CHAPTER – IV

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Method
AREA OF STUDY AND POPULATION

This chapter comprises of the research methodology and other attributes of data collection required for empirical testing of the conceptual framework developed earlier. This study is a descriptive co-relational one and seeks to explore the relationship between job stress and organizational commitment in a bureaucratic set up. In order to ensure validity and reliability of the collected data, the quantitative methodology has been preferred and employed; as the examination of the literature on job stress and organizational commitment provided a strong support for this empirical quantitative method. Also, quantitative method was found to be more suitable to understand in detail the nature of major variables as it provided suitable relative basis for interpreting and validating the results. The primary and secondary data were collected for the survey. Primary data were collected through questionnaires and secondary data were collected from books, journals, magazine etc. The collection of a large amount of data through structured questionnaire in this study provided a real picture of the entities and observable facts.

Table 4.1: Distribution of Population

<table>
<thead>
<tr>
<th>Levels</th>
<th>Delhi Zone</th>
<th>Chandigarh Zone</th>
<th>Jaipur Zone</th>
<th>Total Population</th>
<th>Number of respondents selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level-I or Group-A. Exec.</td>
<td>18</td>
<td>6</td>
<td>6</td>
<td>30</td>
<td>18</td>
</tr>
<tr>
<td>(Gazetted)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level-2 or Group-B. Exec.</td>
<td>65</td>
<td>15</td>
<td>10</td>
<td>90</td>
<td>65</td>
</tr>
<tr>
<td>(Gazetted)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level-3 or Group-B.+Exec.</td>
<td>110</td>
<td>40</td>
<td>20</td>
<td>170</td>
<td>121</td>
</tr>
<tr>
<td>(Non-Gazetted)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level-4 or Group-C. Ministerial</td>
<td>16</td>
<td>4</td>
<td>4</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td>(Non- Gazetted)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It was observed that the bureaucrats at the top most Level-1 or Group ‘A’ Executive (Gazetted) officers i.e. above the rank of Deputy/Assistant Commissioner, exercise administrative and supervisory control in general, besides distinct dispute resolution functions in the form of appeals or reviews, etc. and as such their direct participation for the purpose of revenue collection
has been found **very limited** for the purpose of this study. Similarly, barring a very limited role in the field for the collection of revenue, ministerial officials simply assist the executive staff and as such they too, have the aforesaid limitations.

Since all important matters pertaining to revenue collection are dealt at the formation, comprising of revenue officials designated as **Deputy/Assistant Commissioners** (Level-1) or **Group-A**, Executive (Gazetted) officials, at Divisional level, **Superintendents** (Level-2) or **Group-B**, Executive (Gazetted) officials, at Range level, **Inspectors** (Level-3) or **Group-B+**, Executive (Non-Gazetted) officials, at Sector level and **Tax Assistants** (Level-4) or **Group-C**, Ministerial officials, at Divisional level, as such they play the vital role of revenue collection. Therefore, relevant subjects or respondents for this study belonged to these segments and have been taken into consideration from different geographical areas.

The important **characteristics of the respondents** were that almost all were graduates from different streams; they were having mean age of 48 years; majority of them had put in more than ten years in service in the department; more than twenty per cent of the total respondents had their entry in service of this department through ministerial cadre; about ten per cent of the total respondents had undergone some training and less than five percent of the total respondents were female officials who volunteered for the study.

**Sample:**

The respondents representing the target segments were found distributed in the Delhi, Chandigarh and Jaipur Zones of Customs, Central Excise & Service Tax and their distribution there was reportedly uneven or not fixed on account of shortage of staff or on account of some administrative policy. It was observed that despite of repeated persuasion and lot of efforts, respondents from almost all Levels and a few segments were reluctant to come forward for this
investigation on one pretext or the other. Therefore, the respondents who volunteered for the study were selected from different Levels by applying judgmental, consented and non probability sampling technique on the basis of criterion that the respondent must have been working in the department for more than 5 years, must have worked in relation with the collection of almost all the aforesaid duties or tax in the department and should have adequate experience of desk work and field jobs, directly or indirectly in the same Zone or the other, at the time of study. However, only 18, out of 30, Level-1 respondents, 65 out of 90, Level-2 respondents, 121 out of 170, Level-3 respondents and 14 out of 24, Level-4 could respond properly in the investigations.

**Tools:**

The investigation was conducted with the help of a questionnaire, which comprised of three parts, viz. **A, B and C**.

**Part-A** comprised of 10 straight questions comprising of 10 straight questions pertaining to demographic Bio-Data and respondents were required to answer them by tick marking (✓) pre-set part of information regarding age, qualification, experience, training, hobbies, entry in the department, specialized educational qualifications etc (Appendix-I).

Following instructions were given at the very beginning of this Part, “This part consists of questions where you are required to answer regarding your bio-data etc. Wherever you are requested to (✓) tick mark, please, (✓) tick mark the relevant”

**Part-B** comprised of the Organizational Commitment Questionnaire (OCQ) developed by Meyer and Allen (1991), Following instructions were given at the very beginning of this Part, “The following 24 statements describe how you think about your organization. Please respond by indicating the degree to which each of the statements applies to you using the following scale.
1. Strongly Disagree  
2. Disagree  
3. Slightly Disagree  
4. Neither Agree nor Disagree  
5. Slightly Agree  
6. Agree  
7. Strongly Agree

There is no right or wrong answer. Choose *anyone from the above numbers* 1, 2, 3, 4, 5, 6 & 7 and *(✓)* tick mark one of the relevant column against each statement that best indicates your *choice provided in each statement.*

For the purpose of scoring the responses of respondents organizational commitment Questionnaires scale developed by Allen and Meyer (1991) was used to measure the organizational commitment. The scale was based on the Three-Component Model of Meyer and Allen and consisted of three distinct sub scales for affective, continuance and normative components of organizational commitment and was found to have been supported with acceptable levels of reliability and validity contained therein. Each sub scale consisted of eight statements presented in a seven point Likert-type scale wherein some items were positive and rest were negative, having distinct scoring technique for each of them. The respondents were asked to rate each of the statements and to tick mark *(✓)* pre-set information on the scale *(APPENDIX-II)*

**Part-C** comprised of the Occupational Stress Index (OSI) Questionnaire, by Srivastva & Singh, 1984, consisted of forty six items relating to almost all relevant components which cause stress in some way or the other in job life. The respondents were asked to rate each of the statements and to tick mark *(✓)* pre-set information on the scale Following instructions were given at the very beginning of this Part:

*Instruction:* - *bl iz’ukoyh esa vkids dk;Z okrkoj.k ls lEcft/kr dqN dFku fn;s x;s gSaA izR;sd dFku ds lkeus ikip lEHkkfor mÜkj fn;s x;s gSaA vki dh ukSdjh vFkok foHkkx ds lUnHkZ esa tks Hkh mÜkj Bhd yxs mlds uhps bl izdkj (√ ) fpUfgr dj nhft,A izR;sd dFku*
The Occupational Stress Index (OSI) by Srivastva & Singh, 1984, is a self-report inventory consisting of sub scales pertaining to twelve occupational stressors, each containing varying numbers of statements presented in a five point Likert-type scale, wherein some items were positive and rest were negative, having distinct scoring technique for each of them and with prescribed levels of reliability and validity also contained in tune with and its measurement scale. (APPENDIX-III)

For the purpose of ensuring the validity of collected data, hypothesis was formulated, describing the goal of the research, conceptual descriptions of all the relevant concepts used in the research, as seen theoretically and empirically and used in the research. For the purpose of ensuring the reliability, the individual’s anonymity was ensured, and attempts were made to establish rapport with the respondents by all possible means of communication and also through a note, along with the questionnaire, explaining the reason and purpose of research.

Procedures:

To begin with study was conducted by selecting randomly some of the eligible subjects (respondents) drawn from each level/group and interview method was applied to shortlist the major job stressors they come across very frequently at their work place. After selecting and listing all such reported job stressors, usually one come across in a bureaucratic set up, they were shortlisted and other social sciences department of the University were approached for their suggestions regarding their selection as proper antecedents of job stress, in respect of target segment, veracity of studying such shortlisted job stressors, suitable means for collecting and scaling the data pertaining to the selected job
stressors etc. Occupational Stress Index (OSI) Questionnaire, by Srivastava & Singh, 1984 and its measurement scale were found to be most suitable for this purpose; as it contained all the information pertaining to the shortlisted job stressors in a well organized manner. Therefore, a pilot study was conducted to try out the questionnaire. Whatever ambiguities, drawbacks or incoherence were noticed or pointed out, were corrected and incorporated in the questionnaire which was again tried out. After finding the questionnaire readily comprehensible and up to the mark in using and scoring the subjects’ protocols, this tool was adopted in the form discussed above.

The respondents were thereafter contacted personally and were made aware of the proposed investigation. Whenever anyone of the relevant respondents volunteered, the contents of questionnaire were orally presented and after taking his/her consent, the questionnaire was administered. A good number of the respondents belonging to Level -2 Group-B Executive (Gazetted) and Level -3 Group-B+ Executive (Non-Gazetted) preferred to fill up the questionnaire in the presence of the investigator but large number of them preferred to fill up the questionnaire later on at their own convenience. None of the Level -1 or Group-A Executive (Gazetted) respondent preferred the filling-up the questionnaire then and there or in the presence of investigator. In all such cases, the respondents were followed up by visiting them or telephonically requesting them by all means. Level-1 and Level-3 officers required the maximum follow up and Level-2 officers required the minimum follow up. Level-4 ministerial officials were found to be very cooperative and supporting in the matter of filling up the questionnaire.

Instances were not uncommon when a good number of eligible respondents from Level-1, few from Level-2 and very few from Level-3 & 4 expressed their inability to fill up the questionnaire on one count or the other. Most of the filled up questionnaires were collected personally and remaining were received by post or through a messenger.
On scrutiny of these questionnaires, it was found that 18 questionnaires out of 21 in the case of Level-1, 65 out of 72 in the case of Level-2, 121 out of 135 in the case of Level-3 and 14 out of 20 in the case of Level-4 of the filled up questionnaires received back were complete in all respects.

Analysis & Statistical Tests:

The statistical package for social sciences (SPSS-18th) was used to conduct the analysis of the collected data. Various statistical techniques such as arithmetic mean, standard deviation, correlation analysis, percentile analysis and analysis of variance, were employed to examine the data. These techniques have been found appropriate to test the internal consistency, construct validity, average, and dispersion, determination of cut off scores, variance and relationship among different variables.

Various analyses were done to fulfill the objectives:

1. **One way ANOVA** (Analysis of variance): To find out the effect of hierarchical level on different variables of stress and commitment among officials of Central Excise department. **Post Hoc (Tukey HSD)**, to test the significance of mean difference in each of the twelve dimensions of job stress between different hierarchical levels on the basis of designation, the test of difference, Post Hoc (Tukey HSD) was applied.

2. **Simple Regression**: Simple Regression was applied to the total score of occupational stress, as dependent variable and total score of organization commitment as independent variable for the purpose of verifying the significance of organizational commitment for job stress.

3. **Step wise multiple Regression**: To study and verify the predictive significance of Affective, Normative and Continuance commitment in respect of each of the identified job stressor.