

## **A Study of Stress and Effects of Stress on Industrial Employees in Gujarat**

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### **ABSTRACT**

Stress is the "wear and tear" our bodies experience as we adjust to our continually changing environment; it has physical and emotional effects and can create positive or negative feelings. The total sample consisted of 240 men from different industrial Area in GUJARAT. The sample was selected from randomly. Job Stress scale By Bhatt - Gujarati developed were used for data collection. 2×3×2 factorial design was used. There will be no significant difference between Category, Age, and Type of Salary in relation to Job satisfaction. The employee becomes less efficient and productive due to occurrence of stress and this leads to the inefficiency and unproductiveness of the organization. In order to gather evidence, we are conducting a research on stress of employees of industrial sector. This paper attempts to study the factors causing stress to employees and effects of stress on them through a structured questionnaire executed on the employees of private and public sector industrial in Gujarat region.

**Keywords:** *Stress, Effects of Stress, Industrial Employees, Gujarat*

Stress is defined as “a state of psychological and physiological imbalance resulting from the disparity between situational demand and the individual's ability and motivation to meet those needs.”

Dr. Hans Selye, one of the leading authorities on the concept of stress, described stress as “the rate of all wear and tear caused by life.” Stress can be positive or negative:

Stress is good when the situation offers an opportunity to a person to gain something. It acts as a motivator for peak performance. Stress is negative when a person faces social, physical, organizational and emotional problems.

Stress can be defined as events or situations that cause people to feel tension, pressure, or negative emotions such as anxiety and anger (Martin). Others view stress as the response to these

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**Received: January 3, 2017; Revision Received: February 3, 2017; Accepted: February 7, 2017**

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situations. This response includes physiological changes such as increased heart rate and muscle tension as well as emotional and behavioral changes.

Stress is a biological term which refers to the consequences of the failure of a human or animal body to respond appropriately to emotional or physical threats to the organism, whether actual or imagined. It includes a state of alarm and adrenaline production, short-term resistance as a coping mechanism, and exhaustion. It refers to the inability of a human or animal body to respond appropriately to emotional or physical threats to the organism, whether actual or imagined. It includes a state of alarm and adrenaline production, short-term resistance as a coping mechanism, and exhaustion. It refers to the inability of a human or animal body to respond. Common stress symptoms include irritability, muscular tension, inability to concentrate and a variety of physical reactions, such as headaches and accelerated heart rate. The term is commonly used by laypersons in a metaphorical rather than literal or biological sense, as a catch-all for any perceived difficulties in life. It also became a euphemism, a way of referring to problems and eliciting sympathy without being explicitly confessional, just "stressed out". It covers a huge range of phenomena from mild irritation to the kind of severe problems that might result in a real breakdown of health. In popular usage almost any event or situation between these extremes could be described as stressful. The term "stress" was first used by the endocrinologist Hans Selye in the 1930s to identify physiological responses in laboratory animals. He later broadened and popularized the concept to include the perceptions and responses of humans trying to adapt to the challenges of everyday life. In Selye's terminology, "stress" refers to the reaction of the organism, and "stressor" to the perceived threat. Stress in certain circumstances may be experienced positively. Eustress, for example, can be an adaptive response prompting the activation of internal resources to meet challenges and achieve goals. Job stress is a frequent problem across occupations and it impacts on job performance. It is very much compulsory to take a holistic picture of surroundings of job stress by including the effects of personality, the organizational factors and the work family interaction in the perception of job stress. Over the decades stress is emerging as a growing dilemma in organizations. Stress is dynamic state in which a person is confronted with an opportunity, demand related to what the individual wishes and for which the conclusion is perceived to be both unclear and essential.

### **LITERATURE REVIEW**

There have been so many reports of worldwide workplace stress recently that it would be perfectly reasonable to conclude that everyone everywhere is depressed and disheartened. Every employee feels stress related to work. Many employers complain about their jobs, their bosses, their subordinates. So is that occasional outburst that releases pressure to that extent that allow one to calm down and get back to work. The stress at workplaces is hovering from many years. But management did not take it up seriously and considered the solution as soft stuff. (Ira S. Wolfe) Stress happens when one realizes the strain on them. Even sometimes the requirements of a situation are wider than their recognition that they can handle, if these requirements are huge

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and continue for a longer period of time without any break, mental, physical or behavior problems may arise, (Health & Safety Executive UK). Job stress was defined as those work uniqueness which pose as threats to an employee. In other terminology job stress occurs as a result of a poor person-environment fit. Job uniqueness which causes stress was conceptualized to consist of five magnitudes. One of the magnitudes, physical environment, was not integrated in the present study because it was considered unsuitable in entrepreneurial or managerial work environment (McLean 1974; Osipow and Spokane 1983).

Occupational stress is an increasingly important occupational health problem and a significant cause of economic loss. Occupational stress may produce both overt psychological and physiologic disabilities. However it may also cause subtle manifestation of morbidity that can affect personal well-being and productivity (Quick, Murphy, Hurrell and Orman, 1992).

Rapid change is now a fundamental characteristic of modern working life, with greater demands to learn new skills in order to adapt to increasingly complex types of work. A study conducted by the Princeton Survey Research Associates (1997) found that 75 per cent of employees believed that they experience more on-the-job stress than workers did a generation ago.

### ***Research Problem***

Presented research study's problem:

*"A Study of Stress and Effects of Stress on Industrial Employees in Gujarat."*

### ***Research Purpose***

The purpose of all this research was to look at different types of industrial employees and contentment to living on campus. Researchers interested in this area have wanted to determine how well working men fit into the lifestyles and Job STRESS on campuses.

## **RESEARCH METHODOLOGY**

For the purpose of the study descriptive research design was used. The tool used was structured questionnaire. The method of obtaining responses was personal interview with convenience sampling of non probability sampling method. The responses obtained were then further analyzed using statistical software.

### ***Objectives***

In this research paper Independent variable are Educational Category, Age and Type of salary & dependent variables is Job satisfaction. Following main objective are kept in this research paper.

1. To study the Job stress of working men in industrial Area.
2. To study the effect of category on Job stress.
3. To study the effect of age on Job stress.
4. To study the effect of salary on Job stress.

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### *Variables of the Research*

Variables of the Research No.	Variable	Type of Variable	Level	Name of the Level
1	Category	Independent	2	open category SC/ST/Baxi category
2	Age	Independent	3	<ul style="list-style-type: none"> <li>• Age between 35 to 45 years</li> <li>• Age between 46 to 55 years</li> <li>• Above 56 years</li> </ul>
3	Area of the industrial	Independent	2	Rs. 5000 to 10000 salary Rs. 10000 up salary
4	Job stress	Dependent	1	

### *Hypotheses*

1. There will be no significant difference between category (Open and SC/ST/BAXI) in relation to Job satisfaction.
2. There will be no significant difference between type of Age (35 to 45, 46 to 55, Above 56 years) in relation to Job stress.
3. There will be no significant difference between type of salary (Rs. 5000 to 10000 salary and Rs. 10000 up salary) in relation to Job stress.
4. There will be no significant difference between category & type of Age in relation to Job stress.
5. There will be no significant difference between type of Age & type of salary in relation to Job stress.
6. There will be no significant difference between type of salary and type of category in relation to Job stress.
7. There will be no significant difference between Category, Age, and Type of salary in relation to Job stress.

### *Tools*

There are 40 statement of Job stress questioner developed by Bhatt. Five point scale rate is use in this questioner for high level to low level word the number 5, 4, 3, 2, 1 score given. This score range is from 40 to 200. The test retest reliability of the scale is 0.71 (N=50)

### *Research Design*

*2×3×2 Factorial Research Design is for Used the Research. Total: 240*

Variable	open category			SC/ST/Baxi		
	Age between 35 to 45 years	Age between 46 to 55 years	Age above 56 years	Age between 35 to 45 years	Age between 46 to 55 years	Age above 56 years
<b>Rs. 5000 to 10000 salary</b>	20	20	20	20	20	20
<b>Rs. 10000 up salary</b>	20	20	20	20	20	20
<b>Total</b>	40	40	40	40	40	40

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### *Sample*

To select the sample Type of category, Type of Age, Type of salary were considered as per independent variable taken in this research. Stratified random sampling method was employed of select the unit of sample. Total sample of the present investigation comprised 240 adolescences, in which 120 men were from open category and 120 SC/ST/Baxi categories. Both groups entail equal number of Age between 35 to 45, 46 to 55, and Age above 56 years. Again each group was divided by equal number of Rs. 5000 to 10000 salary and Rs. 10000 up salary. Thus total sample includes 12th components as shown in the following table.

### *Statistical Analysis*

The data were analyzed as follows; The mean with graphical representation for Type of Category (open and SC/ST/Baxi category), Type Of Age (Age between 35 to 45 years, 46 to 55 years, age above 56 years) and Type of salary (Rs. 5000 to 10000 salary and Rs. 10000 up salary) on Job stress was analyzed. A 2x3x2 factorial design was subjected to adequate of statistical analysis viz. technique of Analysis of variance (ANOVA) in order to examine the roll of main variables and to industrial Aria their main as well as interaction effects subsequently on working men's Job stress.

## RESULT AND INTERPRETATION

### **Dependent Variable: Job stress**

The aim of the present study was to investigate the effect of category, Type of Age, Type of salary variable on Job stress.

**Table 1 ANOVA for Job stress in context of category, Type of Age, Type of salary variable:**

Source of Variance	Sum of Square	df	Mean Sum of Square	F	Level of Sig.
<b>Main effects</b>					
<b>SSA</b>	2.204	1	2.204	0.006	N.S
<b>SSB</b>	2144.575	2	1072.288	2.897	N.S
<b>SSC</b>	3442.837	1	3442.837	9.302	0.01
<b>Interaction effects</b>					
<b>SSAXB</b>	143.108	2	71.554	0.193	N.S
<b>SSBXC</b>	419.425	2	209.713	0.567	N.S
<b>SSCXA</b>	1425.938	1	1425.938	3.853	0.05
<b>SSAXBXC</b>	451.425	2	225.713	0.610	N.S
<b>SSW</b>	84389.05	228	370.127		
<b>SST</b>	92418.56	239			

Significance Level      N.S = Not Significant

N                              0.05                      0.01

(Df1) 228                    3.87                      6.72

(Df2) 228                    3.03                      4.68

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**Table 2 F Value and Mean for Category Variable: A**

Category	N	Mean	F	Sig. level
A1	120	99.28	<b>0.006</b>	N. S
A2	120	99.092		

**Table 3 F Value and Mean for Type of Age Variable: B**

Type Of Age	N	Mean	F	Sig. level
B1	80	96.95	<b>2.897</b>	N.S
B2	80	97.2		
B2	80	103.41		

**Table 4 F Value and Mean for Type of Salary Variable: C**

Type of Salary	N	Mean	F	Sig. level
C1	120	95.4	<b>9.302</b>	0.01
C2	120	102.98		

**Table 5 F Value and Mean for Category and Type of Age Variable: AXB**

Variable	Category		F	Sig. level
Type Of Age	A1	A2	<b>0.193</b>	N.S
B1	96.98	96.93		
N	40	40		
B2	98.28	96.13		
N	40	40		
B3	102.6	104.23		
N	40	40		

**Table 6 F Value and Mean for Type of Age and Type of Salary Variable: BXC**

Variable	Type Of Age			F	Sig. level
Type of Salary	B1	B2	B3	<b>0.567</b>	N.S
C1	93.83	97.9	100.93		
N	40	40	40		
C2	104.7	107.1	109.15		
N	40	40	40		

**Table 7 F Value and Mean for Type of Salary and Type of Category Variable: CXA**

Variable	Type Of Category		F	Sig. level
Type of Salary	A1	A2	<b>3.853</b>	0.5
C1	97.93	92.87		
N	60	60		
C2	100.63	105.32		
N	60	60		

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**Table 8 F Value and Mean for Category, Type of Age and Type of Salary Variable: AXBXC**

Variable	A1			A2			F	Sig. level
	B1	B2	B3	B1	B2	B3		
C1	96.2	99.85	97.75	90.05	90.25	98.3	<b>0.610</b>	N.S
N	20	20	20	20	20	20		
C2	97.75	96.7	107.45	103.8	102	110.15		
N	20	20	20	20	20	20		

**Main Effect**

The result reveal at that category, Type of Age, Type of salary variables are all significant at level of 0.01.

**Table - 2** shows F value and mean for Category variable. In which, mean for open category industrial employees 99.28 and for SC/ST/Baxi category workers is 99.092 and F value is 0.06 which is no significant at the level of 0.01. Thus, there is a significant no difference in Job satisfaction level of among open and SC/ST/Baxi category workers. In which Open category workers have highest mean than other groups, says that they have more good Job satisfaction level than other group.

**Table - 3** shows F value and mean for Type of Age variable. In which, mean for Age between 35 to 45 years workers is 96.95, Age between 46 to 55 years age is 97.2 and Age above 56 years is 103.41 and F value is 2.897 which is not significant at the level of 0.01. So, there is no significant difference in Job satisfaction level among Age above 56 years ears. In which Age above 56 years worker have highest mean than other groups, says that they have more good Job satisfaction level than the other group.

Then, **Table -4** shows F value and mean for type of salary variable. In which, mean for Rs. 5000 to 10000 salary is 95.4 and for Above Rs. 10000 salaries is 102.98 and F value is 9.302 which is significant at the level of 0.01. Therefore, there is a significant difference in Job satisfaction level among Rs. 5000 to 10000 salary and Above Rs. 10000 salary. In which Above Rs. 10000 salary workers have highest mean than other groups, says that they have more good Job satisfaction level than the other group.

**Interactional Effect**

**Table -5** shows F value and mean of A x B for interactional effect of category and type of Age variable on Job satisfaction. There were six group in which mean for Age between 35 to 45 years open category workers is 96.98, Age between 46 to 55 years open category workers is 98.28, Age above 56 year open category workers is 102.6, Age between 35 to 45 years SC/ST/Baxi category worker is 96.93, Age between 46 to 55 years SC/ST/Baxi category worker is 96.13 and Age above 56 year up SC/ST/Baxi category men workers is 104.23. Their F value is 0.193 which

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is not significant at the level of 0.01. In which Age above 56 year up SC/ST/Baxi category workers have highest mean than other five groups. It means Age above 56 year up SC/ST/Baxi category workers have more good Job satisfaction level than the other groups.

**Table - 6** shows F value and mean B x C for interactional effect of Type of age and salary variable on Job satisfaction. There were six groups in which mean for Rs. 5000 to 10000 salary Age between 35 to 45 years is 93.83, Above Rs. 10000 salary Age between 35 to 45 years is 104.7, Rs. 5000 to 10000 salary Age between 46 to 55 years is 97.9, Above Rs. 10000 salary Age between 46 to 55 years is 107.1, Rs. 5000 to 10000 salary Age above 56 years is 100.93 and Rs. 10000 up salary Age 56 years is 109.15. F value of this group is 0.567 which is not significant. It shows that there is significant difference in any of these five groups in Job satisfaction. In which above Rs. 10000 salary Age 56 years have highest mean than other groups, say that they have more good Job satisfaction level than the other group.

**Table – 7** shows F value and mean C x A for interactional effect of salary and type of category variable on Job satisfaction. There were four groups in which mean for Rs. 5000 to 10000 salary open category workers is 97.93, Rs. 10000 up salary open category workers is 100.63, Rs. 5000 to 10000 salary ST/SC/Baxi category workers is 92.87 and above Rs. 10000 salary ST/SC/Baxi category worker is 105.32. F value for this group is 3.853 which is significant at the level of 0.05. In which above Rs. 10000 salary ST/SC/Baxi category workers have highest mean than all other groups, says that they have more good Job satisfaction level than the other group.

**Table - 8** shows F value and mean A x B x C for interactional effect of category, type of Age and type of salary variable on Job satisfaction. There were twelve groups. F value of these groups is 0.610 which is not significant at the level of 0.01. In these groups, Rs. 10000 up salary SC/ST/Baxi age 56 years worker have highest mean than other eleven groups, says that they have more good Job satisfaction level than the other group.

## CONCLUSIONS

1. There will be no significant difference between category (Open and SC/ST/BAXI) in relation to Job satisfaction.
2. There will be no significant difference between type of Age (Age between 35 to 45, 46 to 55, above age 56 years) in relation to Job satisfaction.
3. There will be significant difference between type of Salary (Rs. 5000 to 10000 salary and Rs. 10000 up salary) in relation to Job satisfaction.
4. There will be no significant difference between category & type of Age in relation to Job satisfaction.
5. There will be no significant difference between type of Age & type of Salary in relation to Job satisfaction.



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6. There will be significant difference between type of Salary and type of category in relation to Job satisfaction.
7. There will be no significant difference between Category, Age, and Type of Salary in relation to Job satisfaction.

### DISCUSSIONS

Majority of the industrial employees felt that their job is stress full and that stress in return decreases their performance. Work overload, more customers, Less Time and Competition were the major contributor to job stress in industrial employees. Due to work overload and time pressure the employees of the industry are unable to adopt a work approach. Therefore the overstressed job decreases employee performance and perhaps a chief contributor to employee dissatisfaction. The overstress has been a major reason for deteriorating the health of the employees. Industrial employees are getting serious health problems such as Depression, Erratic Moods, Inability to Concentrate, etc. These is even causing employees to feel overtired very soon, feeling of anger, frustration and irritations are the main causes of low efficiency and productivity of the employee. Industry can adopt many ways to remove or reduce the stress and to own work the negative effects of stress among employees like Continuous Training, Improve Knowledge and Provide Development Opportunity, Establish Effective Communication, and Program me on Reducing Stress Management.

### *Acknowledgments*

The author appreciates all those who participated in the study and helped to facilitate the research process.

*Conflict of Interests:* The author declared no conflict of interests.

### REFERENCES

- Beeher T.A , walsh, J. T. and tables T.D (1978) : “Job stress employee health and organization effectiveness” *personal psychology*, 31, 665-669
- Bharti, T.N, and vishvanath reddy 1991 : “effects of occupational stress on of applied psychology” p.17, 81-85
- Garret, H.E. (1967). *Statistics in Psychology and Education*. (4th ed.) Bombay: Vakils, Feffer and Simons Pvt. Ltd.
- Garret, H.E. (1968). *General Psychology*((Indian reprint). New Delhi: Eurasia Pblushing House.
- Hanse selye (1988-89) : “The stress of life”, New York McGrow Hill Murphy, Gardner (1968). *An introduction to Psychology*. New Delhi: Oxford & IBH.
- Hitt, M. A. (1982) : “occupation stress and perceived organizational effectiveness in formal group” *personal psychology summer*, pp. 359-370
- McLEAN A. (1974), "Concepts of occupational stress", in A. McLean (eds) *Occupational Stress*, Thomas, Springfield, Illinois.

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- Okpara, John O., (2004), "Personal Characteristics as Predictors of Job Satisfaction An Exploratory Study of IT Managers in a Developing Economy", *Information Technology & People*, 17(3), 327-338.
- Rode, J. C. (2004), "Job Satisfaction and Life Satisfaction Revisited: A Longitudinal Test of an Integrated Model", *Human Relations*, 57(9), 1205-1231.
- Sethi, Vikram, Barrier, Tonya & King, Ruth C., (1999), "An Examination of the Correlates of Burnout in Information Systems Professionals", *Information Resources Management Journal*, 12(3), 5-13.

**How to cite this article:** Kapdiya N (2017), A Study of Stress and Effects of Stress on Industrial Employees in Gujarat, *International Journal of Indian Psychology*, Volume 4, Issue 2, No. 88, ISSN:2348-5396 (e), ISSN:2349-3429 (p), DIP:18.01.071/20170402, ISBN:978-1-365-74161-6