RESEARCH ARTICLE OPEN ACCESS

Effectiveness Of Employees Safety And Health Measures At Auto Component Industries With Refernece To Tiruppur District

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ABSTRACT
This study is an outcome of the title called "A study on Effectiveness of Employees Safety and Health Measures" with reference to " Auto Component Industry ", which has undertaken Auto Component Limited. Employees Safety and Health look upon prevention of accidents basically as an engineering problem to be tackled through proper designing of mechanical safety devices. In fact, accident prevention and safety are inter related and, therefore require a multi dimensional approach. Its importance has increased because of large-scale industrialization in which human beings are subjected to mechanical, chemical, electrical and radiation hazards. Total population is 2500 above; from that 150 employees were selected using simple random sampling method and a well structured questionnaire was framed in order to extract the required information from the respondents. Questionnaires were collected through personal interview. The various statistical tools like percentage method, chi square test, correlation analysis and weighted rank analysis were used in this study. The findings of the study reveal that major cause for the work place accident is unsafe condition. So the vestibule training method can be included in employee training program. Ergonomics method enables better employee's safety and health.

I. I.INTR ODUCTION

The success of any manufacturing organization depends largely on the workers. The employees are considered as the backbone of auto component limited The study was mainly undertaken to identify the level of employees Safety & Health measures in the organization. Once the Employees Safety & Health Measures are identified it would be possible for the management to improve the employee's safety and health. This study can serve as a basis for measuring causes for the accident in the workplace. Effectiveness of employee's safety and health measures plays a vital role in translating management philosophy in to reality. Effectiveness can be used as effective tool to obtain the desired results and proper training at all level in the organization can greatly enhance the productivity level. Organizations with well-defined employee's safety and health programs create a positive work environment where there is learning and application in work place. Worker must be trained to operate machines, reduce scrap and avoid accidents. It is not only the workers who need training. Supervisors, managers and executives also need to be developed in order to enable them to grow and acquire maturity of thought and actions. Training and development constitute an ongoing Process in any organization Lack of training at appropriate time can be major

Deterrent and de-motivating factors for the employees.

The aim of this study is to "Employees Safety and Health Measures and development function at auto component industrial". The study also aims how to identify the training needs of the employees, which would be immensely useful for identifying the training programs, which were needed by the employees. As the study also studies the effectiveness of training and perception of employees on safety and health, it acts as effective tool for achieving the desired goals efficiently.

This study can be helpful for the management to identify the key factors for improving employee's safety and health with the help of suggestion and conclusion.

II. EFFECTIVENESS OF EMPLOYEE'S SAFETY AND HEALTH MEASURES

2.1 Improving quality of work force:-

Training and development help companies to improve the quality of work done by their employees. Training programs concentrate on specific areas. There by improving the quality of work in that area.

2.2 Enhance employee growth:-

Every employee who takes development program becomes better at his job. Training provides perfection and required practice, therefore employee's area able to develop them professionally.

2.3 Prevents obsolescence:-

Through training and development the employee is up to date with new technology and the fear of being thrown out of the job is reduced.

2.4 Assisting new comer:-

Training and development programs greatly help new employees to get accustomed to new methods of working, new technology, the work culture of the company etc.

2.5 Bridging the gap between planning and implementation:-

Plans made by companies expect people to achieve certain targets within certain time limit with certain quality for this employee performance has to be accurate and perfect. Training helps in achieving accuracy and perfection.

2.6. Health and safety measures:-

Training and development program clearly identifies and teaches employees about the different risk involved in their job, the different problems that can arise and how to prevent such problems. This helps to improve the health and safety measures in the company.

Definition:

International Labor Organization (ILO) and the World Health Organization (WHO) have shared a common definition of occupational health. "Occupational health should aim at: the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities; and, to summarize, the adaptation of work to man and of each man to his job.

III. OVERVIEW OF AUTO COMPONENT INDUSTRY

The automotive industry in India is one of the largest in the world and one of the fastest growing globally. India's passenger car and commercial vehicle manufacturing industry is the sixth largest in the world, with an annual production of more than 4.7 million units in 2010. According to recent reports, India is set to overtake Brazil to become the sixth largest passenger vehicle producer in the world, growing 16 to 18 per cent to sell around three million units in the course of 2011-12. In 2009, India emerged as Asia's fourth largest exporter of passenger cars, behind Japan, South Korea, and Thailand. In 2010, India reached as Asia's third largest exporter of passenger cars, behind Japan and South Korea beating Thailand.

As of 2010, India is home to 40 million passenger vehicles. More than 3.7 million automotive vehicles were produced in India in 2010 (an increase of 33.9%), making the country the second fastest growing automobile market in the world. According to the Society of Indian Automobile Manufacturers, annual vehicle sales are studyed to increase to 5 million by 2015 and more than 9 million by 2020. By 2050, the country is expected to top the world in car volumes with approximately 611 million vehicles on the nation's roads.

The majority of India's car manufacturing industry is based around three clusters in the south, west and north. The southern cluster consisting of Chennai and Bangalore is the biggest with 35% of the revenue share. The western hub near Mumbai and Pune contributes to 33% of the market and the northern cluster around the National Capital Region contributes 32%.Chennai, is also referred to as the "Detroit of India. with the India operations of Ford, Hyundai, Renault, Mitsubishi, Nissan ,BMW, Hindustan Motors, Daimler, Caparo, and PSA Peugeot Citroën is about to begin their operations by 2014. Chennai accounts for 60% of the country's automotive exports. Gurgaon and Manesar in Haryana form the northern cluster where the country's largest car manufacturer, Maruti Suzuki, is based. The Chakan corridor near Pune, Maharashtra is the western cluster with companies like General Motors, Volkswagen, Skoda, Mahindra and Mahindra, Tata Motors, Mercedes Benz, Land Rover, Fiat and Force Motors having assembly plants in the area. Aurangabad with Audi, Skoda and Volkswagen also forms part of the western cluster. Another emerging cluster is in the state of Gujarat with manufacturing facility of General Motors in Halol and further planned for Tata Nano at Sanand.
Ford, Maruti Suzuki and Peugeot-Citroen plants are also set to come up in Gujarat. Kolkata with Hindustan Motors, Noida with Honda and Bangalore with Toyota are some of the other automotive manufacturing regions around the country.

The automotive component manufacturing association of India (ACMA)Is the nodal agency for the Indian auto component industry .Its active involvement in trade promotion technology up-gradation quality enhancement and collection and dissemination of information has made it a vital catalyst for this industry development its other activities include participation in international trade fairs, sending trade delegations overseas and bringing out publication on various subjects related to the automotive industry. ACMA is represented on a number of panels committees & councils of a government of India through which it helps in the

formulation of policies pertaining to the Indian automotive industry.

For exchange of information and especially for co-operation in trade matters ACMA has signed memoranda of understanding with its counter parts in Australia brazil Canada Egypt, France, Germany, Iran, Italy, Japan, Malaysia, Pakistan, south Africa, south Korea, Sweden, Thailand, Tunisia ,turkey, UK,USA.

ACMA represents over 600 companies whose production forms a majority of the total auto components output in the organized sector in the domestics market they supply components to vehicle manufacture trier1 suppliers to state transport undertaking defense establishment railways and even to the replacement market a variety of components are being exports to OEMS and aftermarket worldwide.

Industry Turnover

The automotive component industry's output amounted for the financial year 2010-2011 us$39.9billions with growth rate of 33% against the financial year2009-2010.

Quality

The industry has been making rapid strides towards achievement of world-class quality systems by imbibing ISO9000/ ISO14001/QS9000/TS 16949 quality system. Till now 576 companies have been certified worth OHSAS 18001, 15 companies have won TPM awards, 12 companies won the Deming prize/company won Japan won shin go silver medallion and 3 companies won the JIPM excellence award.

Exports

The industry has been exporting around 13% of its output. In the year 2010-2011 industry has exported US$5.2 billion principal export items include replacement parts, tractors parts motorcycle parts, piston rings, gaskets, engines values ,fuel pump nozzles, fuel injection parts filters elements radiators gears leaf springs brake assemblies and bearings clutch faring head lamps auto bulks and halogen bulbs ,spark plugs and body parts.

Insight Into Indian Market

The industry has also strengthened exporting base that is growing at the pace off percent. India accounts for about 20 percent of its total auto component output that has been valued at US$ 3.8billion, chief components encompassing tractor parts, two wheelers parts, fuel injection pumps, filter, gear, radiator, head lamps, auto bulbs, engine value and many more.

Government facilitated or liberalizes foreign investment manufactures to establish 100 percent owned subsidiaries: this has helped the tap into the international market and also compelled domestic manufactures to improve the quality of their products.

India: The Global Auto Hub.

Supportive government policies, positive business environment availability of reasonably priced talented workforce and stable outlook for the industry has made India a global hub for the international manufactures to set up their facilities in the country.

While many Chinese firms are looking to form strategic alliances with Indian auto component companies, UK-based auto component makers caper group is vying to increases its profits by more than [US$ 96016million] from Indian operations by 2013.the company already has 32 operating sites in India and is exporting possibility of setting up plants for composite materials in southern India .

German automaker Volkswagen also plans to establish four components distribution centers in India to supply parts to its dealers and service centers.

As a part of this plan the company has already commenced work on its first regional parts distribution centre in gorgon. mean while US auto major Ford has broken the ground for its US$1billion for manufacturing plant at sonant in Gujarat .the plant to be operational by 2014,is expected to manufacture 2.4 lack annually for domestic and export market the company has already attached 19 component manufactures to set up shop at the location.

Key Development And Investmetns

Auto components manufactures Bosch India is contemplating to nearly triple capacity from current 3,00,000 units as its challenge plant .the company plans to achieve this target by the end of 2013 at an additional outlay of Rs40crore(US$7069million)

Chennai based automotive conglomerate TVS group has acquired a 90% stake in universal components UK ltd for Rs100crore (US $19.23 million), as part of its expansion plans. A universal component is a wholesale distribution of commercial vehicle parts.

Making its debut in forgoing industry, textile major Raymond auto components arm, nine, pills ,aqua has acquired 78% stake in Pune based trinity India for a consideration of rs54 Croce(US$10.38 million)ring plus aqua's current profile includes auto components such as flywheel ring gears ,flex plate assemblies, integral shaft bearings and sheet metal pulleys.

Rajkot is increasingly emerging as a hot destination for auto majors with number of them settings up their operations in Gujarat, auto components manufactures based in the regions are planning to investment rs200 crore250crore(US$38.45 milliom-US$48.06 million)

towards capacity expansion and automation during 2012-2013 home to around 500 auto components makers , the industry in Rajkot is growing at a rate of 30-40 present churning a turnover of around Rs800crore and Rs 1000 corer(US$153.81 million-US$192027 million)annually.

Government Initiatives

The Indian government is in the process of forming a national automotive board which would become a formal set up top 100 into the issue recall of vehicles and hence improve manufacturing standards. The prospective body. To oversee technical and safety aspects of vehicles, will have automotive research association of India (ARAI)

The government of Tamil nadu has also announced that it will sign several memoranda of understanding (MOU) with various automobile auto parts makers and will soon release industry. Specific policies the reforms would give a boost to the state's position as a strategic auto designation.

Objectives Of The Study

- To study and analyze the Effectiveness of Employees Safety and Health Measures at auto components industry
- To trace the causes of accident at work place.
- To study up to which extent employees are practicing safety and health in the real work situation.
- To assess the management's commitment towards employees safety and health.
- To suggest suitable measures for improving employees safety and health.

Scope Of The Study

- This study throws light on the need for learning Employees Safety & Health.
- The study was developed based on the employees expectation.
- It will be helpful for the management to improve the Employees Safety & Health measures in the organization.
- This study would be a base for the researchers who are carry survey for the same.
- The study also helps the concern for the further enhancement for their manufacturing with employees safety & health measures by elaborating the current survey.

IV. REVIEW OF LITERATURE

Graeber et. al., (1978); said that the time of the day for consumption may affectuptake, digestion and metabolism depending on the phase of the individual's circadian rhythms. Meal timing is considered as an important socio environmental synchronizer of the circadian rhythms and influences human metabolism. Further, the temporal distribution of food intake has also an influence on human performance.

Angersbach et al., (1980); Angersbach found a slight but non significant excess of Cardiovascular disease morbidity among shift workers. The incidence has been noticed to be 13.8% for the day workers and 16.8% for the shift workers. The cholesterol level has been witnessed to be higher in shift workers compared to day workers. The workers with the most irregular working hours may tend to have significantly higher total cholesterol.

Costa et.al., (1981); It is well known that the dietary intake is of immense importance to nutritional status and health. In addition to a balanced intake, the time of the day for consumption and the frequency of intake may also be equally important. Gastrointestinal complaints of gastric upset, disturbed appetite, gas, constipation, diarrhoea, poor eating, dyspepsia, epigastria pain, gastroduodenitis, peptic ulcer etc. are strongly correlated with shift work in a number of studies.

Rutenfranz et. al., (1985); Rotating shift work has well-known harmful effects on human health and well-being. It disturbs sleep, wakefulness, eating patterns and social life and in the long run. Several authors have documented an association between shift work and gastrointestinal disorders. It can be argued that the gastrointestinal disturbances result from eating food at the wrong time, with abnormal patterns of gut motility and gastric acid secretion being likely.

Segawa K (1987); The new "23-hour society" increases night work, together with new experimental and epidemiologic data on the alarming relationship of shift work to fatigue, performance, accidents, and chronic health effects like coronary heart disease, The incidence of peptic ulcer has been calculated to be from 2 to 5 times higher among shift workers with night work than among day workers. In addition, 20-75% of shift workers complain of appetite disturbances, dyspepsia, abdominal pain, flatulence.

Simon (1990); Shift work has been well studied and results show physical health problems of fatigue, sleeping, eating and/or digestion problems, higher accident rates at work, coronary heart disease, and mental health and relationships problems. The author includes workload and repetitive tasks as physical and- psychosocial work factors. In home care work, the workload and repetitive tasks on the job are both physical and mental work.

Engels et al., (1996); There is sufficient literature giving some support to the view that when there is a mismatch between workers' physical

strength and tasks required on the job, back injuries occur. Most back injuries among home health aides and nurses are due to patient-related activities, involving pushing/pulling of patients or materials

Boggild H et.al., (1999); The association between shift work and cardiovascular disease is considered particularly valuable as risk factors in the environment of shift workers can only be eliminated but not the shifts themselves. There is strong evidence that shift work is a significant risk factor for coronary heart disease (CHD). According to a recent review of studies, shift workers seem to have about a 30% increase in CHD risk.

Ito H, Nozaki (2001); This study was conducted among the 109 American nurses who all worked rotating night shifts. The findings were compatible with the possibility that 6 or more years of shift work might increase the risk of coronary heart disease in women. Findings showed that shift workers were have a 30% increase in risk.

Costa (2001); indicates that women can be more vulnerable to shift-work and night-work in relation to both their more complex circadian and infradian (menstrual) hormonal rhythms and to extra demands related to family life and domestic commitments. This includes disorders such as menstrual pains, abortion, interference with foetal development, premature and low birth weight.

Rawat DS (2003); Rawat observed the following health problems among employees. 30% of the respondent experience backache, 35% experience continual tiredness, 50% talk about digestive disorders, 60% suffering from sleep difficulties, 15% experienced sprains and strains, 10% are diagnosed for clinical depression, frequent cold and cough is common among 55%, a major chunk is suffering from high blood pressure i.e. 60%, 50% suffer from menstrual problems, 35% are suffering from respiratory illness, 35% of them complaint about pregnancy related problems.

Atkinson et. al., (2008): said that the individual health is affected by the shift work with Increased risk of insomnia, chronic fatigue, anxiety and depression, cardiovascular and gastrointestinal problems, impaired reproduction in women, increased body mass, increased body mass index, prevalence of obesity, waist-to-hip ratio.

Eva Schernhammer (2011); In a recent study, researchers at Brigham and Women's Hospital (BWH) found that shift work may be associated with a reduced risk of skin cancer in women. Shift work has been associated with increased risk of cancers, gastrointestinal disorders, cardiovascular disease, and diabetes.

V. R ESEARCH METHODOLOGY

Research

Research is a process in which the researcher wishes to find out the end result for a given problem and thus the solution helps in future course of action. The research has been defined as "A careful investigation or enquiry especially through search for new fact in any branch of knowledge".

Research Methodology

The procedure using, which researchers go about their work of describing, explaining and predicting phenomena, is called Methodology. Methods compromise the procedures used For generating, collecting, and evaluating data. Methods are the ways of obtaining information useful for assessing explanation.

Types Of Research

The type of research used in this study is descriptive in nature. Descriptive research is essentially a fact finding related largely to the present, abstracting generations by cross sectional study of the current situation .The descriptive methods are extensively used in the physical and natural science, for instance when physics measures, biology classifies, zoology dissects and geology studies the rock. But its use in social science is more common, as in socio economic surveys and job and activity analysis.

Descriptive Research Aims At

- To portray the characteristics of a particular individual situation or group (with or without specific initial hypothesis about the nature of this characteristics).
- To determine the frequency with which something occurs or with which it is associated with something else (usually, but not always, with a specific initial hypothesis).

The descriptive method has certain limitation; one is that the research may make description itself an end itself.

Research is essentially creative and demands the discovery of facts on order to lead a solution of the problem. A second limitation is associated whether the statistical techniques dominate. The desire to over emphasis central tendencies and to fact in terms of Average, Correlation, Means and dispersion may not always be either welcome. This limitation arises because statistics which is partly a descriptive tool of analysis can aid but not always explain casual relation.

Design Of Descriptive Study:

Descriptive studies aim at portraying accurately the characteristics of a particular group or solution. One may undertake a descriptive study

about the work in the factory, health and welfare. A descriptive study may be concerned with the right to strike, capital punishment, prohibition etc.

A descriptive study involves the following steps:

1. Formulating the objectives of the study.
2. Defining the population and selecting the sample.
3. Designing the method of data collection.
4. Analysis of the data.
5. Conclusion for further improvement in the practices.
6.

Research Design

Research design is the specification of the method and procedure for acquiring the information needed to solve the problem.

The research design followed for this research study is descriptive research design where we find a solution to an existing problem. The problem of this study is to find the Effectiveness of Employees Safety & Health Measures at SACL.

Universe and Sampling

This study was restricted to the Uniform employees. Out of the universe of a sample of 150 respondents was selected by simple random sampling method. All the opinions expressed herein are the contribution by the respondents only.

Data Collection Method

Survey method is considered the best method for data collection and the tool used for data collection are Questionnaire. Private individuals, research workers, private and public organizations and even government are adopting it. In this method a questionnaire is collected through personal interview. A questionnaire consists of a number of question involves both specific and general question related to Employees Safety & Health Measures.

Sources of Data

The two sources of data collection are namely Primary & secondary.

- **Primary data:**

  Primary data are fresh data collected through survey from the employees using questionnaire.
- **Secondary data:**

  Secondary data are collected from books, internet and various journals, magazines etc.

Statistical Tools Used

- Simple Percentageanalysis
- Chi - Square Analysis
- Correlation Analysis
- Simple Percentage Method

In this study Percentage method test and used. The percentage method is used to know the accurate percentages of the data we took, it is easy to graph out through the percentages. The following are the formula:

$$\textbf{Percentage Analysis} = \frac{\textbf{Number of respondent}}{\textbf{Total number of respondents}} \textbf{X } 100$$

- Chi - Square Analysis

In this study chi-square test was used. This is an analysis of technique which analyzed the stated data in the study. It analysis the assumed data and calculated in the study. The Chi-square test is an important test amongst the several tests of significant developed by statistical. Chi-square, symbolically written as x^2 (Pronounce as Ki-Spare), is a statistical measure used in the context of sampling analysis for comparing a variance to a theoretical variance.

Formula:

$$\chi^2 = \frac{(O - E)^2}{E}$$

O = Observed Value

E = Expected Value

To calculate expected frequency, the formula used is

$$E = \frac{\text{Row Total} * \text{Column Total}}{\text{Grand Total}}$$

- Correlation Analysis

Spearman's rank correlation coefficient allows you to identify easily the strength of correlation within a data set of two variables, and whether the correlation is positive or negative (whether the slope of the corresponding line is positive or negative). This guide will help you calculate it without too much difficulty.

Formula:

$$r = 1 - \frac{6 \sum di^2}{N(n^{2-1})}$$

Correlation value shall always lie between +1 and-1. When r =1, it shows there is perfect positive correlation between variables. When r = 0, There is no correlation.

Table No 1specific Reason For Accident Proneness

S. No	Factors	Number of respondents	Percentage
1	Personal Problems	75	50
2	Environmental Problems	14	9
3	Technical Problems	61	41
	Total	150	100

Source: Primary Data

Inference:

The above table shows that out of 150 respondents, 50% of the respondents are Personal Problems, 9% of the respondents are Environmental Problems and 41% of the respondents are Technical Problems.

Table No 2 Major Reasons For The Work Place Accident

S. No	Factors	Number of respondents	Percentage
1	Unsafe Act	72	48
2	Unsafe Condition	78	52
	Total	150	100

Source: Primary Data

Inference:

The above table shows that out of 150 respondents, 48% of the respondents are Unsafe Act and 52% of the respondents are Unsafe Condition.

Table No 3good Safety& Health Measures Helps To Improving Work Efficiency Among Employees

S. No	Factors	Number of Respondents	Percentage
1	Strongly agree	18	12
2	Agree	72	48
3	Disagree	43	29
4	Strongly Disagree	17	11
	Total	150	100

Source: Primary Data

Inference:

The above table shows that out of 150 respondents, 12% of the respondents are Strongly agree, 48% of the respondents are Agree, 29% of the respondents are Disagree and 11% of the respondents are Strongly Disagree.

Table No 4 Employees Level Of Participation In The Implementation Of Safety & Health Procedures

S. No	Factors	Number of Respondents	Percentage
1	Very High	39	26
2	High	81	54
3	Low	25	16
4	Very Low	4	3
5	None	1	1
	Total	150	100

Source: Primary Data

Inference:

The above table shows that out of 150 respondents, 26% of the respondents are Very High, 54% of the respondents are high, 16% of the respondents are Low, 3% of the respondents are Very Low and 1% of the respondents are none.

Table No 5mode of Safety Training Conducted

S. No	Factors	Number of Respondents	Percentage
1	Weekly	32	22
2	Monthly	44	29
3	Yearly	74	49
	Total	150	100

Source: Primary Data

Inference:

The above table shows that out of 150 respondents, 22% of the respondents are weekly, 29% of the respondents are monthly and 49% of the respondents are yearly.

Table No. Employees Approach From The Organization

S. No	Factors	Number of Respondents	Percentage
1	Flexible	35	23
2	Transparent	33	22
3	People Oriented	58	39
4	Product Oriented	24	16
	Total	150	100

Source: Primary Data

Inference:

The above table shows that out of 150 respondents, 23% of the respondents are Flexible, 22% of the respondents are Transparent, 39% of the respondents are People Oriented, and 16% of the respondents are Product Oriented.

Chi-Square Test

The relationship between age groups and awareness of safety and health measures

Null hypothesis H0:

There is no significance difference between in the variable among the age groups and aware of safety and health measures.

Alternative hypothesis H1:

There is significance difference between in the two variables among the age groups and aware of safety and health measures.

Source: Primary Data

(R-1) (C-1) = (5-1) (2-1) = 4*1 = 4.

Formula:

$$\chi^2 = \frac{\Sigma(O-E)^2}{E}$$

O = Observed Frequency
E = Expected Frequency

Computation Of Chi-Square-χ^2

O	E	O-E	(O-E)2	(O-E)2/E
40	41.04	-1.04	1.08	0.03
31	31.86	-0.86	0.74	0.02
5	5.4	-0.4	0.16	0.03
3	1.62	1.38	1.90	1.17
2	1.08	0.92	0.84	0.78
36	34.96	1.04	1.08	0.03
28	27.14	0.86	0.74	0.03
5	4.6	0.4	0.16	0.03
-	1.4	-1.4	1.96	1.4
-	0.1	-0.1	0.01	0.1
Total				3.62

Source: Primary Data

The calculated value is 3.62
Degree of freedom= (n-1) = (5-1) = 4
Level of significance = 5 %
Table value 4 of DGF and 5 % level of significance = 9.48, 3.62 < 9.48 calculated value is higher than tabulated value.\
Hence, null hypothesis is accepted.

Inference:

Thus chi-square test infers that there is no significant difference between in the variable among the age group and awareness of the safety and health measures.

Correlation Analysis

To find whether there is correlation between gender and accident proneness (fear) respondents regarding their gender.
Let x be the respondent of gender.
Let y be the accident proneness (fear) of respondents.

Table

S. No	Factors	X	Y
1	Yes	105	9
2	No	45	141
Total		150	150

Source: Primary Data

Ranks

S. No	Rank of X	Rank of Y	$Di^2=(Xi-Yi)^2$
1	1	2	1
2	2	1	1
Total $\sum$ $(Xi-Yi)^2$			2

Formula: $$r = 1 - \frac{6 \sum di^2}{N(n^{2-1})},$$

By Substituting the Data to the Formula, We Get R= -1

Inference:

The value obtained in negative, where is infers that a change in one variable has an opposite change in another variable. From the correlation analysis it is inferred that, if the gender have accident proneness within the company.

Findings

- 94% of the respondents have no accident proneness (Fear).
- 52% of the respondents Says that accidents are met of work place Unsafe Condition.
- 53% of the respondents are mentioned accidents accrued for work related problems.
- 100% of the respondents Receive Support from Management Employees Safety & Health Measures.
- 71% of the respondents accept Company's Safety & Health Policies, & 65% of the respondents have interest to participate in employee's safety and health scheme.
- Chi-square test infers that there is no significant difference between in the variable among the age group and safety and health measures.
- Correlation analysis it is inferred that, if the gender have accident proneness within the company.

Suggestions

- Auto components industry has been build up efficient safety and health measures of employees. Employees are feeling they are safety and healthy inside the organization. Auto components industry strictly followed factories act, 1948 and create importance of safety and health measures among employees. The frequency of safety training for the employees on safety and health can be altered to monthly once instead of yearly twice.
- Auto components industry trace the causes of accident at work place. Fear is the major causes of accident at work place. It provides good quality and safety tools at work place. And also these industries has to be established counseling centre to relief employee stress.
- To provide special training like job rotation, communication skills and personally development to an employee this improves their interpersonal relationship with in the organization.
- To concentrate on the employee benefits scheme like family insurance, education and family tour, this motivates the employee on their work.

VI. CONCLUSION

This analysis will give a clear idea as to the situation of a large number of accidents that occur in the organization and the steps that an organization

should take to reduce these accidents and to prevent them from occurring in future.

Some of the suggested measures for improving employee's safety and health include vestibule training method, first aid facilities, recreational facilities, counseling program, pre employment and post employment medical checkup orientation program for improving the effectiveness of employee's safety and health.

The findings of the survey will be utilized to bring about the necessary changes in Employees Safety & Health procedures in the company.

The above concept could be better envisaged to bring about the better safety and health measures.

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