Chapter - 3

Research Methodology
CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter deals with methodology adopted for the present research study. It describes the design, sample, tools used, procedure of data collection and statistical techniques used for data analysis.

3.2 DESIGN OF THE STUDY

The purpose of this research was to study the relationship between individual related variables (emotional intelligence, work centrality, age, gender and marital status); family related variables (spouse support, parental demands and household responsibility); work related variables (work schedule flexibility, task variety and task autonomy) and work life balance and its dimensions, namely, work interference with personal life, personal life interference with work and work/ personal life enhancement. The study aimed at examining the differences in work life balance of IT and ITES working professionals at varied levels of individual, family and work related variables. In addition the purpose was to study the nature of work life balance programmes provided in various organizations included in the study. Thus, descriptive research (survey) design was used to undertake the study.
3.3 OBJECTIVES

The objectives of the study were to:

- study the relationship between the individual related variables (emotional intelligence, work centrality, age, gender and marital status) and work life balance (including its dimensions) of working professionals in IT and ITES industry.

- examine the differences among IT and ITES working professionals at varied levels of individual variables (emotional intelligence, work centrality, age, gender and marital status) on work life balance and its dimensions.

- find the relationship between the family related variables (household responsibility, spouse support and parental demands) and work life balance (including its dimensions) of working professionals in IT and ITES industry.

- study the differences among IT and ITES working professionals at varied levels of family related variables (household responsibility, spouse support and parental demands) on work life balance and its dimensions.

- study the relationship between work related variables (task variety, task autonomy and work schedule flexibility) and work life balance (including its dimensions) of working professionals in IT and ITES industry.

- examine the differences among IT and ITES working professionals at varied levels of work related variables (task variety, task autonomy and work schedule flexibility) on work life balance and its dimensions.

- study the nature of work life balance programmes provided to working professionals in organizations included in the study.
3.4 HYPOTHESES

On the basis of the review of literature the study was advanced on the following hypotheses:

- $H_{la(i)}$ There will be significant correlation between the emotional intelligence and work life balance (including its dimensions) of working professionals in IT and ITES industry.

- $H_{la(ii)}$ There will be significant differences among the mean scores of IT and ITES working professionals at varied levels of emotional intelligence on work life balance and its dimensions.

- $H_{lb(i)}$ There will be significant correlation between the work centrality and work life balance (including its dimensions) of working professionals in IT and ITES industry.

- $H_{lb(ii)}$ There will be significant differences among the mean scores of IT and ITES working professionals at varied levels of work centrality on work life balance and its dimensions.

- $H_{lc(i)}$ There will be significant correlation between the age and work life balance (including its dimensions) of working professionals in IT and ITES industry.

- $H_{lc(ii)}$ There will be significant differences between the mean scores of IT and ITES working professionals at varied levels of age on work life balance and its dimensions.
- $H_{ld(i)}$ There will be significant correlation between the gender and work life balance (including its dimensions) of working professionals in IT and ITES industry.

- $H_{ld(ii)}$ There will be significant differences between the mean scores of male and female IT and ITES working professionals on work life balance and its dimensions.

- $H_{le(i)}$ There will be significant correlation between the marital status and work life balance (including its dimensions) of working professionals in IT and ITES industry.

- $H_{le(ii)}$ There will be significant differences between the mean scores of married and unmarried IT and ITES working professionals on work life balance and its dimensions.

- $H_{Fa(i)}$ There will be significant correlation between the household responsibility and work life balance (including its dimensions) of working professionals in IT and ITES industry.

- $H_{Fa(ii)}$ There will be significant differences among the mean scores of IT and ITES working professionals at varied levels of household responsibility on work life balance and its dimensions.

- $H_{Fb(i)}$ There will be significant correlation between the spouse support and work life balance (including its dimensions) of working professionals in IT and ITES industry.
• $H_{Fb(ii)}$ There will be significant differences among the mean scores of IT and ITES working professionals at varied levels of spouse support on work life balance and its dimensions.

• $H_{Fc(i)}$ There will be significant correlation between the parental demands (in terms of number of children) and work life balance (including its dimensions) of working professionals in IT and ITES industry.

• $H_{Fc(ii)}$ There will be significant differences among the mean scores of IT and ITES working professionals at varied levels of parental demands (in terms of number of children) on work life balance and its dimensions.

• $H_{Fd(i)}$ There will be significant correlation between the parental demands (in terms of responsibility of children) and work life balance (including its dimensions) of working professionals in IT and ITES industry.

• $H_{Fd(ii)}$ There will be significant differences among the mean scores of IT and ITES working professionals at varied levels of parental demands (in terms of responsibility of children) on work life balance and its dimensions.

• $H_{Wai(i)}$ There will be significant correlation between the task variety and work life balance (including its dimensions) of working professionals in IT and ITES industry.

• $H_{Wai(ii)}$ There will be significant differences among the mean scores of IT and ITES working professionals at varied levels of task variety on work life balance and its dimensions.
• $H_{Wb(i)}$ There will be significant correlation between the task autonomy and work life balance (including its dimensions) of working professionals in IT and ITES industry.

• $H_{Wb(ii)}$ There will be significant differences among the mean scores of IT and ITES working professionals at varied levels of task autonomy on work life balance and its dimensions.

• $H_{Wc(i)}$ There will be significant correlation between the work schedule flexibility and work life balance (including its dimensions) of working professionals in IT and ITES industry.

• $H_{Wc(ii)}$ There will be significant differences among the mean scores of IT and ITES working professionals at varied levels of work schedule flexibility on work life balance and its dimensions.

3.5 POPULATION

Population for the study comprised of IT and ITES companies in National Capital Region (NCR) and Chandigarh (including Mohali).

3.6 SAMPLE

Sampling was resorted at two stages. At first stage, a list of top IT and ITES companies based on IT revenues, having at least five years of operations, was obtained from Data Quest, 2008 and top fifty companies having office in the National Capital Region (NCR) and/ or Chandigarh (including Mohali) were selected. Twelve companies were such which had offices in Chandigarh. Out of these twelve, six
companies did not have adequate number of employees (i.e. less than thirty) and were mainly sales offices. So, these were not included in the final list. 30% of the companies were then, randomly selected separately for NCR (fifteen) and Chandigarh (two). All the seventeen companies were approached for collection of data. Only fourteen companies (twelve in NCR and two in Chandigarh) agreed to provide the data. Thus, the final sample of companies consisted of fourteen companies.

Table 3.1: IT &ITES companies included in the sample

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Company</th>
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<tbody>
<tr>
<td>1</td>
<td>Accenture</td>
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<tr>
<td>2</td>
<td>Birla Soft</td>
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<tr>
<td>3</td>
<td>CSC India</td>
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<td>4</td>
<td>Dell India</td>
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<tr>
<td>5</td>
<td>e-Sys Information Technologies</td>
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<td>6</td>
<td>HCL Technologies</td>
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<td>7</td>
<td>Infosys Technologies</td>
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<td>8</td>
<td>NIIT Technologies</td>
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<tr>
<td>9</td>
<td>Perot Systems</td>
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<tr>
<td>10</td>
<td>Samsung India</td>
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<tr>
<td>11</td>
<td>Siemens Information Systems</td>
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<tr>
<td>12</td>
<td>TCS</td>
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<tr>
<td>13</td>
<td>Tech Mahindra</td>
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<tr>
<td>14</td>
<td>Wipro Technologies</td>
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</tbody>
</table>

At the second stage, a sample of 490 IT and ITES working professionals (35 professionals from each company) were randomly selected. The final sample for the study consisted of 308 IT and ITES professionals who completed the set of questionnaires. The remaining 182 questionnaires were either not received back or were incomplete.
3.7 TOOLS USED

Nine scales were used to elicit the requisite information / data related to work life balance and individual, family and work related variables. Further, a checklist was used to get information regarding various work life programmes operational in the organizations. The various tools used are described below.

(a) Work Life Balance Scale (Hayman, 2005)

Hayman (2005) adapted work life balance scale originally developed by Fisher (2001). The more inclusive wording of personal life compared to family provides the opportunity to measure the interface between work and non work regardless of employee marital or family status. This broader approach is useful for organizations to assess the non work domain of employees, as family may not be relevant to all employees. Moreover this scale also measures positive spill over or enhancement (Hayman, 2005). The scale consisted of 15 items, designed to assess three dimensions of work life balance, i.e., work interference with personal life (WIPL-7 items), personal life interference with work (PLIW-4 items), and work/personal life enhancement (WPLE-4 items). The first dimension, work interference with personal life (WIPL) included the items e.g. “Personal life suffers because of work” and “Put personal life on hold for work”. The content of these items reflect the extent to which work interferes with personal life. The second dimension is work interference with personal life (WIPL). The items included in this component indicate the opposite direction of work personal life interference. Examples of the items include “Personal life drains me of energy for work” and “Hard to work because of personal matters”. They depict the extent to which ones’ personal life interferes with work. The items of the third
dimension work/personal life enhancement (WPLE) involved positive effects of ones’ work on personal life or vice versa, the extent to which ones’ personal life enhances work. Examples of the items included were, “Personal life gives me energy for my job” and “Better mood because of my job”. The respondents were asked to indicate the frequency with which they felt in a particular way during the past three months, using a seven point time related scale (e.g. 1=Not at all, 4=Sometimes and 7=All the time). Results of higher order factor analysis provided empirical evidence that the three dimensions were indicators of a single latent construct (Fisher-McAuley, et al., 2003). Reliability for the scale, estimated using Cronbach alpha coefficient was .93 for WIPL, .85 for PLIW and .69 for WPLE. The scale was tested for reliability under the Indian conditions and Cronbach alpha was found to be .89. Though the respondents were asked to indicate the frequency with which they felt in a particular way during the past three months, using a seven point time related scale (e.g. 1=Not at all, 4=Sometimes and 7=All the time), the scoring was done as 7, 6, 5, 4, 3, 2, 1 (7 for Not at all, 4 for Sometimes, and 1 for All the time) for the dimensions of WIPL (except item 7, which was reverse scored) and PLIW, since the items were negatively worded. High score indicated lower interference and, lower levels of interference were interpreted as higher levels of work life balance.

For the dimension of WPLE, scoring was 1,2,3,4,5,6,7 (i.e. 1 for Not at all, 4 for Sometimes and 7 for All the time) as the items were positively worded. High score indicated high work/ personal life enhancement. Higher levels of work/ personal life enhancement are considered to be associated with higher levels of work life balance. The overall work life balance score was thus computed by adding the scores on the three dimensions.
In nutshell, the interpretation of scores on various dimensions is:

**WIPL and PLIW**

- High score indicates less interference, thus high balance.
- Low score indicates high interference, thus low balance.

**WPLE**

- High score indicates high enhancement, thus high balance.
- Low score indicates low enhancement, thus low balance.

**(b) Emotional Intelligence Scale** (Hyde, Pethe and Dhar, 2002)

The scale consisted of 34 items and measured emotional intelligence. The items were scored on a five point scale ranging from 5 (Strongly Agree) to 1 (Strongly disagree). The scale consisted of ten factors namely, Self-awareness (being aware of oneself), Empathy (feeling and understanding the other person), Self motivation (being motivated internally), Emotional stability, Managing relations, Integrity, Self development, Value orientation, Commitment and Altruistic behavior. Normal range of raw scores is 52-84. 85 and above are high scores and 51 and below are low scores. The split half reliability coefficient was found to be 0.88 and when pre-tested gave alpha reliability coefficient as 0.93.

**(c) Work Centrality Scale** (Paullay et al., 1994)

Work Centrality was measured using a 12 item scale given by Paullay et al., (1994). A person's degree of identification with the work role, embodied in the work centrality construct, has seemingly emerged as the prevalent conceptualization of what constitutes a general commitment to work (Paullay et al., 1994). Work centrality is
defined as individuals' beliefs regarding the degree of importance that work plays in their lives (Paullay et al., 1994). Originally a six point scale was modified to a 5 point scale with response ranging from 1 (Strongly disagree) to 5 (Strongly agree). Item 1, 6, 9 and 10 were reverse scored. Paullay et al. regarded individuals' degree of work centrality as a relatively stable attitude toward the work domain that is not extremely responsive to conditions in a particular work setting. This is reflected in the fact that the items composing Paullay et al.'s measure refer to work in general, and not to one's present job. The work centrality items assess the extent to which people believe that work is (for them) or should be (in general) a central part of life. The reported coefficient alpha was 0.76 and when pre-tested under Indian conditions, it was found to be .84.

(d) **House Hold Responsibility Index** (Hyman et al., 2003)

House hold responsibility index (Hyman et al., 2003) consisting of six items assessing degree of responsibility for cooking; shopping; cleaning; washing/ironing, looking after small children/sick relative; and small house hold repairs was used. House hold responsibility index was calculated from the sum of responses to six items. It was a five point response scale ranging from 1 (always some else’s responsibility) to 5 (always my responsibility). The Cronbach alpha coefficient under Indian conditions was found to be 0.70.

(e) **Spouse Support Scale** (Suchet and Barling, 1986)

This four item scale was used to measure Spouse support. These items were rated on seven point scale 1 (Very little) to 7 (Very much). These four items assess attitudinal, emotional and physical spouse support. Example of the items include: “How
much does your spouse help with the housework?”, “How much emotional help does your spouse give you in regard to your work?” The Cronbach alpha reliability of the scale was .78 and when tested in Indian conditions, it was found to be .81.

(f) Parental Demand Scale

The scale consisting of six items was self constructed for the study and was used to measure parental demands. The items were scored on 5 point scale. Example of the items include: Who at home is responsible to: “take care of child during sickness”, “to drop and pick the child from school”. The Cronbach alpha coefficient under Indian conditions was found to be 0.84.

(g) Variety in Your Work Scale: Dutch Questionnaire on the Experience and Assessment of Work (VBBA; Van Valdhoven and Meijman, 1994)

The scale was used to measure task variety, which means the extent to which job requires different skills and talents of the employee. The scale consisted of six items, asking respondents to indicate the extent to which their work requires the use of different skills and talent, for example, ‘Is your work varied?’ Original four point scale was modified and five-point response scale, ranging from 0: ‘never’ to 4: ‘always’ was used. Item one was reverse scored. The Cronbach alpha coefficient for the scale was .77 and when tested under the Indian conditions, this coefficient was found to be .78.

(h) Independence in Your Work Scale: Dutch Questionnaire on the Experience and Assessment of Work (VBBA; Van Valdhoven and Meijman, 1994)

The scale was used to measure task autonomy, i.e., the extent to which an employee can control work processes. This scale is a self-administered survey
instrument developed to evaluate the work situation of individual employees. The scale included eleven items, asking respondents to indicate the extent to which they could control their work situation, for example ‘Can you influence your work pace?’ Original four point scale was modified and items were answered on a five-point response scale, ranging from 0: ‘never’ to 4: ‘always’. The Cronbach alpha coefficient for the scale was .86 and when tested under the Indian conditions, this coefficient was found to be .85.

(i) **Work Schedule Flexibility Scale**: (Staines and Pleck, 1986)

It is a two item scale measuring work schedule flexibility. Originally a four point scale, it was modified and responses were taken on a five-point scale ranging from “not at all difficult” to “very difficult”. Scoring was 5 (not at all difficult) to 1 (very difficult). The items used were “How hard/ difficult do you think it would be to get the days you worked changed permanently if you wanted them changed?”, “How hard/difficult do you think it would be to get the hours you begin and end work changed permanently if you wanted them changed?” The Cronbach alpha reliability for the scale was 0.82 and when tested in Indian context, it was .70.

In addition, personal information about age, gender and marital status and number of children was solicited.

(j) **Checklist**

A checklist comprising of total 32 items was prepared to gather information regarding various work life programmes in operation in the IT and ITES industry. The items were classified under, namely, flexible leave arrangements (marriage leave,
maternity leave, examination/study leave, parental leave, career leave, compassionate leave, paternity leave, adoption leave, career break and bereavement leave, any other), flexible work arrangements (flexi time, part time working, annual hour system, compressed working week and job sharing, banking of hours, 48/52 option, any other), childcare arrangements (telephone access, vacation childcare program, work based child care, family room, childcare network and child care referral services), flexible location (e-working ), and other work life balance arrangements (supervisory training in work family sensitivity, employee assistance programmes, employee wellness programmes). The respondents were asked to put a tick mark on the programmes available in their respective organizations.

3.8 DATA COLLECTION

The data was personally collected by the researcher. The purpose of the questionnaire was explained to the selected IT and ITES professionals and they were assured of total confidentiality of the data. 490 questionnaires were administered. Out of this only 308 completely filled in questionnaires were received. The remaining 182 questionnaires were either not received back or were incomplete.

3.9 STATISTICAL TECHNIQUES

Descriptive statistics such as mean, standard deviation, skewness and kurtosis were computed to study the nature of distribution of scores on individual related variables (emotional intelligence, work centrality), family related variables (spouse support, parental demands, household work responsibility), work related variables (task
variety, task autonomy, work schedule flexibility) and on work life balance and its dimensions.

Pearson product moment correlations between work life balance, its dimensions and individual related variables (emotional intelligence, work centrality), family related variables (spouse support, parental demands, household work responsibility), and work related variables (task variety, task autonomy, work schedule flexibility) were calculated to ascertain the extent of relationship between these variables. For the variables of age, gender, marital status and parental demands (number of children), point biserial correlations were calculated.

One way analysis of variance (ANOVA) was used to study the main effect of individual related variables (emotional intelligence, work centrality), family related variables (spouse support, parental demands, household work responsibility), work related variables (task variety, task autonomy, work schedule flexibility) on work life balance and its dimensions. Further, wherever F-values were found to be significant, t-ratios were calculated to study the significance of differences between means. t-test was also used to study the differences in work life balance of IT and ITES professionals with respect to age, gender and marital status.

3.10 DELIMITATIONS OF THE STUDY

The delimitations of the study were:

- The study has been restricted to two regions of the country namely, NCR and Chandigarh (including Mohali).
• Sample of the study has been restricted to only IT and ITES companies in the selected regions.

• Only selected individual variables, family related variables, work related variables have been included in the study.

REFERENCES


