

Chapter 3

Research Design of the Study

This chapter explains the methodology used in gathering the information necessary for the study. An appropriate research design is used to structure the research properly. The present study is an explanatory study which explains the socio-demographic characteristics related to values and general wellbeing of high school students.

The main purpose of this chapter is to present the research methodology and methods used in this study in order to answer the research questions and to achieve the research objectives. The chapter begins with the study variables, research design, population and sample of the study. Subsequently, the chapter explains the sources of data and the research instrument. The steps are elaborated in detail .

Study Variables

In present study on the independent variables include- gender, residence (rural/urban), occupation of parents. Dependent variables of the study are values and general wellbeing scores. For measuring values the researcher has used “study of values test” developed by Dr. Raj Kumar Ojha and Dr. Mahesh Bhargava (2012) consisting of six dimensions of values- theoretical, economic, social, aesthetic, political and religious. General wellbeing was measured on a five point likert scale “general wellbeing scale” developed by Dr. Ashok K. Kalia and Dr. Anita Deswal (2011) consisting of four dimensions-physical, emotional, social and school wellbeing.

Research Design

In the present study, descriptive survey method is used for collecting data as the purpose of the study is to explain the values and general wellbeing in relation to

socio-demographic variables. Descriptive research is typically more formal and structured than exploratory research (Malhotra, 2005). It is based on large, representative samples and the data obtained are subjected to quantitative analysis. In this study, descriptive survey is undertaken in order to ascertain and describe the characteristics of the variables. The present study is descriptive in nature as it endeavors to assess the impact of socio-demographic variables on the values and general wellbeing of high school students.

Research Instruments

Questionnaire I (Study of values test by Dr. Raj Kumar Ojha and Dr. Mahesh Bhargava, 2012): The questionnaire was used for collecting data regarding values. The students appeared for the values test . The test had 2 parts with a total score of 240 (part 1: 90 and part 2: 150) covering the areas of theoretical, economic, aesthetic, social, political and religious values. The questions covered the following areas:

Description of the items: the study of values test consists of 45 statements with 120 alternative answers. These alternative answers belong to each of the six values.

- a) Theoretical value: Questions that can infer the inclination towards discovering truth through the statements that can logically evaluate the empirical, critical and rational interests.
- b) Economic value: Questions that can observe inclination towards money and material gains through the statements that can infer if the respondent is positively biased towards the rich, industrialists and material gain.
- c) Aesthetic value: Questions related to art and beauty infer the aesthetic value of respondent.

- d) Social value: Questions that can observe charity, kindness, love and sympathy for others are consisted in the test for measuring social value.
- e) Political value: Questions that can observe inclination towards political man power and prestige and interest in leadership, administration, management, political parties etc.
- f) Religious value: Questions that can observe inclination towards faith in God and fear of divine wrath are existed in the test for measuring religious value.

Scoring pattern: The two different parts of the test has different scoring pattern which is given as under:

- If any statement is left unanswered –
 Part 1 : 1.5 score for each alternative. The sum of scores for (a) and (b) must always be equal to 3
 Part 2: 2.5 for each alternative. The sum of scores for four alternatives should be equal to 10.
- Add the vertical columns of the scores on each page and enter the total in the boxes at the bottom of each page.
- Transcribe the totals from each page in the space of the table which is labeled with same letter.
- Add the total from the 6 columns (values).
 The total score for all the columns should be equal to 240 (for part 1: 90 and part 2: 150)

Questionnaire II (General well-being scale by Dr. Ashok K. Kalia and Dr. Anita Deswal, 2011): In addition to values test, students also appeared for GWBS-KADA psychological test designed by Dr. Ashok K. Kalia and Dr. Anita Deswal from National Psychological Corporation. The test has positive and

negative questions for four subscales: physical, emotional, social and school wellbeing, that constitutes the general wellbeing.

Table 3
Distribution of Items of General Wellbeing (GWB)

Category	Subscales	Positive Items	Negative Items	Total (55)
A	Physical Well-being	1,2,3,4,5,6,10,11	7,8,9	11
B	Emotional Well-being	22,23,24,25	12,13,14,15,16, 17,18,19,20,21	14
C	Social Well-being	26,27,28,29,30,31,3 2,33,34,35,36,37,42	38,39,40,41	17
D	School Well-being	51,52,53,54,55	43,44,45,46, 47,48, 49,50	13

Table 4
Scoring Pattern for Positive and Negative Items

Response	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Positive Items	1	2	3	4	5
Negative Items	5	4	3	2	1

It is a self reporting scale. There are statements followed by five alternatives and the students have to mark the most suitable alternative against each statement. The scores are awarded in a very simple manner as mentioned above. The maximum score for positive statement is 5 and minimum is 1, vice-versa for negative statements.

Table 5
Interpretation of the General Wellbeing (GWB)

Interpretation	Range of scores for males	Range of scores for females
High GWB	231-275	226-275
Average GWB	168-230	177-225
Low GWB	Below 167	Below 176

Both the questionnaires have designed manual explaining the meaning of each value and methodology to conduct the analysis. There was no pressure of time limit and hence, the students have completed the test as per their ease and comfort ranging between 40-90 minutes.

Population of the study

Population of the study consist of all the high school students of block Rewari who are studying in government or private secondary schools affiliated to Haryana board of secondary education (HBSE) or central board of secondary education(CBSE).

Sample of the study

For the present study a sample of 600 students (300 males and 300 females) was selected on random basis. The sample was selected from Rewari block of Haryana State. From all high schools of Rewari block seven schools (3 govt. and 4 private) were selected for study (given in table 6).

Table 6

Description of the Sample

Sr. No.	Name of the school	Number of students	
		Male	Female
1	Govt. Sr. Sec. School, Kapriwas	60	60
2	Govt. Sr. Sec. School, Sheoraj Majara	55	45
3	Govt. Sr. Sec. School, Sangwadi	50	50
4	A.M.Sr. Sec. School, Sheoraj Majara	40	40
5	Roseland International School, Konsiwas	30	30
6	Aravali International School Gokalgarh	30	30
7	Hindu Sr.Sec.School Rewari	35	45
	Total	300	300

Table 7

Demography of the Sample

Category	Gender		Residence		Fathers' occupation				Mothers' working status	
	Male	Female	Rural	Urban	Govt. employed	Self employed	Private employed	unemployed	Working	Homemaker
N	300	300	300	300	191	235	168	06	180	420
Total	600		600		600				600	

Data Collection

The present study used primary data sources. For the collection of primary data questionnaire method was used. The primary data for this research study was collected through the structured standardized questionnaires (attached in appendix).

Prior to data collection, proper meeting with the school authorities was held to secure cooperation and ensure quality control. Despite this, many schools did not allow the survey to be conducted in their school. With rigorous effort and tenacity, the data was collected from the agreed schools. The respondents also faced difficulties in understanding the questions, children were asked to complete the questionnaire in their class itself.

Statistical Techniques used for Data Analysis

The collected data has been analyzed with help of statistical package for social sciences (SPSS). Statistical methods like percentage, frequency procedure, mean score, standard deviation, t-test, ANOVA, Post-hoc, correlation, regression, Levene's test and Mann-Whitney U Test were conducted.

- **Correlation:** Correlation is used to see study the differences in value amongst high school students. Furthermore, the technique is also used to study the relation between values and wellbeing of high school students. As Pearson's correlation technique is the most appropriate technique for investigating the relationship between two quantitative, continuous variables like value scores and wellbeing scores, thus, Pearson's correlation is applied to study the same.
- **Independent samples t-test and Levene's test:** Independent samples t-test is used to observe the difference in values among high school male/female students, urban/rural students and working/home maker mothers. Furthermore, the technique is used to analyze difference in general wellbeing among high school students of working and home maker mothers. As the independent samples t-test compares the means of two independent groups (male/female, urban/rural, working/home maker mothers) in order to determine whether there is statistical evidence that the associated population means are

significantly different, thus, to study the differences in the means of two group, this technique is applied. The t-test assumes that variances of the populations from which different samples were drawn were equal. To check this assumption Levene's test was conducted so that valid analysis can be drawn.

- One-way ANOVA: If the mean differences of more than 2 groups are needed to be studied in that case one-way ANOVA is an appropriate technique. To determine whether there are any statistically significant differences between the means of two or more independent (unrelated) groups- occupation of father (self- employed/ unemployed/ government employee/ private employee) in relation to values and wellbeing separately, one-way ANOVA is used.
- Tukey Post-hoc Test: While the ANOVA states if there is difference in the means of the group, Tukey Post-hoc Test states which of the specific group differed. Thus, in this study ANOVA test is followed by the Post hoc test to draw specific analysis.
- Mann-Whitney U test: With the dependent variable- general wellbeing score- being ordinal in nature and 'gender' (which has 2 groups- male and female) as an independent variable, the Mann-Whitney U test was used to compare differences between two independent groups.
- Linear regression: The technique is used to predict the value of general wellbeing (dependent variable) on the basis of value of residence of the student (independent variable).
- Percentage analysis: In order to compare the wellbeing of male students with female students, percentage analysis is used. The score range of low, average

and high wellbeing for both male and female students are referred from the manual.

- Descriptive statistics and charts (bar graph and pie chart) are used to summarize the sample.

In the present chapter the research methodology adopted for the present study has been dealt in detail, which included variables selected, research design employed, data collection procedure, study areas, sample selection, statistical methods applied etc.,. The data analysis for the data collected in the present study has been systematically analyzed and interpreted in chapter 4.