



Job satisfaction as a function of stress among job satisfaction

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Abstract

This study finds out the effect of level of stress i.e. low, moderate and high stress on job satisfaction, Second to find out the effect of three professions i.e., doctor, teacher and advocate on job satisfaction. This study comprises three independent variables. The first independent variable called the stress has been designated as A, having three levels, i.e. low stress (A1), moderate stress (A2) and high stress (A3). The second independent variable, i.e. profession the subjects symbolized as B, has been varied at three levels, i.e., doctors (B1) teachers (B2) and advocates (B3). The third and last independent variable namely gender of the subject. Effects of these three independent variables on the dependent variable, i.e. job satisfaction of subjects have been assessed. In this chapter an attempt has been made to analysis the data obtained from 270 subjects on job satisfaction scale. Scores on job satisfaction scale obtained from 270 subjects were computed and these raw scores were tabulated for statistical analysis. Job Satisfaction Scale: This test was developed by Prof. S.K. Srivastava of Gurukul Kangri University, Haridwar. As the design of the study is $3 \times 3 \times 2$ between group factorial designs with equal number of subjects in each cell, ANOVA was used as statistical technique to analyze the data followed by Mean and Newman-Keuls Multi-group Comparison Test.

Keywords: job satisfaction, stress

Introduction

Are most people satisfied with their jobs? The answer seems to be a qualified "yes" in the in most developed countries. Independent studies, conducted on workers over the past 30 years, generally indicate that the majority of workers are satisfied with their jobs, while the percentage range is pretty wide—from the low 50s to the high 70s - more people report that they're satisfied. Moreover, these results are generally applicable to all developed countries. For instance, comparable studies among workers in Canada, Mexico, and Europe indicate more positive than negative results.

What factors might explain this recent drop in job satisfaction? Experts suggest it might be due to employers' efforts at trying to increase productivity through heavier employee workloads and tighter deadlines. Another contributing factor may be a feeling, increasingly reported by workers, that they have less control over their work. But does the fact that job satisfaction increases with pay mean that money can buy happiness? Not necessarily. While it's possible that higher pay alone translates into higher job satisfaction, an alternative explanation is that higher pay is reflecting different types of jobs. Higher-paying jobs generally require higher skills, give incumbents greater responsibilities, are more stimulating and provide more challenges, and allow workers more control. So it may be that the reports of higher satisfaction among better-paid workers reflects the greater challenge and freedom they have in their jobs rather than the pay itself.

Long term nationwide studies indicate that general job satisfaction has been relatively high and stable in the developed countries. Although worker expectation have both increased and change in their focus over time. The quality of management practices also has improved. As result more then 80 percent of those in the work force usually report, that they are reasonably satisfied with their

jobs.

Managers should not be complacent, however, for this also suggests that millions of workers are unhappy, and many other million are probably dissatisfied with same specific aspects of their job. In addition many of the "satisfied" workers may have simply resigned themselves to their work situations, with the result that they are neither satisfied nor dissatisfied.

The level of job satisfaction across groups is not constant, but it is related to numbers of variables. This allows managers to predict which group is more likely to exhibit the problems behaviors associated with dissatisfaction. The key variables revalue around age, occupational level, and organizational size. Who is satisfied? As workers grow older, they tend to be slightly more satisfied with their jobs; apparently they lower their expectations to more levels and adjust themselves better to their work situations. Predictably, too, people with high-level occupations tend to be more satisfied with their jobs. As we might expect, they are usually better paid, have better work conditions, and hold jobs that make fuller use of their abilities.

Finally, there is some evidence to suggest that level of job satisfaction are higher in smaller organizational units (such as branch plant). This is because larger organization tend to whelm people, disrupt supportive process, and limit the amount of personal closeness, friendship, and small groups team work and limit the amount of teamwork that are important to the satisfaction of many people.

Following problems were formulated

Problems related to main effect

1. The problem of present research was to find out the effect of level of stress i.e. low, moderate and high stress on job satisfaction.

Problems related to Interaction effect

1. The problem was to find out the interaction effect between levels of stress job satisfaction.

Hypothesis

Hypothesis provides a direction to a research. Accordingly, after formulation of problems hypotheses were also formulated in the present research. Following seven hypotheses were formulated.

Hypotheses related with main effects

1. Three different level of stress, i.e., low, moderate and high will have significantly different effect on job satisfaction.
2. Subjects of three different professional groups, i.e., doctors, teachers and advocates will differ significantly in their level of job satisfaction.

Hypotheses related with interaction effects

3. There will be significant interaction effect between three level of stress and three professional groups on job satisfaction.

Description of Variables

Independent Variable

In the present research we have selected to study the effect of three independent variables on job satisfaction.

1. Degree of stress has been manipulated at three levels, i.e., low, moderate and high stress.

2. Three types of profession i.e., doctor, teacher and advocate were selected.

Dependent Variable

In the present research, we have studied the effect of above three independent variable on one dependent variable, i.e., job satisfaction.

Job satisfaction

Job satisfaction may be defined as an attitude which results from a balancing and summation of many specific likes and dislikes experienced in connection with the job. These evaluations may rest largely upon one's own success or failure in the achievement of personal objectives and upon perceived contribution of the job and company towards these ends.

Research Design

In the present study 3x3x2 between group fractional designs, with 18 cells was used to examine the effect of three independent variable on job satisfaction. The three independent variables were, stress (A) profession (B) and gender (C)

The first independent variable, degree of stress was varied at three levels i.e., low stress (A1), moderate stress (A2) and high stress (A3). Second variable profession has three categories, doctors (B1), teachers (B2) and advocate (B3). A schematic presentation of design is shown in Fig. 3.1.

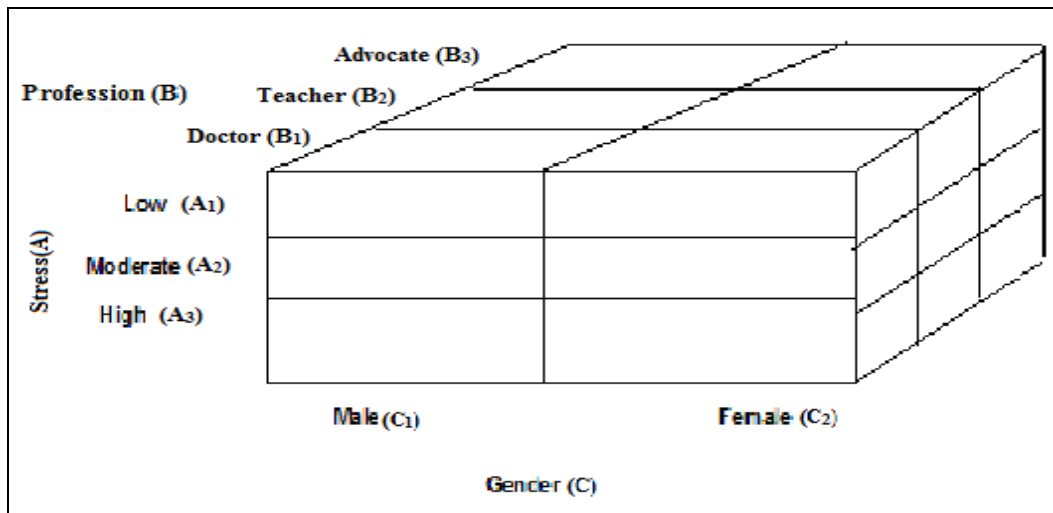


Fig 1: Showing Design of the Study

Sample

In the present study, 270 subjects were used as sample of the research. Out of these 270, 90 subjects were of low stress, 90 moderate stress and 90 of high stress. Each group

of 90 individuals consisted of 30 doctors, 30 teachers and 30 advocates. In each sub group of 30 subjects, Distribution of sample is given in Table 3.2.

Structure of the Sample

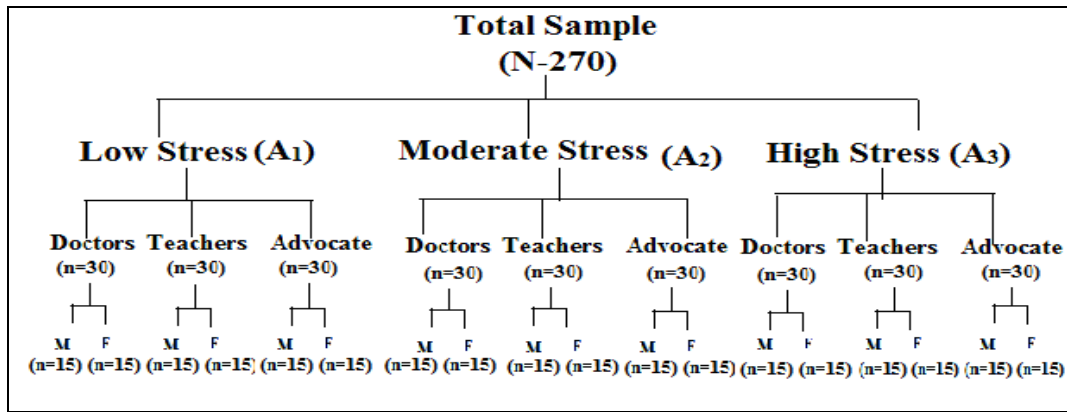


Fig 2

Tools

1. Stress Inventory

This test was developed by eight state questionnaire (8SQ) measures 8 states - anxiety, stress, depression, regression, fatigue, guilt, extraversion and arousal. In this questionnaire there are 12 questions to measure the stress of the individual.

Scoring: Each item (question) is scored 3, 2, 1 or 0. Item number 1, 3, 4, 6, 9, 10 are scored in order of 3, 2, 1 and 0. Remaining six items -2, 5, 7, 8, 11, 12 are scored 0, 1, 2 and 3. Thus stress score ranged from 0 to 36 indicating high score to high stress. In this way stress score for each individual were calculated.

2. Job Satisfaction Scale

This test was developed by Prof. S.K. Srivastava of Gurukul Kangri University, Haridwar.

Scoring and Interpretation

Total no. of Quesner 38 bl ekiuh esa dqy 38 iz'u gSa] ftuds fd mÜkj ^^iw.kZr% lger] lger] vfuf'pr] vlger vkSj iw.kZr% vlger** ds uhps cus dks"Bd esa fdlh, d ij lgh (√) fpUâ cukdj vafdr djuk gSA bl ekiuh esa 28 iz'u@dFku /kukRed (Positive) gS rFkk 10 iz'u@dFku _kkRed (Negative) gSaA /kukRed dFku (Positive Items): 1] 2] 3] 4] 5] 8] 9] 10] 11] 12] 13] 16] 17] 19] 21] 22] 23] 24] 25] 26] 27] 28] 32] 33] 34] 35] 36 and 37 = 28 Items/kukRed iz'uksa DH x.kuk (Scoring) bl izdkj gksxh&iw.kZr% lger&5] lger&4] vfuf'pr&3] vlger&2 vkSj iw.kZr% vlger&1 vad iznku fd; k tk; sxA_kkRed dFku (Negative Items) % 6] 7] 14] 15] 18] 20] 29] 30] 31 and 38 ¼ 10 Items bl dk;Z larks"k ekiuh (Job Satisfaction Scale) esa U;wure vad 38 rFkk vf/kdre vad 990 gks ldrs gSA bl ekiuh dh lgk;rk ls izkIr U;wure vad (minimum score) dk;Z ds izfr vlarks"k (Job dissatisfaction) rFkk vf/kdre vad (maximum score) dk;Z ds izfr larks"k (Job satisfaction) dks n'kkZrs gSaA

Statistical Analysis of Job Satisfaction Scores

In order to find out the effect of the three independent variables on Job Satisfaction of the subjects, the data were analyzed by using three-way analysis of variance (ANOVA) technique. The technique is useful in testing difference between two or more means and its special merit lies in testing differences of all mean at the same time. The F-test is a comprehensive test of significance of differences among means but it fails to locate as to which of the mean differ

significantly. In the case of significant F-value more specific comparisons are made among the means for the factors having more than two levels by the use of Post -hoc multi-group comparison test. For mean comparison the Newman Keuls Test has been selected and the procedure prescribed in the standard text books, Ferguson (1971, pp. 271-274) and K.D. Broota (1989) has been followed in applying the Newman-Keuls Test. The data indicating the mean scores based on 15 observation each for (18 cells, i.e., 3 levels of stress i.e., low stress, moderate stress and high stress, Three Professionals Doctors, Teachers and Advocates i.e., are presented in Table 4.1.

Table 1: Mean Job Satisfaction Scores on Various Levels of Three Independent Variables

Stress (A)
Low Stress A ₁ =156.42
Moderate Stress A ₂ =131.58
High Stress A ₃ =108.08

In order to find out the effects of three independent variables on the dependent variable called job satisfaction the data presented in tabular form were analyzed using three-way analysis of variance (ANOVA) technique. The procedure followed for the analysis is that suggested by Edwards (1971) for the treatment of such data. Summary table of ANOVA is presented in Table 4.2.

Table 2: Summary of Analysis of Variance of Job Satisfaction

Source of Variance	Sum of Square	Degree of Freedom (df)	Mean Square	F value
Stress (A)	105151.67	2	52575.83	1221.89**
Error	10843.06	252	43.02	

** Significant at 0.01 level * Significant at 0.05 level

Interpretation of Results

Main Effects

Effects of Level of Stress

Table 4.2 shows that F ratio for the first independent variable, i.e., level of stress- low stress, moderate stress & high stress is 1221.89 which is highly significant at 0.01 level of confidence (F; 2, 252=1221.89<.01). This significant F value leads us to conclude that level of stress is important factors in determining job satisfaction. The null hypothesis is, therefore, rejected and the research hypothesis that three would be significant difference in the job

satisfaction of the subjects associated with three levels of stress, i.e. low stress, moderate stress and high stress is confirmed. The fact that three levels of stress influence job satisfaction also signifies that the three means stand apart. In order to know as to which group of subjects of three levels of stress had maximum and which had minimum job satisfaction, means were calculated for level of stress. Mean

job satisfaction scores, thus, obtained are given in Table 4.3.

Table 3: Mean Job Satisfaction Scores at Three Levels of Stress

S.No.	Stress (A)	Mean Score
1	Low Stress (A ₁)	156.42
2	Moderate Stress(A ₂)	131.58
3	High Stress (A ₃)	108.08

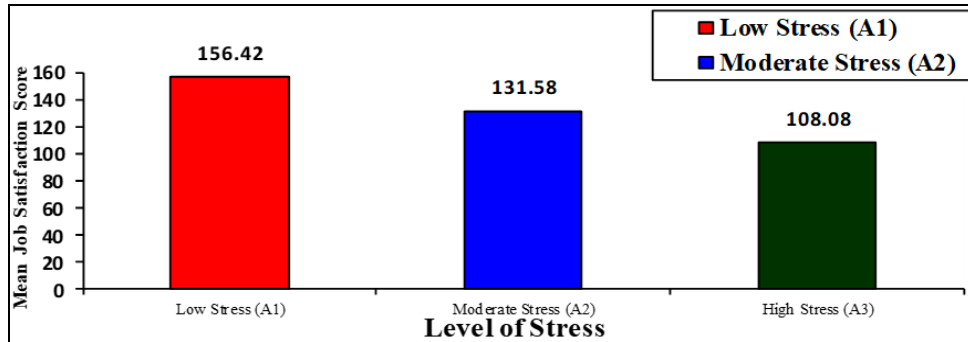


Fig 4: Showing mean job satisfaction Scores at three levels of stress

A glance at table 4.3 reveals that mean job satisfaction score of subjects with low stress was found higher (156.42) than the remaining two levels, i.e., moderate stress level (131.58) and high stress (108.08). Thus, increase in stress has adversely affected job satisfaction. In order to make things more clearly mean job satisfaction scores for low stress, moderate stress and high stress group were plotted in Figure 4.1. A look at graph reveals adverse effect of stress. Three level of stress has been plotted on abscissa and mean job satisfaction scores on ordinate. Three bar indicating the three level of stress has shown that the job satisfaction level has decreased with the increase in the level of stress.

The F-test provides a comprehensive test of the significance of difference among means but it does not locate as to which of the three mean comparisons differ significant. It simply shows that at least one of the mean comparison is significantly different from the other. From the result given in table 4.3, it is clear that there is difference among mean job satisfaction scores of subjects with low stress, moderate stress and high stress. In order to find out the significance of differences among means at three level of stress, Newman-Keuls (1952) multiple group Comparison Test was applied to further analyze the data, following the procedure advised by Ferguson (1971). The obtained results of Newman-Keuls Test are given in table 4.4.

Table 4: Summary of Newman Keuls Test

Group Compared	Stress (A)		
	A ₃	A ₂	A ₁
Ordered Mean	108.08	131.58	156.42
A ₃ -108.08	-	23.5**	48.34**
A ₂ -131.58		-	24.84**
A ₁ -156.42			-

**Significant at .01 level

A close inspection of table 4.4 reveals that all of three mean group comparisons were found significant at .01 level of confidence. The first mean comparison between low group of stress and high group of stress yielded highest value i.e., 48.34 followed by between low stress and moderate stress i.e., and 24.84 and between moderate stress and high stress i.e., 23.5.

Summary

On the basis of the analysis of the obtained data in terms of job satisfaction score the findings of the present investigation are summarized as below:

1. Difference in the job satisfaction under three level of stress i.e., low stress, moderate stress and high stress was found significant at .01 level of confidence. Job satisfaction under low stress (M= 156.42), moderate stress (M=131.58), high stress (M=108.08).
2. No significant interaction was found between three type of profession, i.e., doctors, teachers and advocates and gender. Thus B × C has no influence on job satisfaction.

Discussion and Suggestions for Further Researches

This study divided into the sections. (1) In the section a broad review of theories of job satisfaction have been presented. (2) The second part deals with the interpretation of results related to (i) effect of level of stress on job satisfaction.

i). Effect of stress on Job Satisfaction

The main finding related to the effect of level of stress on job satisfaction clearly revealed that the three group of stress, i.e., low, moderate and high do differ significantly in their scores of job satisfaction. The subjects with low stress were found more satisfied in their job (M=156.42) in comparison to other group of subjects belonging to moderate (M=131.58) and high level of stress (M=108.08). Now question arises why do these groups differ significantly in job satisfaction. More specifically, why the subjects of low stress are are more satisfied in their job as compared to the subjects belonging to moderate and high stress group. To answer this question, an explanation can be advanced to account for these differences in the light of Vroom's valence instrumentality expectancy (V.I.E.) theory. This theory is also known by another name such as Expectancy theory. The expectancy valence theory or model is also a cognitive theory of job satisfaction. Individuals are viewed as thinking and reasoning beings who have beliefs and expectations or anticipations concerning future events in their lives. The assumption of this theory is that behavior is viewed as function of interaction between personality i.e.

ability, value, needs, expectancy, instrumentality and role demands and general environment around the person. Vroom (1964) also sees job satisfaction in terms of the degree to which a job provides the person with positively values outcomes. Vroom equates satisfaction with valence. Since, the subjects with low stress have shown more satisfaction in jobs, these subjects are supposed to have healthy personality interaction with the environment around them. The needs and expectations of these individuals are fulfilled by their effort and abilities and in turn of this they take more interest in their job which might be producing a positive feeling towards their job. In other words it may be hypothesized that individual with low stress feel more comfortable and enjoy their work. The positive feeling towards the work also brings positive feeling in them. The positively in the feeling and behavior of individual brings more satisfaction in job due to more valued outcomes provided by the environment. Thus, due to the difference in the degree of the valued outcomes, these three groups of high, moderate and low stress have shown different job satisfaction. Another explanation can be presented in the light of fulfillment theory of job satisfaction proposed by Scaffer (1953). The basic assumption of this theory is that job satisfaction is related to the extent of fulfillment of needs. The subjects of high level of stress were found to experience less job satisfaction. It may be noted that the outcome in the job depends upon the efforts one makes to complete the work successfully. A highly stress person have feeling of helplessness and does not take interest in his work leading to low job satisfaction.

Suggestions for Further Researchers

In the following section researcher has made an attempt to highlight and suggest those problems which are still unresolved and need further investigation by the follow researchers.

1. In the present study we investigated the effect of three professional groups, i.e., doctors, teachers and advocates ignoring their seniority and work experience. With the length of experience several type of changes are automatically associated, i.e., adjustment with the work environment, income and professional skills etc. A study be planned to find out the effect of work experience i.e., length of service on job satisfaction.
2. In our study, we studied the effect of profession on job satisfaction ignoring the job profile. We studied job satisfaction of doctors without considering whether they are private practioners or in employment in government or semi government organization. Similarly teachers working in Govt Colleges and self-finance colleges, advocates in employment or private practioners be also compare in term of their job satisfaction. A study including this dimension will bring interesting results.
3. Now a day’s people are more inclined and prefer Govt. job rather than job the private organisation due to job uncertainty in private organization. A study comparing the job satisfaction of workers in private and govt organisation along with the length of service may be planned to bring comparative position of job satisfaction.

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