CHAPTER 4
Methodology and Data Collection

The present study aims at identifying the factors which determine the level of human well-being. The measurement of well-being is a complex task and there is no consensus on the methodology to be employed for its measurement. A critical survey of the existing measures of welfare, presented in Chapter 2, revealed that the focus has been on the objective aspect of human well-being. While some studies have dealt with subjective well-being, they have ignored the objective component. It is clear that the existing welfare theories do not analyse subjective and objective components of well-being together. This, however, has hindered the development of a complete and satisfactory measure of welfare and an appropriate framework to analyse human well-being. This led to a gap between theory and empirical analysis of welfare which could not be eliminated over time. Thus, the lack of relationship between theory and empirical measurement undermined the practical value of welfare analysis.

An attempt has been made in the present study to analyse subjective and objective components of well-being in tandem. The previous chapter proposed to measure well-being in terms of happiness and life expectancy. While, the previous chapter discussed theoretical basis of the proposed framework for well-being analysis, this chapter discusses the issues related to empirical analysis of the same. To achieve this purpose, a primary survey was undertaken for collecting the relevant data with the help of a questionnaire. The various issues related to data collection, development of questionnaire, and the methodology to be adopted for analysing are discussed below.
4.1 Choice of Area for Survey

The data were collected through a primary survey with the help of a questionnaire, which was designed so as to ascertain the maximum possible information relevant for the present study. The subjects or respondents were chosen on random basis but different regions were chosen for survey so as to include a diverse range of income groups while keeping the factors like climate, culture, language etc. the same. The rural and urban areas were given almost equal representation in the survey. While making choice of the geographical area, as mentioned above, the determining factor was the similarity in weather and climatic conditions. Hence, the survey was limited to a smaller area to ensure that climatic conditions of all the respondents are similar. Adequate care was taken to give sufficient representation to illiterates and individuals having low level of education. The survey, thus, amounts to stratified random sampling.

4.2 Structuring the Questionnaire

The questionnaire contained questions on various domains of life, characteristics of respondents, and a question on happiness. The questionnaire also contained a few questions pertaining to life expectancy. The analysis based on such a questionnaire is based on the assumption that individuals are able to understand and answer the questions correctly. Another implicit assumption is that the responses of respondents are inter-personally comparable. These assumptions are justified by the studies undertaken in psychology while comparing different Subjective Well-being (SWB) measures. For example self-reported SWB correlated with amount of time, individuals use to smile (Sandvik et al. 1993).
The questionnaire was designed to capture information on various social, economic, and demographic factors. Most part of the questionnaire was structured to ascertain the perception of individuals about various aspects of life and well-being. Broadly, the questions were designed to know the respondent’s perception regarding his relative position in society, comparison with peers, satisfaction with various domains of life, and perceived change in economic and social conditions over a reference period, etc. Various conceptual and definitional issues relevant for the questionnaire are discussed below. The questions have been formulated on the basis of the following discussion. The final questionnaire is given at the end of this chapter.

4.2.1 Definition of Happiness and its Measurement

Before trying to measure or ascertain the level of happiness, it is imperative to understand the meaning of the concept. Several definitions of happiness have been put forward by a number of philosophers and academicians. Some of them are reported in Veenhoven (1984). According to Fordyce, ‘Happiness is a particular emotion. It is an overall evaluation made by the individual in accounting all his pleasant and unpleasant affective experiences in recent past’ (Fordyce, 1972: 202). Tatarkiewicz (1975) defined happiness as a lasting, complete and justified satisfaction with life. Most of the definitions have defined happiness in context of experience over a longer period, satisfaction, and achievement of goals. A common feature of all the major definitions is that happiness is considered to be an experiential phenomenon. It is a feeling experienced by individuals. Measurement or assessment of this mental state requires a judgement, which could be made by the individual for himself. There could, however, be indirect ways of assessing the happiness of an individual such as taking reports from
friends or relatives about the general mood or behaviour of the subject. But the direct method - asking a subject to indicate about his feelings - has been preferred by most of the researchers and surveys. General Social Survey (GSS) of the United States has for many years been interviewing people annually about levels of happiness. A GSS question is given below:

_Taking together, how would you say things are these days – would you say that you are very happy, pretty happy, or not too happy?_

Another similar question on satisfaction was included in the Euruobarometer Survey Series

_On the whole, are you very satisfied, fairly satisfied, not very satisfied, or not at all satisfied with the life you lead?_

_Cantril (1965) put a similar question to respondents asking them to indicate on a 0-10 step ladder about their feelings. In fact, most of the studies on happiness are based on direct method of ascertaining the level of subjective well-being in one form or another. The present study has followed the same method._

**4.2.2 Scale of Happiness**

Another issue associated with the direct method of measuring happiness is the scale to be used to ascertain the responses of individuals. In practice, both verbal and non-verbal scales have been in use. The studies have shown consistency between both types of the scales. At the same time, however, the difference in the emotions generated by verbal scale for different individuals has been discussed in the literature (Praag 1996). To avoid this problem and also for statistical reasons, the present study used a numerical scale of 0-10 for a large
part of the questionnaire. A numerical scale of 0-10 can help to broaden the scope of statistical operations. The usefulness of this type of scale has been recognised by Diener (1983) while discussing various scales, “the 11 point Fordyce item showed the strongest correlation with daily affect and life satisfaction on any measure assessed, and this should receive more wide spread use” (p 549). One more advantage of the numerical scale is that it helps in reducing the influence of current mood on the response of individuals. Kammann (1983) presented evidence indicating that the current mood does not substantially distort multi-item scores.

4.2.3 Causality between Happiness and Various Factors

The dependent variable in the study of subjective well-being is self-reported happiness and explanatory variables are various domains of life representing social, personal and economic factors. Some analysts have examined the causality between different variables and happiness. Graham (2003) noted in context of happiness that ‘it is difficult to establish cause and effect with many of the variables that are at play, and in many cases they may interact’. For example, happier people are more likely to get married (means happiness leads to marriage) or it may be otherwise that married people are happier (that is marriage is cause of happiness). Kenny (1999) tried to establish the relationship between economic growth and happiness. In the present study, the cause and effect approach as suggested by Veenhoven (1984) has been adopted where self-reported happiness is considered to be affected by several factors.
4.3 The Concept of Income

The most crucial variable for the present study is the income of an individual, which is used to examine the influence of economic factors on happiness. Defining income in a uniform and comparable manner is a difficult task. Smeeding and Weinberg (2001) concluded from the examination of various income components collected by a wide variety of countries that it is next to impossible to quantify all elements of any new comprehensive income definition in a way that makes comparisons easy. In economic literature various definitions of income have been used to explain the behaviour of economic agents. ‘Permanent Income Hypothesis’ sought to explain the consumer behaviour on the basis of income stream, which a consumer or individual expects to receive throughout his life. This concept of income is different from current income in the sense that ‘permanent income’ does not take into account the ‘windfall gains’ or ‘windfall losses’. Moreover, permanent income is not the realised income but it is only a stream of income one may expect to get over a time period on the basis of his resources. Even current income assumes definitional complexities on account of diversities in the sources of receipts for different individuals. For the present purpose, Smeeding and Weinberg (2001) approach towards income, which tries to ascertain whether income makes household better today (able to consume more goods and services), was considered to be relevant. Both regular and non-regular incomes, as well as cash and non-cash incomes are included if they are received in a form that can be spent immediately. On the other hand if some action must be taken to convert an item to spendable form – such as selling equity – then it is not considered to be income. In fact, the word ‘income’, by most of the respondents, is understood the way Smeeding and Weinberg define it.
There was, however, some difficulty in rural areas, mostly in case of illiterate respondents, where word ‘income’ is taken as a synonym for savings. The income of these respondents was arrived at by ascertaining their consumption level and adding it to their reported savings. Further, to have an idea about per capita income one must define the unit that shares the reported level of income. Family is considered to be the most natural sharing unit. Total income of family members staying together is considered to be suitable for the present purpose, as it would indicate the consumption per capita of the members staying together.

Despite the amount of care one may take in conveying the same meaning of word ‘income’ to respondents, the reported income is least likely to be uniform. Under reporting of the income level is common problem in this type of surveys. This problem may not pose serious threat for the present study, as one could assume that all the respondents would under report their income in same manner. Still, the problem in calculation of income and differences in the perceived meaning of the same is well recognised and to avoid these difficulties, and for the reasons explained below, satisfaction with income was considered to be another explanatory variable. The perception about different levels of income may vary for different individuals depending upon their social and economic background (Praag 1996). It is the satisfaction from income, which is important in determining or influencing the level of self-reported happiness. The examination of satisfaction with income as a determinant of self-reported happiness will also assist in testing the consistency of the relationship between income and happiness. Taking into account these considerations, a question was included in the questionnaire to ascertain the level of satisfaction an
individual feels with his present income level. Another related question was included in the questionnaire to ascertain information about the utility level, which an individual would assign to a given level of income. Praag (1968) adopted this approach to determine the individual welfare function. The individual was asked how much income he needed to place himself in different levels of happiness. The verbal scale was used to avoid complexities and to make the question simpler to understand and respond.

4.4 Relative Position and Level of Happiness

The relative position of an individual in the society has always been an important aspect of the economic analysis. Sen (1983) recognised the emerging consensus in favour of conceptualising poverty in relative terms. While maintaining the importance of absolute poverty along with relative poverty, Sen, in dealing with some important capabilities, maintained that an absolute approach in the space of capabilities translates into a relative approach in the space of commodities, resources and income. The role of relative position of an individual has been discussed in context of subjective well-being widely. Shin (1980) while referring to Easterlin’s finding that happiness is a ‘reference group’ phenomenon, noted that, “satisfaction one gets from his material position depends not only on the absolute amount of goods he has, but also on the relative level of resources he commands vis-à-vis other people around him” (Shin 1980). Easterlin (1974) had made a point that economic growth would not bring about increased happiness because the positive effects of income growth on happiness would largely or wholly get offset by corresponding upward shift in the standards for self appraisal of happiness. There are several other studies, which tried to establish a relationship between happiness and
relative position of an individual in the society he is living in. The relative position may be considered in terms of economic and social factors. Praag et al. (1968) have discussed the ‘reference group’ concept to explain the mechanism of ‘social reference’ evolution in a society. The reference group of an individual depends on a wide range of factors. Argyle (1987) found from the value survey that our income relative to peers does remain an important contributor to our self-reported happiness. In the present study, a set of questions was included to ascertain the perceived relative position of an individual by him.

4.5 Achievements of Expectations

The role of gap between expectations and achievements in the level of well-being has been studied from different perspectives in the literature on subjective well-being. Michalos (1980) has noted rightly that ‘the hypothesis that reported satisfaction is a function of the perceived difference between achievements and expectations has been tested in a variety of experimental situations with mixed results’. Hamner and Harnett (1974) found that satisfaction in a competitive situation was a function of two comparisons, namely, the perceived-achievement difference from one’s expectations and the difference between one’s own achievements and that of one’s reference group. Most of the studies regarding influence of aspiration-achievement gap on reported satisfaction involve calculation of a gap between separate measures of aspirations and achievements. These procedures presume that the calculations researchers make are roughly identical to the calculations respondents make. The fact that relatively strong connection has been found between gap measures thus calculated and the reported satisfaction measures suggests that the presumption is not entirely unfounded. Michalos (1980), however, recognised that the gap we
calculate for respondents may be significantly different from the gap they perceive on the basis of their own calculations and intuitions. In the present study, the gap between expectations and achievements is measured in terms of perception of respondents. A question was included in the questionnaire asking respondents to indicate their achievements on a scale of 0 to 10.

4.6 Satisfaction with Various Domains of Life

Apart from income, self-reported happiness is considered to depend on satisfaction with various domains of life. These domains may include education, health, friendship etc. (Veenhoven 1984). It may be noted that satisfaction and happiness are not the same thing. Campbell, Converse and Rodgers (1976) found that feelings of happiness tended to be lower among older people, but feelings of satisfaction tended to be higher as age goes up. Regarding the impact of satisfaction on happiness, Veenhoven (1984) noted that happy people are typically more positive about the various aspects of their life. Happiness is closely related to the appreciation of some aspects of life than others. Veenhoven recognised that it has not been established which life-aspect appreciation corresponds most closely with (overall) happiness. Diener (1984) has discussed the correlation between overall measure of subjective well-being (happiness) and satisfaction with various domains of life. The overall subjective well-being was found to be most correlated with satisfaction with self, indicating the importance of self esteem. An effort has been made in the present study to examine the association between appreciation of different aspects of life and overall happiness. The appreciation or satisfaction with various domains of life is considered as perceived by respondents. A set of questions was
Education is considered to be a crucial variable to influence the life of an individual. There is no final verdict on the exact role of education on one’s well-being. Dasgupta (1993) has emphasised the instrumental value of education where attainment of education is expected to result in improved productivity of an individual. At the same time, however, he has recognised the direct contribution of education to one’s happiness or satisfaction. The relationship between education and happiness has been examined in several studies. Veenhoven (1984) explains how education could influence the level of happiness. The possibility of an improvement in income consequential to better or higher education could be one link between happiness and education. The other aspects associating education to happiness are related to personality of an individual where education makes people ‘self-reliant’, more ‘creative’, ‘more firm in moral dilemmas’, etc. The combined effect of all these aspects is expected to positively influence the level of happiness. The negative association between education and happiness has also been found in some of the studies. For example, it was found that suicide rate was higher in the educated group when compared with that in the uneducated group. Glenn and Weaver (1981) cautioned about the adverse impact of education on happiness.

An attempt has been made in the present study to examine the influence of education on happiness in terms of educational level as such and satisfaction with education. A question on role of education in one’s economic position was also included in the questionnaire.
4.8 Role of Governance in Happiness

The law and order conditions in a society may influence the level of happiness in more than one way. Dasgupta (1993) has considered the index of civil and political rights as components of well-being. This way of reckoning the political conditions, however, does not throw light on the mechanism by which political conditions influence well-being. Frey and Stutzer (2002) recognised that the people living in constitutional democracies are expected to be happier because the politicians are more motivated to rule according to their interests. Democratic institutions, in particular, right to participate in elections and vote on issues, contribute to citizens' happiness. It may be noted that the quality of governance is a crucial factor in determining the feelings of citizens for the constitution. And ultimately, it is satisfaction with governance, which determines overall happiness of individuals in a society. In the questionnaire for the present study, questions were included to ascertain the satisfaction of individuals with government.

4.9 Religion and Well-being

The impact of religion on human well-being could be examined from a wide range of perspectives. Anderson (1988) stressed that belief in God constitutes a kind of internal moral enforcement mechanism. Religion provides the basis for a system of internalised monitoring that represents an efficiency enhancing adaptation to problems. Religion could save the cost of maintaining an orderly society and at the macro level this function of religion is capable of indirectly making a society better off, through sparing resources otherwise required for maintaining order in a society. Off late, economists have started recognising the importance of religion for subjective well-being. Veenhoven (1984)
mentioned that religions could obviously be an aid for psychological functioning. They help to give a positive meaning to inevitable suffering, provide explanations for unintelligible things, serve as a source of social support, etc. In the present study, the role of religion is examined in terms of its impact on psychological functioning of human being. The faith in religion or God could be measured in terms of church membership or number of visits one pays to a worship place or participation in other religious activities etc. Veenhoven has pointed out problems with these measures as they may not be identical for different individuals and hence may not be comparable. For example, an individual may have a strong faith in God but may prefer to avoid going to a worship place. In this case, it is faith in God which is important not the number of visits paid to a worship place. The degree of faith in God could be best measured and revealed by an individual himself. To ascertain this, a question was included in the questionnaire asking respondents about the degree of their faith in the God.

4.10 Data Collection

The detail description about the nature of information required for the present study has been discussed above under different aspects. Each aspect like satisfaction, achievement, and comparison with peers requires information pertaining to various domains of life. This type of information has multiplied the number of variables for which the information needed to be collected. In total, about 75 variables were contained in the questionnaire. Some of the variables like per capita income were derived from the information contained in the questionnaire. The numbers of variables were, however, reduced after doing adequate sorting and aggregation.
The selection of the region for the present study was motivated, partially, by the findings of studies on country comparison of happiness, indicating that, on an average, persons living in rich countries are happier than in poor countries (Diener, E.D; Marissa Diener and Carol Diener 1995). There are, however, several other factors, which could move parallel with income and affect happiness. If so, the positive correlation found between income and happiness across countries would be spurious (Frey and Stutzer 2002). For example, in richer countries the political, cultural, and climatic factors may be conducive for generating higher level of happiness. To allow for a control of region specific characteristics, a relatively small region having number of similarities was considered for the present study. Thus, in the selected region, the political, cultural, linguistic, and climate factors happen more or less to be similar. Since, the main purpose of the study is to examine the influence of income on well-being; the similarities in these characteristics would enable accuracy in results. The selection of the particular region, i.e. some villages and cities of Haryana state, was motivated by familiarity of the region and associated convenience in collection of data.

Attempt was made to collect information on more than 600 individuals in all, through personal interaction with the illiterate respondents and distribution of questionnaires among the educated ones. The personal interaction was done with the respondents while filling the questionnaire wherever it was possible. Out of 600 questionnaires which were distributed, around 500 were received back and acceptable number of questionnaires was 470, on the basis of which the empirical investigation was carried out.
The responses to the questions regarding life expectancy were not answered by many of the respondents, as a result only 269 observations could be obtained in this regard. Similarly, the appropriate information on relative utility of income could also not be obtained. Particularly the two questions:

1. how much income you need to place you in various categories of happiness; and
2. what higher income will earn for you?

were not responded in the expected manner. Hence, it was decided to leave the analysis relating to these two questions. This, however, will not interfere with the objective of the study.

4.11 Statistical and Econometric Applications

The descriptive statistics as well as econometric techniques have been used for analysing the data and deriving results therefrom. Among the descriptive statistics, the graphical presentation, mean, deviation from mean, test for difference of means etc. have been mainly used. The graphical presentation is based on bar, line and scatter diagrams. The use of histograms has been made frequently, as it is suitable for the study.

For empirical examination of various structural relationships, econometric analysis carried out with the help of single equation regression. Most of the variables have been defined as to vary between 0 and 10. The simple regression and the least squares could not be used where dependent variables are defined to take limited values. In practice, the qualitative dependent variables are treated with Logit and
Probit models. These two models are extensively used where dependent variable is of binary type or dichotomous. Since most of the variables in the present study have been defined to take multinomial value like other studies on happiness, the Probit or Logit models cannot be used. A variation of these models called 'Ordered Probit Model' is used instead. The use of this model is quite common in the studies on subjective well-being (Frey and Stutzer 2002).

Before discussing the Ordered Probit model, it will be useful to discuss in brief the Logit and Probit models. To start with, one may consider a simple model

\[ Y_i = b_0 + b_1 x_i + u_i \]

where \( y \) can take only two values, say 0 and 1. This model looks like a typical regression model but because dependent variable is binary, it is called linear probability model (LPM). This is because the conditional expectation of \( y_i \) can be interpreted as the conditional probability of the event to take place (that is \( y \) will assume value 1) for a given value of \( x_i \). It seems from the above specification that Ordinary Least Squares can be applied to the models involving binary dependent variables. Such a treatment will, however, be characterised by the problems like non-normality of random term \( u_i \), heteroscedasticity and inconsistency in estimated values of dependent variables (Gouriroux 2000). These problems can be resolved to some extent by applying the restricted least squares and by increasing the sample size. The basic problem of the model is, however, its logical inconsistency as it assumes that probability \( P_i \) increases linearly with \( x_i \). This is inconsistent with the concept of probability, which cannot exceed 1 and cannot be negative. The relationship between the variables involving a dichotomous variable as dependent variable can take a broad S shape, as shown in Chart 1.
The curve in the chart indicates that $y_i$ should not cross 0 and 1, at the same time it should not follow a linear association with $x_i$. This type of formulation is best represented by the Cumulative Distribution Function (CDF) (Hebden 1983). There could be various types of cumulative frequency distributions but the frequently used ones are 'normal' and 'logistic' distributions generating 'Probit' and ‘Logit’ models. Probit model is briefly discussed below. The probit analysis is based on transformation of a dichotomous dependent variable into a continuous non-observable variable. This variable is called latent variable, which depends on factors determining the binary dependent variable say $x_i$.

$$l_i \text{ (latent variable)} = b_0 + b_1x_i$$
This latent variable is related with $y_i$ through a threshold limit $I^*$ such that $y_i = 1$ if $l_i > I^*$ and equal to 0 otherwise. Assuming the normality feature, the probability that $l_i$ is less than or equal to $I^*$ can be estimated or calculated from the standardised normal cumulative distribution function in the following manner:

$$P_i = P(\frac{y=1}{x}) = P(l_i \leq I^*) = P(Z_i \leq b_0 + b_1 x_i) = F(b_0 + b_1 x_i)$$

The information on $l_i$ could be ascertained from the inverse of above function.

$$l_i = F^{-1}(P_i) = F^{-1}(P_i) = b_0 + b_1 x_i$$

The grouped data may be treated with Least Squares method, whereas for estimation from individual data the Maximum Likelihood method is applied.

The dependent variable, however, cannot be restricted to two values. It can take more than two values and in that case it is called multinomial choice variable. The variables in such cases take values like 0, 1, 2, 3 etc. These values are normally responses given on a ranking. For treating the data like this, Ordered Probit and Ordered Logit models are frequently used. The model is built around a latent regression like binomial Probit model. To begin with

$$Y^* = B'X + e \quad \text{(where Y, B, X are vectors containing variables and parameters).}$$

$Y^*$ is unobserved variable similar to that in Probit model. What is observed is

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\[ Y = 0 \text{ if } Y^* \leq 0 \]
\[ = 1 \text{ if } 0 < Y^* \leq u_1 \]
\[ = 2 \text{ if } u_1 < Y^* \leq u_2 \]
\[ = 3 \text{ if } u_2 < Y^* \leq u_3 \]
\[ \vdots \]
\[ = j \text{ if } u_{j-1} < Y^* \]

which is a form of censoring. The \( u_j \) are unknown parameters to be estimated along with \( \beta \). The random term \( e \) is assumed to be normally distributed across observations. With the normal distribution, we have the following probabilities:

\[
\text{Prob}(y=0) = f(-\beta'X) \\
\text{Prob}(y=1) = f(u_1-\beta'X) - f(-\beta'X) \\
\text{Prob}(y=j) = 1 - f(u_{j-1}-\beta'X)
\]

The log likelihood function and its derivative can be obtained readily, and optimisation can be done in a usual manner.

In addition to the Ordered Probit estimates, the simple OLS has also been applied for estimating the coefficients. Though, the simple OLS is based on the assumption of linearity and hence does not fit logically with the data like we are having. Some studies have, however, used the OLS to treat data on happiness and found that the signs of
estimated coefficients are same in both the models. An attempt has also been made to make a comparison of the coefficients estimated from OLS and Ordered Probit models.
A Questionnaire for Measuring Well-being

This questionnaire is developed purely for the research purpose. Your honest response will determine the quality of the research. You are kindly requested to take some time and respond as correctly as possible. The information supplied by you will be used for the research purpose only. I anticipate a kind co-operation from you and in this anticipation I extend my sincere thanks to you for sparing some time for filling this questionnaire.

Name Village or city name Age (in Years) Male / Female Education level Is Your husband/wife working- yes or no
Marital Status (please mark) Married /Unmarried /Divorced /Widow/Widower /Remarried
Present profession (mark) Self-employed/Regular Job/Part-time job/Unemployed/Work at home/Others
Age at which you started earning ( years ) Nature of first job regular/part-time/other
Total income of the family staying together (in Rs. per annum)
1 Total number of family members staying together.
   Ans. Wife/husband Children Brothers/Sisters Parents Any other Total
   ( ) ( ) ( ) ( ) ( ) ( ) ( )
2 Taking your life as whole, where do you feel on the happiness scale of 0 to 10 given below, where 0 means totally unhappy and 10 means completely happy.
   0 1 2 3 4 5 6 7 8 9 10
3 In your perception, how much happy is your family generally from life as whole. Please mark on the happiness scale of 0 to 10 given below, where 0 means totally unhappy and 10 means completely happy.
   0 1 2 3 4 5 6 7 8 9 10
4 In your perception, how much secure (permanent) source of income you are having for your future life/old age. Please mark on the scale of 0 to 10, where 0 means completely unsecured (uncertain) income and 10 means complete security (certainty) of the income.
   0 1 2 3 4 5 6 7 8 9 10
5 Please mention how much satisfied are you with various aspects of your life. Please specify the level of satisfaction on a scale of 0 to 10, given below along with each aspect. In this scale, 0 means complete dis-satisfaction with the respective aspect of life and 10 means complete satisfaction with the same. Please circle the appropriate level.

a. Financial Position 0 1 2 3 4 5 6 7 8 9 10
b. Present Job/profession 0 1 2 3 4 5 6 7 8 9 10
c. Married life 0 1 2 3 4 5 6 7 8 9 10
d. Children 0 1 2 3 4 5 6 7 8 9 10
e. Relatives 0 1 2 3 4 5 6 7 8 9 10
f. Friends 0 1 2 3 4 5 6 7 8 9 10
g. Neighbourhood 0 1 2 3 4 5 6 7 8 9 10
6. To what extent your expectations/ambitions about the following aspects of your life have been achieved/fulfilled. Please circle the appropriate number on the scale of 0 to 10, where 0 means complete failure and 10 means full achievement or beyond expectations.

Financial Position 0 1 2 3 4 5 6 7 8 9 10
Social status 0 1 2 3 4 5 6 7 8 9 10

7. If you compare the existing position regarding following aspects of your family with that of your parents at the time of your childhood, has it improved or deteriorated? Please circle the appropriate number on the scale of -5 to +5, where 0 means no change in the position, 1 means double improvement, 2 means two times improvement etc. If it has deteriorated, please mark on the negative side, where 1 means 10 per cent decline, 2 means 20 per cent decline and so on.

Financial Position -5 -4 -3 -2 -1 0 1 2 3 4 5
Social status -5 -4 -3 -2 -1 0 1 2 3 4 5

8. Where do you place yourself on the ladder of social status. Please mark on the scale of 0 to 10, where 0 means at the bottom or lowest status in society and 10 means at the top in society.

0 1 2 3 4 5 6 7 8 9 10

9. To what extent education has contributed to your economic or financial position. Please mark on the scale of 0 to 10 where 0 means that role of education is nil in your financial position and 10 means your present financial position is totally on account of your education.

0 1 2 3 4 5 6 7 8 9 10

10. In comparison to a group of individuals of your age (your classmates, colleagues, playmates, relatives, other persons in your circle), where do you place yourself or your satisfaction in respect of various aspects of life mentioned below. Please specify your position on a scale of 0 to 10, given below along with each aspect. In this scale, 0 means that you are at the bottom or at the lowest level among the persons of your age group and 10 means you are on the top of the group of your age.

a. Financial Position 0 1 2 3 4 5 6 7 8 9 10
b. Present job/profession 0 1 2 3 4 5 6 7 8 9 10
c. Married life 0 1 2 3 4 5 6 7 8 9 10
d. Children 0 1 2 3 4 5 6 7 8 9 10
e. Family 0 1 2 3 4 5 6 7 8 9 10
f. Relatives 0 1 2 3 4 5 6 7 8 9 10
g. Economic Security 0 1 2 3 4 5 6 7 8 9 10
h. Education 0 1 2 3 4 5 6 7 8 9 10
i. Health 0 1 2 3 4 5 6 7 8 9 10
j. House 0 1 2 3 4 5 6 7 8 9 10
k. Locality 0 1 2 3 4 5 6 7 8 9 10
l. Social Status 0 1 2 3 4 5 6 7 8 9 10

11. In comparison to financial/social status of your wife, where do place your self on a scale on −5 to +5. 0 means your financial/social status is equal to your wife, −1 means your status is 10 per cent less and +1 means your status is 10 per cent more.
12. Do you feel that governance factors affect your happiness level.
   Ans: yes
   no

13. How much faith do you have in God. Please mark on the scale of 0 to 10 where 0 means you have no faith in God and 10 means you have complete faith in God.
   0 1 2 3 4 5 6 7 8 9 10

14. How much time you devote to your hobbies or passing time activities (listening music, watching TV, playing cards etc.). Please mark on the scale of 0 to 10, where 0 means that you do not spend any time for these things and 10 means you are always busy with hobby or passing time activities.
   0 1 2 3 4 5 6 7 8 9 10

15. How much concerned you are about the welfare of other individuals (other than your family and close relatives). Please mark on the scale of 0 to 10, where 0 means you are totally selfish and never think about the welfare of others and 10 means your are always concerned about the welfare of others.
   0 1 2 3 4 5 6 7 8 9 10

16. Do you get sufficient leisure time after work? Please mark on the scale of 0 to 10, where 0 means complete insufficiency of leisure time 10 means complete sufficiency of the same.
   0 1 2 3 4 5 6 7 8 9 10

17. How much income you need to place yourself in the following categories.
   Categories (Rs. Per month) very happy Happy not so happy unhappy very unhappy
   ( ) ( ) ( ) ( ) ( )

18. In case of illness what bothers you most for which you have to take medicine and get cured. Please give ranks to following things.
   Ans. Relief from pain / loss of work or income/ taking care for family/just maintain your health
   ( ) ( ) ( )

19. What do you think that higher income will bring or earn for you. Give the rank to the followings things from 1 to 5.
   Ans
   Improvement in your status in society
   Help access to more luxuries
   Help to change for a better profession
   Help attaining more education
   Getting a bigger house or better locality
   Security for future
   Help in providing better facilities/secure future for your children
   To take up social activities/religious activities (benevolence)

Questions Related with Life Expectancy

1. If you remember any case of natural death in any age (including infants) in your family, neighbours, friends or relatives (excluding accidental deaths), please mention the year of the death.
   Ans.

2. What was the age of the person at that time.
   Ans.

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3. What was the income level (approximately, in Rupees per month) of his family. The income level may be stated in terms of average during five years before death of deceased.
   Ans. Rs.
4. Was he suffering from some major or chronic illness?
   Ans. Yes / No
5. Do you think that death could have avoided had the income of the deceased been sufficiently higher.
   Ans. Yes / No