

A STUDY ON STRESS MANAGEMENT IN SELECTED COMPANY

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ABSTRACT

Work stress is recognized world-wide as a major challenge to workers' health and the healthiness of their organizations. Workers who are stressed are also more likely to be unhealthy, poorly motivated, less productive and less safe at work. Their organizations are less likely to be successful in a competitive market. Stress can be brought about by pressures at home and at work. Employers cannot usually protect workers from stress arising outside of work, but they can protect them from stress that arises through work.

Stress is physical and mental reasons to circumstances that frighten, confuse, endanger or irritate. If the stress is controlled it works like a friend and strengthen to encounter many failures. Stress can be taken as negative value as well as positive value. consider, for example when you undergo annual performance review at work, you feel stress because you confront opportunity, constraints, and demands.

KEYWORDS: A Study on Stress Management in Selected Company

INTRODUCTION

The stress is so widespread; it has a very high cost for individuals, companies and organizations, and for society. For the individual, in addition to the devastating impact of the serious health impairments referred to above, the loss of capacity to cope with working and social situations can lead to less success at work, including loss of career opportunities and even employment. It can give rise to greater strain in family relationships and with friends. It may even ultimately result in depression, death or suicide. For the company or organization, the costs of stress take many forms. These include absenteeism, higher medical costs and staff turnover, with the associated cost of recruiting and training new workers.

NEED FOR THE STUDY

The need for the study is to identify the level of stress at the work place for every organization. The employee should not be under stress at the work place. If they are stressed it would affect both employee and organization. When the employee stress is reduced it would be the betterment for the organization simultaneously the employee concentration in work will increase. The level of stress affects the productivity of individual employees as well the organization .If the level of stress is low ,the employees productivity will be more and vice versa.

Hence this study which can help the organization to take remedial measures to reduce stress and enhance the productivity of the organization.

SCOPE OF THE STUDY

This study has been carried out with the perspective of evaluating the level of work stress among the employees

which carried out their job function and analyze the employees stress level at PSL Limited.,

This research also determines the cause and effects of the stress and also ways to reduce the work stress. This research which also helps in increasing productivity by means of reducing stress.

OBJECTIVES OF THE STUDY

Primary Objective

To analyze and evaluate the level of stress among the employees at PSL Limited.,

SECONDARY OBJECTIVES

- To examine the causes of work stress
- To assess the effects of work stress
- To identify the symptoms of work stress
- To know how they cope with stress situation
- To provide suggestions to overcome work stress

LIMITATIONS OF THE STUDY

- The sampling error can occur due to the respondents bias.
- The respondents answer questions according to the influence of the superior.
- The research is conducted with limited samples.
- Respondents may have hidden some facts as they are fear of management.
- Time constraint is another factor

RESEARCH METHODOLOGY

Research simply means a search for facts-answers to questions and solutions to the problems. It is a purposive investigation. It is an organized enquiry.

According to Emory defines research as “any organized inquiry designed and carried out information for solving a problem”.

RESEARCH DESIGN

A research design is a logical and systematic plan prepared for directing a research study. It specifies the objectives of the study, the methodology and techniques to be adopted for achieving the objectives. It ‘constitutes the blue print for the collection, measurement and analyze of data’. It is “the plan” structure and strategy of investigation conceived so as to obtain and answers to research questions....the plan is the overall scheme or program of research”.

DESCRIPTIVE RESEARCH

Descriptive study is fact-finding investigation with adequate interpretation. It is the simplest type of research. It is more specific than an exploratory study, as it has focus on particular aspects or dimensions of the problem studied. It is

designed to gather descriptive information and provides information for formulating more sophisticated studies. Data are collected by using one or more appropriate methods observation, interviewing and questionnaire .This study is based on Descriptive Research Design

PRIMARY DATA

Primary data are those data that are collected fresh and for the first time, and thus happen to be original in character. The data are collected by questionnaire.

SECONDARY SOURCES OF DATA:

Secondary data means the data that are already available i.e., they refers to the data which have already been collected and analyzed by someone else. Such data can be internal or external to the organization and accessed through the internal or perusal of recorded or published information.

There are several sources of secondary data, including books and periodicals, government publications of economic indicators, census data, statistical abstract, data bases, the media, annual reports of companies etc.

SAMPLING DESIGN

A sampling design is a definite plan for obtaining a sampling from the sampling frame. It refers to the technique or the procedure the researcher would adopt in selecting units from which inferences about the population is drawn. Sampling design is determine before any data are collected.

POPULATION

Population in statistics means the whole of the information which come under the purview of statistical investigation. A population may be finite according as the numbers of individuals in it are finite in the organization. The population size is 850 in the organization

SAMPLE SIZE

A sample is a part of the population selected from the study. The selection of a group of individuals or items from a population in such a way that this group represents the population is called sample. The sample is collected from the employees of **PSL Limited.**,

The sample size taken for the study is 250.

SIMPLE RANDOM SAMPLING

It is the method of selection of a sample in such a way that each and every member of population or universe has an equal chance or probability of being included in the sample.

DESCRIPTION OF STATISTICAL TOOLS

The researcher can be used in different tools to find the employee attitude towards organization development.

- Percentage analysis
- Correlation

- One sample run test
- Chi-square
- Weighted average method

PERCENTAGE ANALYSIS

Percentage refers to a kind of ratio. Percentages are used in making comparison between two or more series of the data. They are used to describe relationships. Moreover percentage can also be used to compare the relative turns, the distributors of two or more series of data.

$$\text{Percentage of respondents} = \frac{\text{Number of Respondents}}{\text{Total Respondents}} * 100$$

PEARSON’S CORRELATION TEST

The relationship between two variables such that a change in one variable results in a positive (or) negative change in the other variable and also a greater change in one variable result in corresponding greater (or) smaller change in the other variable is known as correlation.

Correlation is a statistical 150L which studies the relationship between two variables and correlation analysis evolves various method and techniques used for studying and measuring the extend of the relationship between two variable. The correlation co-efficient has between -1 and +1 (-1 < 0 < +1) .

FORMULA

$$R = \frac{N \sum xy - \sum x * \sum y}{\sqrt{(N \sum x^2 - (\sum x)^2) * \sqrt{(N \sum y^2 - (\sum y)^2)}}$$

ONE SAMPLE RUN TEST

The popular One-Sample Runs Test is used to identify a nonrandom pattern in a sequence of dichotomous elements. Although the test is generally effective in the identification of patterns, it is demonstrated to be incapable of signaling departures from randomness with run lengths of two. Further-more, with run lengths of two, increasing the sample size reduces the power of the test. Run lengths strictly of two, therefore, generate a unique category of anomaly in the test’s overall performance.

Formula for Calculation of Test Statistics

$$(i) \quad \mu_v = \frac{2n_1n_2}{n_1+n_2} + 1$$

$$(ii) \quad \alpha_v = \frac{2n_1n_2(2n_1n_2-n_1-n_2)}{(n_1+n_2)^2 * (n_1+n_2-1)}$$

$$(iii) \quad Z = \frac{v - \mu v}{\dots}$$

Level of significance $\alpha = 0.05$

Critical value : The tabulated value of $Z\alpha$ at 5% level of significance

CHI – SQUARE TEST (Ψ^2)

The chi square test is useful for measure of comparing experimentally obtained results with those expected theoretically and based on the hypothesis. It is used as a test statistics in testing hypothesis that provides a set of theoretical frequencies with which observed frequencies are compared.

The chi square test was first used in testing statistical hypothesis by karl pearson in the year 1900. it is defined as

Chi – square (Ψ^2) = $(O_i - E_i)^2 / E_i$ with $(R-1) (C-1)$

Where ;

O_i = observed Frequency of the event

E_i = Expected frequency of the event

$$E_i = \frac{\text{Row total} \times \text{column total}}{\text{Grand total}}$$

The calculated value of chi-square is compared with the table of chi-square for given.

Degree of freedom at specified level of significance

If $CV < TV$ then Hypothesis accepted and

If $CV > TV$ then Hypothesis accepted

WEIGHTED AVERAGE METHOD

In this case of data involving rating scale and ranking, this method is used. Here the net score for each attributes are calculated and analysis can be done as the basis of the scoring in percentage obtained the formula is given.

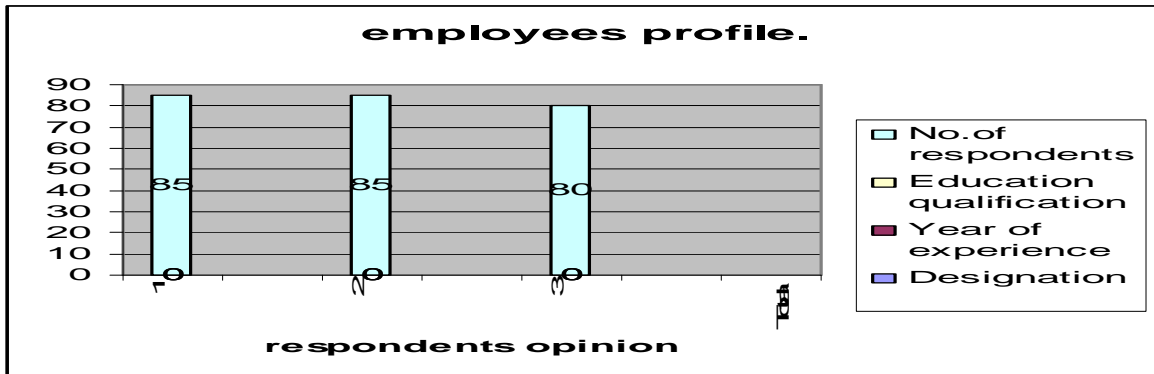
$$\text{Weighted average method} = \frac{\text{weighted for column} \times \text{no. of Respondents}}{\text{Total weight}}$$

DATA ANALYSIS AND INTERPRETATION

Table 1: General Information about Employees

S.no	Designation	Year of Experience	Education Qualification	No.of Respondents
1.	Project lead	5-7 years	B.tech/M.tech	85
2.	Lead	3-5 years	BE	85
3.	MT	1-3 years	BE	80
TOTAL				250

CHART 1 General Information about Employees



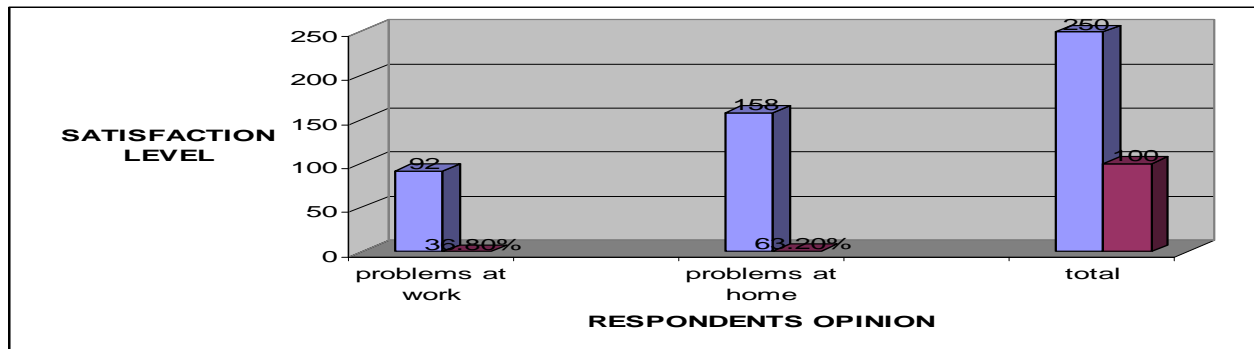
INFERENCE

From the above table, it is inferred that out of 250 employees, 85 respondents were project lead with the experience of 5-7 years with the education qualification B.tech/M.tech., 85 respondents were lead with the experience of 3-5 years and 80 respondents were MT with the experience level of 1-2 years with the qualification BE.

Table 2: Reasons for Employee Stress

S.No	Particulars	No.of Respondents	Percentage(%)
1	Problems at work	92	36.80
2	Problems at home	158	63.20
	Total	250	100

CHART 2: Reasons for Employee Stress

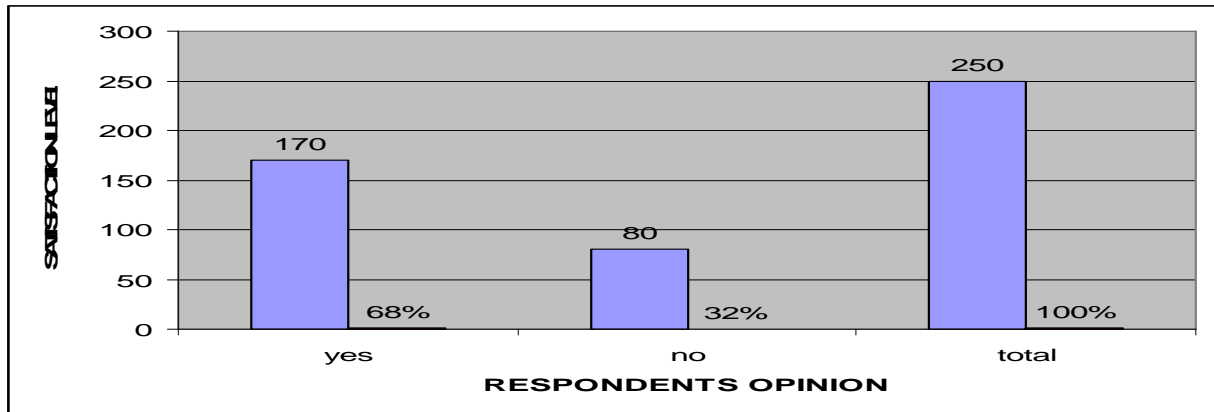


INFERENCE

From the above table, it is inferred that out of 250 respondents, 32.80% of employees is under stress due to problem at work and 63.20% of the employees is under stress due to problem at home.

Table 3: Employees Plan According to the Work

Respondents Opinion	No. of Respondents	Percentage(%)
YES	170	68
NO	80	32
TOTAL	250	100



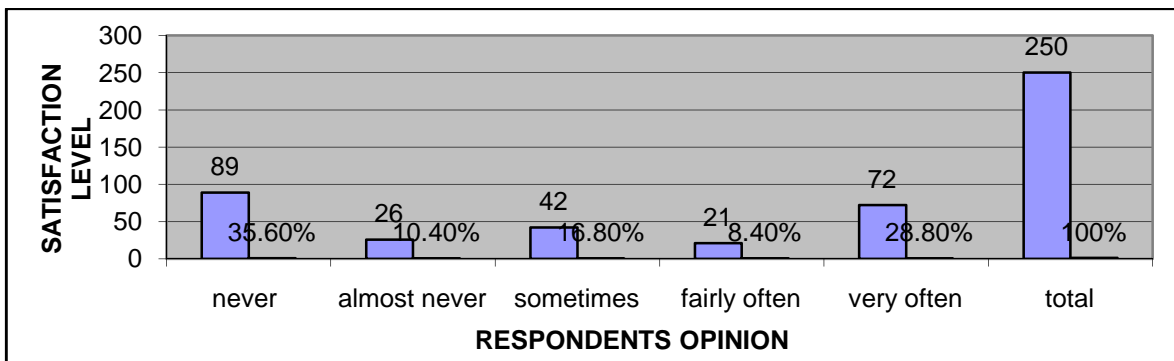
INFERENCE

From the above table, it is inferred that out of 250 respondents, 68% of employees work according to plan and 32% of the employees will not work according to the plan.

Table 4: Employees Expected to Work More than Office Hours

Respondents Opinion	No. of Respondents	Percentage(%)
Never	89	48
Almost never	26	10.40
Sometimes	42	16.80
Fairly often	21	8.40
Very often	72	28.8
TOTAL	250	100

CHART 4 Employees Expected to Work More than Office Hours



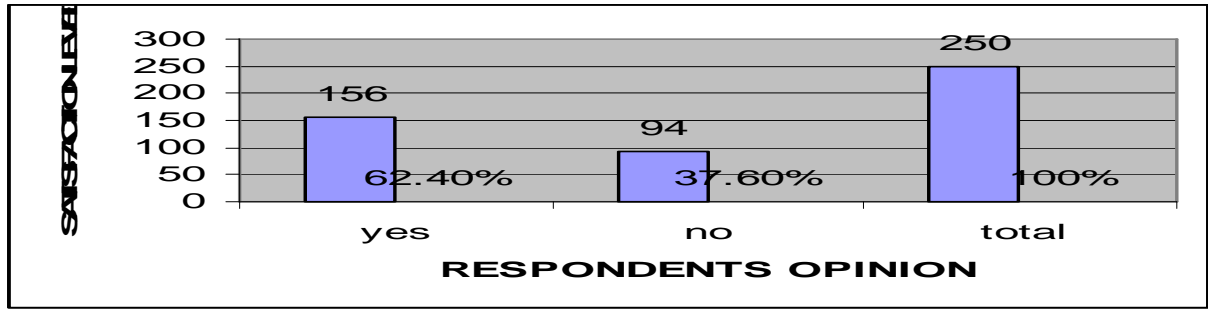
INFERENCE

From the above table, it is inferred that out of 250 respondents 35.60% of respondents feel that they never expected to work more than office hours, 10.40% of respondents feels that almost never, 16.80% of respondents feels that sometimes, 8.40% of respondents feels that fairly often and 28.8% of respondents feels that very often employees are expected to work more than office hours.

Table 5: Level of Interruption during Work Time

Respondents Opinion	No. of Respondents	Percentage(%)
YES	156	62.40
NO	94	37.60
TOTAL	250	100

CHART 5. Level of Interruption during Work Time



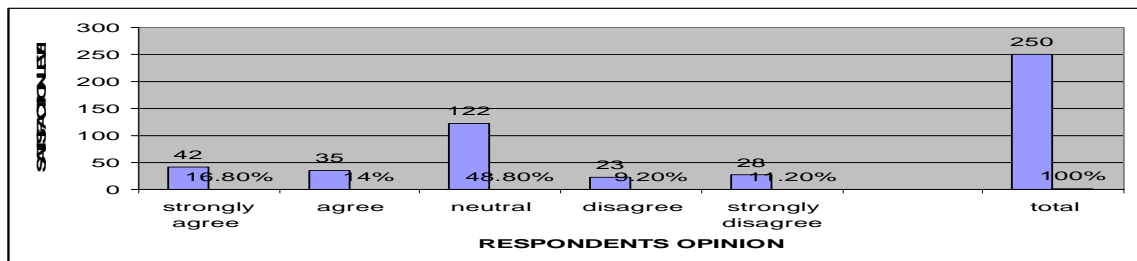
INFERENCE

From the above table, it is inferred that out of 250 respondents 62.40% of respondents feels that they get interrupted during work schedule and 37.60% of respondents feels that they are not get interrupted during work schedule.

Table 6: Employees Stress Prevents Paying Attention to Work

Respondents Opinion	No. of Respondents	Percentage(%)
strongly agree	42	16.80
Agree	35	14
Neutral	122	48.80
Disagree	23	9.20
Strongly Disagree	28	11.20
Total	250	100

CHART6 Employees Stress Prevents Paying Attention to Work



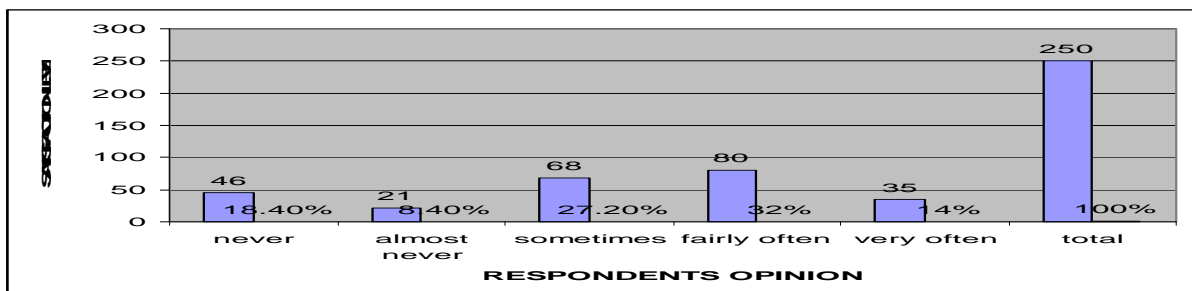
INFERENCE

From the above table, it is inferred that out of 250 respondents 16.80% of respondents strongly agreed that they having trouble in paying attention towards work, 14% of respondents agreed, 48.80% of respondents were neutral, 9.20% of respondents were disagree and 11.20% of respondents were strongly disagree that they having trouble in paying attention towards work.

Table 7: Level of Controlling Emotions

Respondents Opinion	No. of Respondents	Percentage(%)
Never	46	18.40
Almost never	21	8.40
Sometimes	68	27.20
Fairly often	80	32
Very often	35	14
Total	250	100

CHART 7 Level of Controlling Emotions



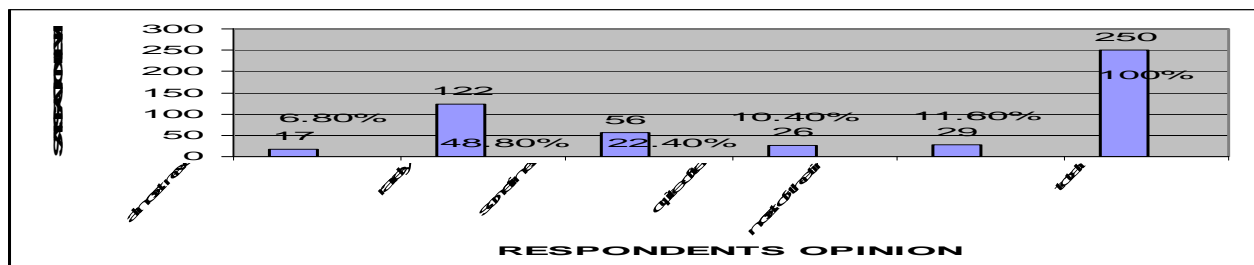
INFERENCE

it is inferred that out of 250 respondents 18.40% of respondents feels that they never found difficult to control their emotions, 8.40% of respondents feels that almost never, 27.20% of respondents feels that sometimes, 32% of respondents feels that fairly often and 14% of respondents feels that very often they found difficult to control emotions.

Table 8: Level of Anger during Interruption at Work

Respondents Opinion	No. of Respondents	Percentage(%)
Almost never	17	6.80
Rarely	122	48.80
Sometimes	56	22.40
Quite often	26	10.40
Most of the time	29	11.60
Total	250	100

CHART 8 Level of Anger during Interruption at Work



INFERENCE

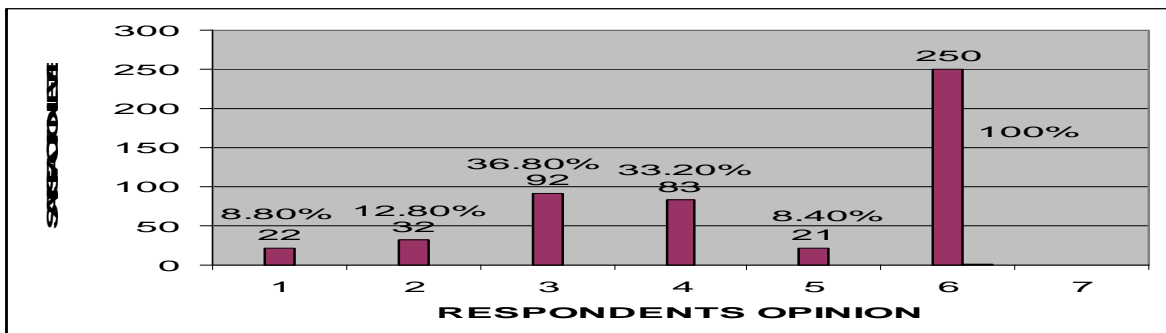
it is inferred that out of 250 respondents, 6.80% of the respondents are never stimulated to anger when interrupted in work, 48.80% of the respondents were rarely stimulated to anger when interrupted in work and 22.4% of the respondent

are sometimes, 10.40% of respondents were quite often & 11.60% of respondents were stimulated to anger when they are interrupted in work

Table 9: Level of Tension While doing Unexpected Projects

Respondents Opinion	No. of Respondents	Percentage(%)
Almost never	22	8.80
Rarely	32	12.80
Sometimes	92	36.80
Quite often	83	33.20
Most of the time	21	8.40
Total	250	100

CHART 9 Level of Tension while doing Unexpected Projects



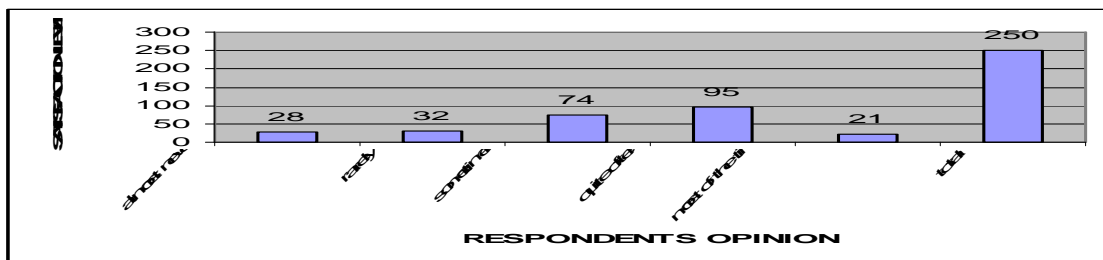
INFERENCE

From the above table, it is inferred that out of 250 respondents, 8.80% of the respondents sometimes tensed due to unexpected projects, 12.80% of respondents that they were rarely get tensed, 36.80% of the respondents sometimes tensed due to unexpected projects, 33.20% of respondents were quite often and 8.40% of respondents were most of the time get tensed due to unexpected projects.

Table 10: Reaction towards a Work While Employee Lack Training

Respondents Opinion	No. of Respondents	Percentage (%)
Almost never	28	11.2
Rarely	32	12.8
Sometimes	74	29.6
Quite Often	95	38
Most of the time	21	8.40
Total	250	100

CHART 10 Reaction towards a Work while Employee Lack Training



INFERENCE

From the above table, it is inferred that out of 250 respondents, 11.2% of the respondents almost never, 12.8% of the respondents were rarely respond in a positive manner if they are asked to do a work even if they lack training in it and 29.6% of the respondents sometimes will respond in a positive manner, 38% of the respondents were quite often and 8.40% of respondents were most of the time respondent positive manner if they are asked to do a work even if they lack training in it.

STATISTICAL TOOLS

1 Correlation:

Let X be the Trouble in Paying Attention towards Work

Particulars	No. of Respondents	Percentage
Strongly agree	42	16.80
Agree	35	14
Neutral	122	48.80
Disagree	23	9.20
Strongly disagree	28	11.20
Total	250	100

Let 'Y' be the Stimulation of Anger

Particulars	No. of Respondents	Percentage
Strongly agree	17	6.80
Agree	122	48.80
Neutral	56	22.40
Disagree	26	10.40
Strongly disagree	29	11.60
Total	250	100

Table

X	Y	X ²	Y ²	XY
42	17	1764	289	714
35	122	1225	14884	4270
122	56	14884	3136	6832
23	26	529	676	598
28	29	784	841	812

Values:

$N = 250$ $\sum X^2 = 19186$

$\sum X = 250$ $\sum Y^2 = 19826$

$\sum Y = 250$ $\sum XY = 13226$

FORMULA:

$$R = \frac{N \sum XY - \sum X \cdot \sum Y}{\sqrt{(N \sum X^2 - (\sum X)^2)} \cdot \sqrt{(N \sum Y^2 - (\sum Y)^2)}}$$

Substituting the Values in the Formula,

$$R = \frac{250 \times 13226 - (250 \times 250)}{\sqrt{(250 \times 19186) - (250)^2} \cdot \sqrt{(250 \times 19826) - (250)^2}}$$

R = 0.7

CONCLUSIONS

There exists high correlation between **trouble in paying attention towards work** and **the stimulation of anger.**

2 ONE SAMPLE RUN TEST:

YYYNNNYNYYYNNYNYNNNNYYYYYNNNNNNYNYNYYYNYYYYYYYYYYYNYYYNNNYNYNYYYY
 NNNNYNYYYNYNYYYYYYYYYNNNYYYYYNYYYNYNYNNNYNNNYNNNYYYYYNYNYNYNNNN
 NNNYYYYNYNNNNYNYNNNYNNNNYNYNNNNYNYNYNNNNNYYYYYNNNNNNYNYNNNYYYYY
 YYYNYYY

Y- Yes N – No

Setting of Hypothesis:

Null Hypothesis (Ho) : The sequence is random

Alternate Hypothesis (H₁) : The sequence is not random

Calculation of Test statistics:

n₁ = 156 ; n₂ = 94 ; V = 76

(iv) $\mu_v = \frac{2n_1n_2}{n_1+n_2} + 1$
 $= \frac{2 \times 156 \times 94}{156+94} + 1$
 $= 118.31$

(v) $\alpha_v = \frac{2n_1n_2(2n_1n_2-n_1-n_2)}{(n_1+n_2)^2 * (n_1+n_2-1)}$
 $= \frac{2 \times 156 \times 94 (2 \times 156 \times 94 - 156 - 94)}{(156+94)^2 * (156 + 94 - 1)}$

$$\begin{aligned}
 &= \frac{852799584}{15562500} \\
 &= 54.8 \\
 \text{(vi) } Z &= \frac{v - \mu v}{\sigma_v} \\
 &= \frac{76 - 118.31}{54.8} \\
 &= -0.73 \\
 |Z| \text{ (Modulus of } Z) &: 0.73
 \end{aligned}$$

Level of significance $\alpha = 0.05$

Critical value : The tabulated value of Z_α at 5% level of significance for Two Tailed test is 1.96

$$Z_\alpha = 1.96$$

CONCLUSION

The calculated value of $|Z|$ is less than that of the tabulated value; hence the null hypothesis is accepted. (i.e) The sequence is random.

3 CHI SQUARE TEST

For Experience and the decision making:

Null Hypothesis (H₀):

There is no significant difference between the Experience and the Employee’s autonomous in Job determination.

Alternate Hypothesis (H₁):

There is significant difference between the Experience and the Employee’s autonomous in Job determination.

$$\begin{aligned}
 \text{(i) } E_i &= \frac{\text{Row Total X Column Total}}{\text{Grand total}} \\
 \text{(ii) } \chi^2 &= \sum \frac{O_i - E_i}{E_i^2} \text{ with } (r - 1) (c - 1)
 \end{aligned}$$

Where

O_i = Observed frequency

E_i = Expected frequency

r = No. of rows

c = No. of columns.

Calculation of Ei:

Experience	Never	Almost Never	Sometimes	Fairly often	Very Often	Total
1-3 yrs	26.24	10.24	17.28	12.16	14.08	80
3 – 5 yrs	27.88	10.88	18.36	12.92	14.96	85
5 – 7 yrs	27.88	10.88	18.36	12.92	14.96	85
Total	82	32	54	38	44	250

Calculation of Chi-Square:

O _i	E _i	(O _i – E _i)	(O _i – E _i) ²	$\frac{(O_i - E_i)^2}{E_i}$
37	26.24	10.76	115.78	4.4
14	10.24	3.76	14.13	1.38
18	17.28	0.72	0.52	0.03
5	12.16	-7.16	51.27	4.22
6	14.08	-8.08	65.29	4.63
36	27.88	8.12	65.94	2.365
17	10.88	6.12	37.45	3.44
13	18.36	-5.36	28.73	1.56
11	12.92	-1.92	3.69	0.28
8	14.96	-6.96	48.44	3.23
9	27.88	-18.88	356.45	12.78
1	10.88	-9.88	97.61	8.97
23	18.36	4.64	21.53	1.17
22	12.92	-0.92	0.85	0.85
30	14.96	15.04	226.2	226.2

TOTAL = 275.48

Level of Significance = 5%,

$r = 3, c = 5$

$(r-1)(c-1) = 8$

Critical value: The tabulated value of Chi square = 15.5

Chi square calculated = 275.48

χ^2 calculated > χ^2 (from table)

When comparing calculated value with table value, H₀ is rejected.

CONCLUSION: There is significant difference between the experience and the decision making encouragement.

4 WEIGHTED AVERAGE METHOD:

Particulars	Excellent	Good	Satisfactory	Bad	Very bad
Interpersonal relationship	89	75	36	24	26
Intra organizational factors	73	78	25	42	32
Opinion on stress management in the organization	75	21	36	92	26
Strategies followed	45	75	48	39	43
Stress management and training programme	126	48	36	40	0

Weighted Average Method:

Rank	1	2	3	4	5
Weight	5	4	3	2	1

FORMULA:

Net Score = weighted for column * No. of respondents/Total weight

SOLUTION:

Particulars	Excellent	Good	Satisfactory	Bad	Very Bad	Total	Avg.	Rank
Interpersonal relationship	445	300	108	48	26	927	61.8	2
Intra organizational factors	365	312	75	84	32	868	57.9	3
Opinion on stress management in the organization	375	84	108	184	26	777	51.8	5
Strategies followed	225	300	144	78	43	790	52.7	4
Stress management and training programmes	630	192	108	80	0	1010	67.33	1

CONCLUSION:

From the above table, it is inferred that the First preference goes to the **Stress management and training programmes**,

Second preference goes to the **Interpersonal relationship**,

Third preference goes to the **Intra organizational factors**,

Fourth preference goes to the **Strategies followed** and the

Final preference goes to the **Opinion on stress management in the organization**.

FINDINGS

The following are the findings that are derived from the study.

- 80 of the respondents were MT with the experience level of 1-2 years with the qualification BE.
- It is inferred from the analysis that **63.2%** of employees are under stress due to problems at home.
- It is inferred from the analysis that **68%** of employees work according to plan.
- It is inferred the analysis that **35.6%** of employees feels that they never expected to work more than office hours.
- It is inferred from the analysis that **62.40%** of respondents says yes that they get interrupted during work schedule
- It is inferred from the analysis that **48.80%** of respondents feels neutral that they having trouble in paying attention towards work.

- It is inferred from the analysis that **32%** of respondents feels that fairly often they found difficult to control emotions.

SUGGESTIONS

The suggestions given, here under may be considered for implementation of the organization under reference.

The employee must be trained well so that the work will be stress free. If there is no stress among employees, the employees would be able to cope with the organizational demand and work with full concentration. If the employee's concentration on work increases, it will lead to increase in productivity leading to the profit for the company.

CONCLUSIONS

This study on "Stress management" has identified the factors responsible and in knowing stress among employees of the organization under study .This study is more informative and sets guidelines to overcome stress among employees of the organization .Future, it helps the researcher as well the organization to get first hand information about stress in general and specific to the organization under study.

The employees must be trained in such way so that they are aware of their roles and responsibilities which in turn reduces their stress level at work .The lack of education and training among employees results in role conflict and poor performance at work .Hence, the level of awareness about work reduces the level of stress among employees and enhances their performance at work.

The employees in the organization felt that only sometimes they were under stress. Hence, the organization has to take steps to reduce stress among employees for better productivity and profitability.

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