CHAPTER FOUR
CHAPTER - 4

METHODOLOGY

4.1 TITLE OF THE PROBLEM

Exploring The Quality of Life, its Relationship with Consumer Behaviour in The City of Calcutta

4.2 RATIONALE

Quality of Life is a complex variable, it means different things while viewing in different perspectives. However, one significant way of defining it is by examining the words "quality" and "life". Quality indicates an assessment of value with reference to some standard. Assessment signifies judgement about how well an object or experience is compared with an individual's reference point. According to Campbell (1976) "such point might be in the context of what relevant others have, to the best one has had in the past", or "to what one believes he or she deserves" (Adams and Freedman, 1976). Day (1978) and Scheer (1980) argued that the assessment is manifested along satisfaction-dissatisfaction continuum. Again the word "life" provides a context of "overall human experience" and should neither be restricted to "economic well-being", "consumer satisfaction", "quality of physical environment" nor be assumed only as the "effectiveness of social services and political freedom" or the "quality of work life" or even any other specific domain of life.
In the present study *Quality of Life* is conceived, at the level of the individual, as being equivalent to the individual's "overall life satisfaction" - which may be defined as "an individual's evaluation of his or her current life situation as compared to a personal standard as expressed in terms of the degree of satisfaction" (Day, 1987). Hence, the overall life satisfaction may be assumed as a general construct consisting of a large number of specific domains of life viz. satisfaction with family life, social life, work life, material possessions, acquisitions, recreation, personal health, health care administration, spiritual life, self-development, life in India, the central government's policies and the West Bengal government administration.

*Quality of Life* has had many effects in the social life. One of the many direct impacts of *Quality of Life* has been found to be in the area of people's aspirations, particularly the materialistic possessions. Apart from their functional values, material possessions are significant to human beings for their social meaning (Levy, 1959, 1965; Zaltman and Wallendorf, 1979). Consumers buy goods not only to satisfy own requirements but also to exhibit, impress their friends, peer group, etc., with a view to achieve some social status. What one buys reflects his/her taste, outlook and motives to buy that (Day, 1987; Dholakia and Levy, 1987).

*Consumer behaviour* consists of the activities that people engage in when selecting, purchasing and using products and services, so as to satisfy their needs and aspirations. Such activities involve mental and emotional processes in addition to physical action. Csikszentmihalyi and Rochberg-Halton (1981) opined that "man is the maker and user of objects, "self" to a large extent is reflection of things with which he/she interacts". Than (1980) viewed that people seek, express confirm and ascertain a sense of being through what they have. Sirgy (1982) felt that material possessions are reflection of self concept\(^2\) and consumers, by and large, cherish a desire to achieve

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\(^2\) The 'self' is one's sense of identity, the perception of being the same human being from week-to-week and year-to-year (Brun, 1986). The 'self-concept' is the sum total of the
congruence between their self-image and the images\(^3\) of the products they possess (Cooper, 1974; Duncan, 1968). It is also assumed that the sense of self is often diminished when possessions are lost (Belk, 1988) or replaced by possessions that are incongruent with a person's self-image. Scores of studies (Sherman and Newman, 1977-78) have reported that material possessions are strongly related to an individual's feelings of well-being about her or his life. It is, therefore, conjectured that an individual's satisfaction with his or her material possessions has a positive effect on overall satisfaction with life.

In the above perspective consumer behaviour may be thought to be well-organised, highly motivated and goal-directed nature. Consumers are motivated\(^4\) to buy goods because goods as symbols are important to the individual's striving-becoming process. Obviously, one may easily consider the possessions of different objects over a given span of time to have a positive relationship with Quality of Life of the buyer or consumer.

\(^3\) An 'image' is a cognitive mental construct developed by the consumer on the basis of a few selected impressions among the host of total impressions. Thus, a product, store or brand image is the buyer's mental picture of how a particular product, a given store or a designated brand differs from other products, stores or brands. A given 'image' is what buyers "see" and "feel" when the specific products/brands come to their mind.

\(^4\) Motivation is an inner state that activates or moves people towards certain goals, and which results in purposive behaviour. The goal is the objective reward or condition towards which the action or behaviour is directed and that will, temporarily satisfy or reduce the striving. Motivation is thus a process or processes - something going on within the individual that moves him/her to action toward a desired goal. Quality of Life or satisfaction of an individual's life also depends upon the achievement of his/her desired goal. The inadequacy or the gap of the desired goal and the level of achievement creates dissatisfaction within the individual.
4.3 OBJECTIVES

The purpose of the present investigation is to examine:

- the objective and subjective attainment of Quality of Life in the city of Calcutta, based on the opinion of people belonging to different socio-economic strata. It is an attempt to assess the Quality of Life in terms of satisfaction with family life, work life, social life, civic amenities and various other domains of life;

- the possible relationship between satisfaction with life in general and thirteen select domains of life. In particular, it probed into the crucial issues like, does overall life satisfaction vary with age, sex, socio-economic status, materialistic aspirations and self-concept? Moreover, to ascertain the importance attached to thirteen select buying motives in the purchase of a durable good.

4.4 HYPOTHESES

Hypothesis 1: Individuals belonging to different age groups vary significantly in their perceived Quality of Life.

Hypothesis 2: Males and females vary significantly in their perceived Quality of Life.

Hypothesis 3: There is a positive relationship between an individual's socio-economic status and his/her perceived Quality of Life.

Hypothesis 4: Satisfaction with different domains of life such as family life, work life, social life, spiritual life, self development, recreational facilities, material possessions, acquisitions, health care services, personal health, life in India, central government policies and local government administration are each positively related to their perceived Quality of Life.
Hypothesis 5: Individual's material possessions vary significantly with the age groups.

Hypothesis 6: Males and females significantly vary in drive for possessing materials.

Hypothesis 7: There is a positive relationship between an individual's self-concept and with his/her perceived Quality of Life.

Hypothesis 8: Individual's material possessions are positively related to the self-concept.

Hypothesis 9: Individual's buying motives are positively related to the self-concept.

In order to put the above hypotheses into empirical testing the present investigation was conducted in two major divisions:

- Development of the Quality of Life measures for the assessment of the Quality of Life of the city dwellers.

- Assessment of the Quality of Life and examine the relationship between consumer behaviour and Quality of Life.

4.5. SELECTION AND DEVELOPMENT OF MEASURES OF QUALITY OF LIFE

Assessment of the Quality of Life of the dwellers of the Calcutta city required the selection/development of suitable measures. Multiple item measures were employed to avoid item response bias and enhance measures developed in Quality of Life research. Two scales were used to measure overall life satisfaction and a separate scale was used to measure satisfaction with different domains of life.
4.5.1 Life Satisfaction Scale

The first one dealt with global ratings of the respondent's level of satisfaction. This predominantly concerns with the cognitive perception and affective feeling of the person's present life. This Life Satisfaction Scale\(^5\) (Mourn 1981) consists of two items - first one is a verbally anchored seven point scale — "completely satisfied to completely dissatisfied" and the second one is seven point — "delighted -terrible scale". Test-retest reliability co-efficient of the scale with the present sample \((N=120)\) observed to be fairly high \((0.86)\).

4.5.2 Semantic Differential Scale

Cambell et al. 1976 designed another scale utilising "Semantic Differential Technique". With the help of 17 bi-polar adjectives they investigated how people feel about their present life. Numerous previous studies (Andrews and Withney 1976, Andrews and Mckennell 1980, Atkinson 1982, Horley and Brian 1985) confirmed that this scale possesses high level of internal consistency and validity. The present study made use of the same Semantic Differential Scale. The collected data were subjected to Factor Analysis with Varimax rotation and in the process determine the underlying associative attributes of one's Quality of Life. In the present sample data test-retest reliability co-efficient of this device has also been observed to be very high \((0.86)\).

4.5.3 Life - Domain Satisfaction Scale:

In order to develop this scale, altogether thirteen domains of life\(^6\) were selected. (eg; family life, work life, social life, spiritual life, self development, recreational facilities, material possessions, acquisition, health care services, personal health, life in India,

\(^{5}\) This Scale was developed in line with the original scale of Cantrill (1965).

\(^{6}\) Here the choice of domains of life is similar to one proposed by Day (1987).
central government policies and local government administration). Multiple-item measures were employed to measure satisfaction with different domains. A five-point Likert scale (with response strongly agree to strongly disagree) was used to measure satisfaction with each of those domains. After collecting a pool of 150 items constituting different domains of life, a draft questionnaire was developed.

\[ \Rightarrow \text{Face Validity} \]

The set of items along with its fixed response alternatives were then presented to a group of three experts having sufficient background of test development and test adaptation. As per their suggestions the language of a few items were modified to make them more suitable for the inhabitants of the Calcutta city.

\[ \Rightarrow \text{PreTry-out Study} \]

This study was conducted to understand "how well" the draft questionnaire fits the "subject under study" in the actual testing session. Here, the questionnaire was administered on a group of 20 randomly selected undergraduate and post-graduate students\(^7\) (equal number of males and females) of a university located in Calcutta. Individual administration of the questionnaire was conducted to collect as much information as possible in identifying the probable ambiguities and other inadequacies of the items. The students concerned were specially instructed during administration, to report their "felt difficulties" in connection with the language and ideas of the statements or items. Further, the subjects were assured that the results would not be used in any way to affect their present status or future opportunities. After completion, each of the questionnaires was scrutinized.

\(^7\) A list of 50 students, who were willing to participate in the testing session, was originally prepared and then from them a group of twenty students were randomly selected.
carefully. After a thorough scrutiny of the reported difficulties, the language of few statements were further modified to make them easily understandable to the sample concerned. The edited copy of the questionnaire was then subjected to item analysis.

⇒ Item Analysis

A set of procedures was applied to know how truthfully or effectively the given test items functioned, individually, within the total test when administered on a representative group of subjects.

a) Sample Selection

A total of 120 samples respondents were drawn from different socio-economic segments of Calcutta. Stratified random sampling procedure was adopted to select respondents from three randomly selected municipal wards (taking one from each of the north, central and south zones) in the Calcutta city consulting the District Census Handbook (1981). The selection was done in such a way that the number of sample within a municipal ward is proportional to the number of households in that ward.

Over and above, the selected samples were subjected to the following conditions:

◊ the sample consisted of people from age group between 21-65 years;

◊ the respondents had minimum educational qualification of Higher Secondary level;

◊ husband and wife together never constituted as separate respondents;

◊ only one member of a household was included as respondent.
The city zonewise sample structure is as follows:

<table>
<thead>
<tr>
<th>City Zones</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>24</td>
<td>16</td>
<td>40</td>
</tr>
<tr>
<td>Central</td>
<td>25</td>
<td>17</td>
<td>42</td>
</tr>
<tr>
<td>South</td>
<td>23</td>
<td>15</td>
<td>38</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72</strong></td>
<td><strong>48</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

b) Test Administration

To collect data from the selected subjects with the help of the Measures\(^8\) of Quality of Life (viz. Life Satisfaction Scale, Semantic Differential Scale and the draft Life-Domains Satisfaction Scale) the individual administration technique was followed. To evoke interest of the subjects under study and establish an easy rapport with them, the investigator first gave an introductory talk explaining the purpose of the present investigation. The purpose was to convince them that their sincere and honest expression bear tremendous importance to this study.

The response of each sample as per the structured questionnaire were collected. The time taken by the subjects to complete the test was observed to be on an average of 45 minutes in the range of 30 to 65 minutes.

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\(^8\) Among the three measures of the Quality of Life used in the present study Life Satisfaction Scale and the Semantic Differential Scale were administered to check the reliability whereas the draft Life-Domains Satisfaction Scale was administered on the subjects for the item analysis purpose.
c) Scrutiny of the data and Scoring

Each answer sheet was scrutinized carefully. Those items which had no response were marked. The concerned subjects were contacted again to respond to the items which they perhaps overlooked. Scoring was done following the standard scoring key of the three scales.

d) Selection of items for developing the Life-Domains Satisfaction Scale

For each of the thirteen domains of life, under study, the total scores of the subjects were hierarchically arranged. After that 25% cases with highest summed scores and 25% cases with lowest summed scores in each domain were identified. Critical ratios for the mean differences between these extreme cases were worked out (Edwards, 1957) for significant (P<0.05) items.

After item analysis a set of 118 statistically significant items were retained and 32 items were rejected due to their insignificant nature. A reliability analysis of each of the domains was performed by computing the Cronbach alpha and the size of the reliability coefficients obtained in the range of 0.72 to 0.90 — which support the use of measures for further use of test items as standardised one. Item-wise distribution of critical ratios of the final scale have been presented in the Appendix-I.

4.6 QUALITY OF LIFE OF THE CITY-DWELLERS AND ITS RELATIONSHIP WITH CONSUMER BEHAVIOUR

After developing the two standardized scales to measure the overall Life Satisfaction and the one hundred eight item Life-Domains Satisfaction Scale, the second part of the present investigation commenced.
4.6.1 Sample Selection

The sample structure is as follows:

<table>
<thead>
<tr>
<th>City Zones</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>90</td>
<td>62</td>
<td>152</td>
</tr>
<tr>
<td>Central</td>
<td>94</td>
<td>64</td>
<td>158</td>
</tr>
<tr>
<td>South</td>
<td>88</td>
<td>52</td>
<td>140</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>272</td>
<td>178</td>
<td>450</td>
</tr>
</tbody>
</table>

4.6.2 Research Tools Used

In addition to the three measures of the *Quality of Life*, the present study used, three other research tools: General Information Questionnaire, Socio-Economic Status Scale and Self-concept Inventory.

⇒ General Information Questionnaire

Several characteristic features like age, sex, marital status, academic qualifications, occupation, income, family size of the respondents along with their names and addresses were recorded with the help of this questionnaire. Moreover, a few questions were included to study the household durable purchase behaviour of the respondents.

⇒ Socio-Economic Status Scale

An adapted version (Dasgupta and Ray, 1993) of the Kupuswamy's Socio-Economic Status scale (1976) was used to find out the socio-economic status of the selected samples. Here, information about education, occupation and income
was collected from General Information Questionnaire and combined to determine the socio-economic status.

⇒ **Self-Concept Inventory**

This inventory was developed by Rosenberg (1964) to find out the individual's conceptual appraisal and evaluation of "self concept" through statements about one's values, abilities, goals and personal worth. It consists of 10 statistically significant items answered on a four-point scale - completely agree to completely disagree. The odd-even reliability co-efficient has been found to be as 0.89 with the present sample.

A copy of all of the above research tools under a broad name of comprehensive questionnaire is enclosed in the Appendix- II.

4.6.3 **Instrument Administration and Scoring**

Following the programme schedule developed earlier in consultation with the selected group of subjects the tests were administered on them by the researcher. The subjects were urged to answer every item. The collected data were carefully scrutinized so that no items, for each subject, remained unattempted or skipped. Scoring was done following the standard scoring keys of the different scales.

4.7 **Statistical Treatment**

- General characteristics of the sample in terms of age, sex, marital status, education, employment, family size and income were determined either by calculating average values or percentages of the concerned variables. Besides these the socio-economic status of the subjects were determined utilising the information about education, occupation and income levels.
On the basis of the calculation of Mean and Standard Deviation of the Life Satisfaction Scores (as indicated by the two-item Life Satisfaction Scale) the total sample (N = 450) were classified into three groups - Highly satisfied (i.e. whose life satisfaction scores > M + σ), Moderately satisfied (i.e. whose life satisfaction scores are greater than M - σ but less than M + σ) and Poorly satisfied (i.e. whose life satisfaction scores < M - σ). It is presumed that such levels of satisfaction of different individuals are indicative enough of their respective perceived Quality of Life.

The scores of the Semantic Differential Scale was subjected to factor analysis with varimax rotation to determine the underlying associated attributes of one's Quality of Life. Then the highly, moderately and poorly satisfied groups were compared among themselves in terms of the factor scores by applying t-tests.

In order to get an understanding of the relationship between satisfaction with various domains of life and overall life satisfaction multiple regression analysis was conducted.

Relationships between age groups and perceived Quality of Life as well as sex and perceived Quality of Life were determined by applying Chi-square test on the concerned data.

Again product-moment coefficients of correlation were computed to determine the socio-economic status and perceived Quality of Life, Self-concept and material possessions of the subjects. Furthermore, Chi-square test was applied to determine the relationship between buying motives and Self-concept of the subjects.
The importance attached to various buying motives while purchasing any durable item, was understood from the calculated pattern of responses of different groups. The responses of the subjects regarding buying motives were further subjected to factor analysis with Varimax rotation to extract the significant set of underlying factors of the consumers' buying motives.

In addition to the above statistical treatment of data, several graphical presentation viz. bar diagram, line diagram, pie chart were also drawn.