CHAPTER III

RESEARCH METHODOLOGY
There are three broad types (Malhotra, 2010) of research designs used, namely, exploratory, descriptive and causal. The latter two are referred to as conclusive research.

Exploratory research: This design is defined as “research that focuses on collecting either secondary or primary data and using unstructured format or informal procedures to interpret them”. Exploratory studies are often used to classify problems or to understand a phenomenon and are not intended to provide conclusive information to determine a course of action. It regularly involves focus-group interviews, in-depth interviews and/or pilot studies. Exploratory studies are most suited when the existing knowledge and experiences of the researcher are limited and that the scope of the study is to find out as much of the subject as possible, which involves several ways to collect data.

Descriptive research: This design is defined as research that uses a set of scientific methods to collect raw data and create data structures that describe the existing characteristics of a defined target population or market structure. Descriptive studies aim to portray, depict or describe certain fields of interest in order to select a course of action. Descriptive studies are most suited when the researcher already possesses knowledge about and experience from the subject, and that the scope of the study is to describe a certain field thoroughly, often only involving one way of collecting data. Descriptive research, also known as statistical research, describes data and characteristics about the population or phenomenon being studied. Descriptive research answers the questions who, what, where, when and how.

Causal research: This design is defined as “research designed to collect raw data and create data structures and information that will allow the researcher to model cause-and-effect relationships between two or more market (or decision) variables”. Causal studies aim to explain causality between market factors to create a framework for decision makers to understand that “if ... happens, then ... will occur”. Adopting causal studies presumes that the
researcher possesses a great deal of knowledge of and experience from the subject studied. It often involves a technique of collecting data that gives precise and accurate information, since only factors linked to the hypothesis want to be studied.

Causal research design was employed for current research based on quality of work life research model constructed for this research.

III.2 SCOPE OF THE RESEARCH
The scope of the research broadly encompassed sub themes like institution affiliation, criteria for joining institution, variables impacting satisfaction with extrinsic job, variables impacting satisfaction with intrinsic job satisfaction, variables impacting satisfaction with workplace environment factors, perception about quality of work life and demography.

III.3 SAMPLING DESIGN
In statistical surveys, when sub-populations within an overall population vary, it is advantageous to sample each sub-population (stratum) independently. Stratification (web 3.1) is the process of dividing members of the population into homogeneous sub-groups before sampling. The strata should be mutually exclusive: every element in the population must be assigned to only one stratum. The strata should also be collectively exhaustive: no population element can be excluded. Then random or systematic sampling is applied within each stratum. This often improves the representativeness of the sample by reducing sampling error.

The formula for estimating sample size (Malhotra, 2010) when population is unknown is: 

\[ n = \frac{\sigma^2 \cdot z^2}{D^2} \]

where \( n \) = estimated sample size; \( \sigma \) = standard deviation (value obtained from pilot study); \( D \) = acceptable level of error (significance level); \( z \) = standard variate.
Population: Faculty serving in university-affiliated institutions offering full-time management programs at Bengaluru.

Frame: Lecturers (inclusive of senior grade) serving in affiliated institutions offering full-time management programs at Bengaluru.

Sampling Method: Proportionate Stratified Sampling was employed for the study wherein strata comprised two categories: 28 colleges affiliated to Bangalore University, and 43 colleges affiliated to Viswesvaraya Technological University.

Sample Size: The standard deviation value of ‘Quality of work life’ obtained from pilot study of 50 faculty was $\sigma = 0.553$. The estimated sample size was computed using formula and was found to be 470 respondents (faculty). The sample size details are shown in Table 3.1. The estimated and actual sample sizes were 470 and 467 faculty respectively.

Table 3.1
Sample Size for Faculty

<table>
<thead>
<tr>
<th>University</th>
<th>Total Affiliated Colleges in Bengaluru</th>
<th>%</th>
<th>Estimated Sample size (proportionate)</th>
<th>Rejection</th>
<th>Actual Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTU</td>
<td>43</td>
<td>60.56</td>
<td>285</td>
<td>2</td>
<td>283</td>
</tr>
<tr>
<td>BU</td>
<td>28</td>
<td>39.44</td>
<td>185</td>
<td>1</td>
<td>184</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>100</td>
<td>470</td>
<td>3</td>
<td>467</td>
</tr>
</tbody>
</table>

Source: Compiled by Researcher from University sources.
III.4 DATA COLLECTION DESIGN

The primary data collection method employed was Survey method to collect primary data from faculty. The primary data collection instrument was undiscguised structured questionnaire.

III.5 CONCEPTUAL FRAMEWORK

The conceptual framework is presented in Figure 3.1. The dependent variables used in the research were:

(i) **Extrinsic job factors**: Extrinsic factors concern aspects of a job that form the background or context to the task itself. It consists of activities that are externally motivated by rewards and it is carried out only because of its effects.

(ii) **Intrinsic job factors**: Intrinsic factors cover aspects inherent in the conduct of the job itself. It consists of activities that are intrinsically motivating, meaning that they are rewarding by themselves.

(iii) **Workplace environment**: It entails those attributes of an organisation that describes the way in which the organisation operates (internal environment) and how it deals with members of the external environment (James and Jones, 1974).

(iv) **Quality of Work Life**: Quality of Work Life is a process of joint decision making, collaborations and building mutual respect between management and employees.

The independent Extrinsic Job factor variables were:

(i) **Promotion prospects**: A worker (Chelte, 1983) who feels overqualified (for example promotion overdue according to promotion policy) for his job will almost
always be concerned about his possibilities for promotion. There are of course reasons other than satisfaction for wanting promotion, the most obvious of which is more pay, but surveys reveal almost universally greater concern with promotion than with pay or other job aspects. With promotion, different needs can be involved such as more power, more pay, more status, sense of achievement and new challenges.

(ii) **Relations with Peers:** The emphasis on esprit de corps (Ducharme and Martin, 2000) in organisations necessitates that one pays greater attention to the role of co-worker relations in determining the nature and quality of work life.

(iii) **Benefits:** These are the usual benefits that flow from work, including pay, promotion or position, rank and status, privilege of position, security and fringe benefits (Chelte, 1983; Stein, 1983).

(iv) **Superiors:** Davis et al. (1984) made use of a step-by-step Delphi analysis to develop a definition and measure of quality of working life. Their results identified the degree to which superiors treat subordinates with respect and have confidence in their abilities as significant predictor of quality of working life.

(v) **Job security:** Job security is associated with feelings of security about future employment, for example, feeling secure knowing that one is not likely to get laid off (Sirgy et al. 2001).

(vi) **Resources:** Resource adequacy has to do with enough time and equipment, adequate information and help to complete assignments (Chelte, 1983).

The independent Workplace Environment Factor variables were:

(i) **Structure and Leadership:** This refers (Field and Abelson, 1982) to either “flat” (few layers in the hierarchy) or “tall” (many layers) in the organization.
Leadership (Alimo-Metcalfe, 2001) refers to the style and control exhibited by top management which ultimately defines organizational climate.

(ii) **Equity and fairness**: There is an element of relative justice (Scandura, 1999) involved that exceeds satisfaction with pay and benefits and this could give rise to perceptions of equity or inequity.

(iii) **Communication**: It is through communication (Orpen, 1997) that employees learn what goals they are to strive for, what is expected of them, find out how to accomplish these goals and get feedback on the achievement of goals.

(iv) **Participative Management**: Forehand and Gilmer (1964) contend that such organisations possess personnel policies which are participative, and democratic.

(v) **Consideration, warmth and support**: James and Jones (1974), as well as Joyce and Slocum (1982) refer to warmth and support as the degree to which supervisors maintain warm and friendly relations whereby conflict, if any, is resolved effectively.

(vi) **Initiative and Motivation to achieve**: James and Jones (1974) considered factors in the organisation that are based on how members are treated in terms of individual responsibility and opportunities for exercising individual initiative as important for satisfaction with organisational climate. Motivation is the degree to which members of the organisation are viewed as attempting to excel, to address difficult problems, or to advance themselves (Joyce and Slocum, 1982).
The independent Intrinsic Job Factor variables were:

(i) **Job Content and Clarity**: Thurman’s (1977) analysis found several aspects of a ‘good job.’ These are variety, learning opportunities, the possibility of organising one’s own work, mental challenge, growth and being given a chance to do the things one does best.

(ii) **Development of human capacities**: The ability of an organization to notice and develop knowledge, skills and abilities thereby aiding job enrichment.

(iii) **Social relevance of work life**: The way members (Walton, 1975) of the work organisation relate to one another about their ideas and feelings which have a bearing on mental health and physical well-being. It also comprises behaving in a responsible manner with respect to society.

(iv) **Autonomy and Control**: This is the degree to which a work environment permits an individual to control activities and events. Freedom of action, discretion, influence, power, participation in decision-making and decision latitude on the job is inseparable from a high quality of work life (Stein, 1983; Warr, 1987).

(v) **Recognition**: Recognition means being known as an individual and being visible not only personally but as a contributor (Stein, 1983).

(vi) **Progress and development**: These are among the benefits one derives from work. They include the internal rewards available from the organisation: challenge, exercise of competence, development of skill and a sense of accomplishment (Stein, 1983).
Figure 1.1
Conceptual Framework

EJ: Extrinsic Job factors; IJ: Intrinsic Job factors; WE: Workplace Environment factors

Source: Constructed by researcher and adapted from variables cited in literature.
III.6 RESEARCH QUESTIONS AND HYPOTHESES

The main tools used for statistical analysis were Percentages, Means, Standard Deviation, and Structural equation Modelling (SEM). The Research Questions (RQ) were:

RQ1: Do extrinsic job factors have an effect on faculty’s perceived satisfaction with extrinsic job factors?

RQ2: Do intrinsic job factors have an effect on faculty’s perceived satisfaction with intrinsic job factors?

RQ3: Do workplace environment factors have an effect on faculty’s perceived satisfaction with workplace environment factors?

RQ4: Does satisfaction with extrinsic job factors have an effect on faculty’s perceived satisfaction with quality of work life?

RQ5: Does satisfaction with intrinsic job factors have an effect on faculty’s perceived satisfaction with quality of work life?

RQ6: Does satisfaction with workplace environment factors have an effect on faculty’s perceived satisfaction with quality of work life?

The Main Hypotheses framed were:

H1a: Promotion prospect has no effect on perceived extrinsic job factor satisfaction.

H1b: Relations with Peers has no effect on perceived extrinsic job factor satisfaction.

H1c: Benefits has no effect on perceived extrinsic job factor satisfaction.

H1d: Superiors has no effect on perceived extrinsic job factor satisfaction.

H1e: Job security has no effect on perceived extrinsic job factor satisfaction.

H1f: Resources adequacy has no effect on perceived extrinsic job factor satisfaction.

H2a: Job Content and Clarity has no effect on perceived intrinsic job factor satisfaction.

H2b: Opportunity to use and develop human capacities has no effect on perceived intrinsic job factor satisfaction.
H2c: Social relevance of work life has no effect on perceived intrinsic job factor satisfaction.

H2d: Autonomy and Control has no effect on perceived intrinsic job factor satisfaction.

H2e: Recognition has no effect on perceived intrinsic job factor satisfaction.

H2f: Progress and development has no effect on perceived intrinsic job factor satisfaction.

H3a: Structure and Leadership has no effect on perceived workplace environment satisfaction.

H3b: Equity and fairness has no effect on perceived workplace environment satisfaction.

H3c: Communication has no effect on perceived workplace environment satisfaction.

H3d: Participative Management has no effect on perceived workplace environment satisfaction.

H3e: Consideration, warmth and support has no effect on perceived workplace environment satisfaction.

H4: Satisfaction with extrinsic job factors has no effect on faculty’s perceived satisfaction with quality of work life.

H5: Satisfaction with intrinsic job factors has no effect on faculty’s perceived satisfaction with quality of work life.

H6: Satisfaction with workplace environment factors has no effect on faculty’s perceived satisfaction with quality of work life.

III.7 VALIDITY

Content Validity: The variables impacting quality of work life chosen for this research have been sourced from literature wherein the validity of using such variables has already been demonstrated.
Construct validity: Construct validity is how well the items on the inventory represent the variable. The independent variables used under three dimensions have been well established in literature.

III.8 RELIABILITY

Reliability (Malhotra, 2010) refers to the extent to which a scale produces consistent results if repeated measurements are made. The coefficient alpha, or Cronbach alpha, is the average of all possible spilt-half coefficients resulting from different ways of splitting the scale items. This coefficient varies from 0 to 1, and a value of 0.6 or less generally indicates unsatisfactory internal consistency reliability as espoused by Nunnally. The reliability coefficient (cronbach alpha) was found to be 0.769 for faculty survey comprising 18 items. Thus, the alpha value was more than the minimum acceptable value.

III.9 LIMITATIONS OF RESEARCH

The limitations of the research were:

(a) the study is focused on QWL of faculty only and other dynamics of human resource management are not under its purview,

(b) there may be changes in the service sector/education sector environments in the future which in turn may influence changes in expectations and perceptions.