

PLAN AND PROCEDURE

A research method describes the plan to be adopted in solving the research problem. In any scientific investigation, there are numerous methods and procedures to be applied, but it is the nature of problem under investigation, which determines the selection of a particular method of study. The accuracy and reliability of result depends upon the accuracy and reliability of data. Data collection is essentially an important part of the research process. Every researcher has to take help of some tools for collecting data for the research work just like the technical person. There are many research tools and methods but the researchers are required to make a wise and judicious choice and should select only those which may be suitable to meet the requirements of the study. For collection of data the investigator has to set up the design, describe the sampling method, the nature of population and sample, the tools used for the collection of data, reliability and validity of the tools used and the statistical techniques adopted in drawing out the results of investigation. The investigator is also required to discuss the administration of his tools over the selected samples and procedures used in tabulating, organizing and scoring data.

The present chapter gives a brief description of the method of investigation, sampling procedures, research tools and techniques employed for the collection of data.

3.1 RESEARCH METHOD

In the present study, descriptive research method was used. The descriptive research method refers to the method used to describe data and characteristics used to describe the population. The purpose of using the descriptive research method is to acquire accurate, factual, systematic data that are available with an actual picture of the data set that are reviewed. The present investigation aims to study the self-disclosure and values of adolescence in relation to their family relationship and school environment. It is a descriptive survey method as it involves collecting data using standardized tools to tests hypotheses or answer questions concerning the current status of the adolescents i.e. location (rural/urban), type of school (government/private) in which they are studying and gender (male/female) with regards to self-disclosure, values, family relationship and school environment. The investigator delineated family relationship and school environment as independent variables and self-disclosure and values as dependent variables.

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3.2 VARIABLES

In the present study, two independent and two dependent variables were considered by the investigator which are as follows:

3.2.1 Independent Variables

Family Relationship and School Environment

3.2.2 Dependent Variables

Self-Disclosure and Values

3.3 POPULATION AND SAMPLE

3.3.1 Population

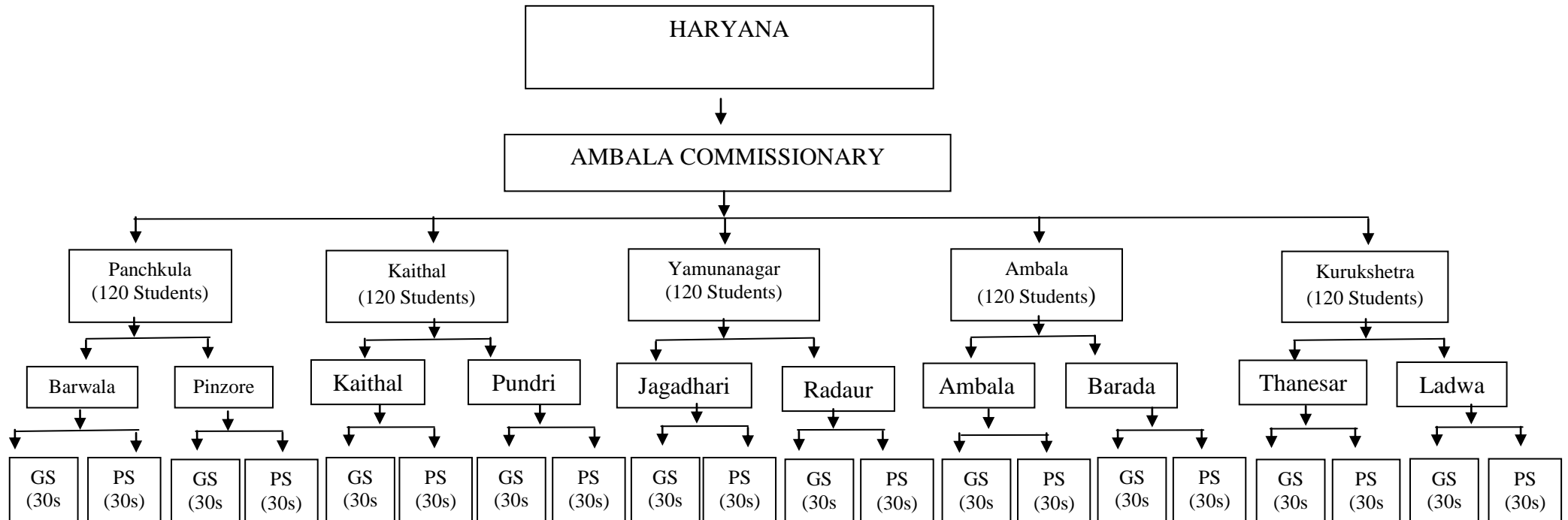
In the present study, population refers to all the adolescent students of Government and Private Senior Secondary Schools of Haryana state.

3.3.2 Sampling

For the present study, a restricted sample of 600 adolescent students comprised of government and private senior secondary schools of Haryana State. There are four commissioneries in Haryana state i.e. Hisar, Ambala, Rohtak and Gurgaon. Out of them, Ambala commissioneriy was taken. All the five districts of Ambala commissioneriy i.e. Ambala, Yamunanagar, Kurukshetra, Panchkula and Kaithal were considered for the sample. Further, two blocks from each district were selected. Ambala and Barara blocks from Ambala district, Barwala and Pinzore blocks from Panchkula district, Jagadhari and Radaur blocks from Yamunanagar district, Thanesar and Ladwa blocks from Kurukshetra district, Kaithal and Pundri blocks from Kaithal district were selected by stratified random sampling. Two schools (one Government and one private senior secondary school) from each block were selected randomly for the purpose. Total 600 students were selected from Ambala commissioneriy of Haryana state. Thirty adolescent students from each school were selected randomly.

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Sample Design



GS= Government Schools

PS= Private Schools

30s = 30 students

3.4 TOOLS USED

The aim of study enunciated in the first chapter required the collection of relevant data through standardized tools on the variables of self-disclosure, values, family relationship and school environment. The tools used for the purpose are as under:

1. **Self-Disclosure Inventory (SDI)** developed and standardized by **Dr. Virendra Sinha (2003)**.
2. **Study of Values Test (SVT)** developed and standardized by **Dr. R.K. Ojha & Dr. Mahesh Bhargava (2012)**.
3. **Family Relationship Inventory (FRI)** developed and standardized by **Dr. (Mrs.) G.P. Sherry & Dr. J.C. Sinha (2011)**.
4. **School Environment Inventory (SEI)** developed and standardized by **Dr. Karuna Shankar Misra (2011)**.

3.4.1 SELF-DISCLOSURE INVENTORY(SDI)

Sinha's Self-Disclosure Inventory has been designed to measure the extent of self-disclosure of Indian adolescents. This inventory is usable on adolescents (12-19 years) of both sexes of urban and rural population.

(a) Description

The inventory is capable of assessing the trend and magnitude of self-disclosure of the adolescents in different areas of self and towards different target figures. The inventory contained 80 items (10 items in each area). It is a 3-point self-rating scale (numerical type).

(a) Areas

Eight areas of self are included in the inventory, which were considered to be the important areas of self for Indian adolescents by five psychologists and a number of parents. These areas are as follows-

1. Money
2. Personality
3. Study
4. Body
5. Interests
6. Feelings & Ideas
7. Vocation
8. Sex

Thus, Part-1 of the inventory is related to the area of money; part-2 to the area of personality; part-3 to the area of study; part-4 to the area of body; part-5 to the area of interests; part-6 to the area of feelings & ideas; part-7 to the area of vocation; part-8 to the area of sex.

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(b) Target Figures

Target figures are the persons to whom the adolescents generally disclose themselves. In SSDI six such target figures are included. These target figures are not arbitrarily included in the inventory, but were statistically explored with the help of a short questionnaire filled in by 313 adolescents of the same age range and population to which the inventory is usable. The explored target figures are as follows-

1. Mother
2. Father
3. Brother
4. Sister
5. Friend
6. Teacher

(c) Reliability and Validity

Reliability

Split-half reliability was calculated on a sample of 200 mid adolescents including male, female, urban and rural testes. The coefficient of correlation was calculated on total scores of SSDI by using Spearman-Brown Formula, and value of r was found to be 0.95 significant at .001 level.

The coefficient of correlation between the 1st and 2nd halves of the various areas of the self were calculated and value of r was found to be .95 by the author.

The reliability of the test was determined by split-half method. For this purpose, the test was administered to a sample of 100 adolescent students studying in different senior secondary schools of Haryana state. The split-half reliability of the inventory by applying Spearman-Brown formula was computed by the researcher to be 0.78.

Validity

The construct validity of SDI on a sample of 200 mid adolescents was calculated by contrasting group method. The significance of difference in the total score of low and high disclosures in urban/rural and boys/girls were calculated. The value of SSDI was found to be significant at .01 level.

(d) Answering the Inventory

The answering of this inventory is based on 3 point self-rating scale. The respondent is to follow the following rating scale according to the assessment of his own extent of self-disclosure on any topic towards any target figure.

Write 0 if you never talk about a given topic to the other person or never disclose yourself on the topic to the person concerned.

Write 1 if you talk in general terms about a topic, but not in full details. The other person is given only a general idea about your views on that particular self of yours.

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Write 2 only when you know that you talk fully to the other person about that particular topic, or you disclose fully without any hesitation on that aspect of yourself.

(e) Scoring

This inventory yields the self-disclosure scores area-wise and target-figure wise. The sum of the scores in all the areas or towards all target-figures gives the total magnitude of self-disclosure of the subject. This inventory is also capable of sorting out the self-disclosure scores in any one particular area or towards any one particular target figure.

3.4.2 STUDY OF VALUES TEST (SVT)

Study of Values Test developed and standardized by Dr. R.K. Ojha & Dr. Mahesh Bhargava (2012) was used in the present research. The main aim of the study of values is to measure the six basic interests or motives in personality: the Theoretical, Economic, Aesthetic, Social, Political and Religious. This type of classification is based upon Spranger's Type(s) of man.

(a) Description

The study of values test is self-administering. It consists of a number of statements based upon a familiar situation. The test has two parts- the first part consists of 30 items with two alternative answers and the second part consists of 15 items with four alternative answers. In all there are 45 statements with 120 alternative answers. Roughly 20 alternative answers belong to each of the six values. The subject records his preferences numerically by the side of alternative answers.

(b) Areas

The Study of Values was originally published in 1959. The present revision represents considerable changes in general norms and contents of the test. The present revision of 'Study of Values' by Allport-Vernon-Lindzey has given a definition of each of these values as conceived by Spranger.

A. The Theoretical Value: Theoretical values refer to a person's interest in the discovery of theories and truth. This type of person does not give any importance to the practical aspects of science. He is independent and philosophical in nature and wants to explain everything through logic and theories.

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- B. The Economic Value:** Economic values in man are characterized by his interest in practical knowledge and use of this knowledge for financial and economic gain.
- C. The Aesthetic Value:** Aesthetic values in man draw him towards beauty and harmony. The concept of beauty, symmetry, form and harmony is the highest truth for him.
- D. The Social Value:** social values in man drive him towards care and fellow feeling for others.
- E. The Political Value:** political values are characterized by love and ambition for power and renown.
- F. The Religious Value:** Religious values involve man in the study of the mystical and divine aspects of the universe.

(c) Reliability and Validity

Reliability

Reliability of the tool is generally defined as the ratio of the true variance to the scores. The error variance component of the scores generated by a perfectly reliable tool is zero and there is no error of measurement.

Split-Half Reliability: The statements were divided into two sub scales whereas the odd number statement formed the other. For a sample group of 100 cases the product-moment correlations are shown in the following table:

Table 3.1

RELIABILITY COEFFICIENT OF THE STUDY OF VALUES TEST

Sr. No.	Values	Revised Form	Old Form
A	Theoretical	.78	.60
B	Economic	.81	.65
C	Aesthetic	.76	.54
X	Social	.82	.66
Y	Political	.83	.62
Z	Religious	.84	.70

The internal consistency of the study of values test was determined by Split-half method. The reliability of study of values test was calculated by the researcher by

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employing split-half reliability using Spearman-Brown formula for a sample of 100 students. The split-half reliability coefficient of the test as found as by the author of the test and by the researcher:

Table 3.1.1

RELIABILITY COEFFICIENT OF THE STUDY OF VALUES TEST

Sr. No.	Values	Reliability Coefficient	By Researcher
A	Theoretical	.78	.71
B	Economic	.81	.79
C	Aesthetic	.76	.74
X	Social	.62	.64
Y	Political	.83	.79
Z	Religious	.84	.68

Validity

The coefficient of correlation was found for a sample of 500 male and 500 female students. There is positive correlation between economic-social values, between economic-political values and between economic-religious values in males. But in female sample, there is a positive correlation between economic-religious values, aesthetic-religious values and social-religious values.

(d) Scoring

Step- 1. If any statement has been unanswered, then award scores are as following:

Part I: 1 and half for each alternative. The sum of the scores for (a) and (b) must always be equal to 3.

Part II: 2 and half for each alternative. The sum of the scores for the four alternatives must be equal to 10.

Step- 2. Add the vertical columns of scores on each page and enter the total in the boxes at the bottom of the page.

Step- 3. Transcribe the totals from each page in the space of the table which is labeled with the same letter.

Step- 4. Add the totals for the six columns (values).

Step-5. The total score for all the six columns must be equal to 240. (for part I 90 and part II 150)

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Step-6. The total raw scores for the six categories of values were then added and this sum total was Total Raw Score for Full Inventory, which was to be placed in the column for Grand Total.

3.4.3 FAMILY RELATIONSHIP INVENTORY (FRI)

For the present study, Family Relationship Inventory developed and standardized by Dr. G.P. Sherry & Dr. J.C. Sinha (2011) was used.

(a) Description

The inventory contains 150 items classified into three patterns of mother and father separately. The number of items measuring each pattern is given below-

Table 3.2

DESCRIPTION OF ITEMS IN PATTERNS OF FAMILY RELATIONSHIP

ACCEPTANCE		CONCENTRATION		AVOIDANCE	
Father	Mother	Father	Mother	Father	Mother
FA	MA	FC	MC	FV	MV
25	27	20	21	26	31
TOTAL	52	TOTAL	41	TOTAL	57

(b) Patterns (Areas)

Acceptance means that the parents consider the child as a full-fledged member of the family who needs a certain degree of independence and the capacity to assume responsibility. Parents having acceptance attitude towards their children neither attend nor overlook their children. They encourage them to fulfil their potentialities as best they can.

Concentration refers to attitudes of parents who devote a disproportionate amount of their time and energy to the direction and control of their children. They overprotect them through restrictions upon their efforts to explore the environment. They place heavy demands upon them to perform beyond their capacities and to achieve ambitious goals.

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Avoidance characterizes the disposition of parents who either neglect or reject the child. They fail to satisfy the child's physical needs or they openly abuse the child.

(c) Reliability and Validity

Reliability

The test-retest reliability was determined on a sample of 100 intermediate students. For the test-retest reliability, the correlation coefficient was worked out on the basis of the scores of two tests of 100 students. The correlation coefficient of parental acceptance was found 0.56. Parental concentration correlation was found 0.44 and correlation coefficient of parental avoidance was found 0.85. The values are significant at 0.01 levels of significance.

The test-retest reliability was determined on a sample of 100 adolescent students to whom the inventory was administered twice with an intervening period of three months. For the test-retest reliability, the correlation coefficient was worked out on the basis of the scores. The reliability of the inventory was found to be 0.79 by the researcher.

Validity

The correlation between three scales of the inventory was worked out to find out the extent of internal consistency. The 'r' values were computed between three scales separately for mother, father and the whole group.

(e) Scoring

For every true response one mark was given and the marks obtained by respondents were summed up pattern-wise. The following table shows the area and corresponding items belonging to that pattern for scoring purpose.

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Table 3.3

DISTRIBUTION OF ITEMS IN PATTERNS OF FAMILY RELATIONSHIP INVENTORY

M.A.(27)	F.A.(25)	M.C.(21)	F.C.(20)	M.V.(31)	F.V.(26)
7	3	2	27	6	1
10	5	13	28	12	4
11	8	17	33	16	15
14	9	18	40	20	19
22	36	25	56	21	23
29	41	39	67	24	32
31	49	52	68	26	34
38	50	55	69	30	35
43	61	59	71	42	37
46	70	62	81	48	44
47	72	74	92	51	45
57	75	79	97	58	53
63	76	87	98	73	54
64	80	90	100	77	60
65	84	106	101	78	86
66s	94	107	104	82	89
85	108	120	137	83	93
88	112	122	139	99	95
91	121	127	144	102	96
124	125	134	150	109	103
135	130	147		113	105
136	131			114	110
140	133			115	111
141	143			116	119
142	145			117	128
146				118	138
148				123	
				126	
				129	
				132	
				149	
Total- 27	Total- 25	Total-21	Total- 20	Total-31	Total- 26

3.4.4 SCHOOL ENVIRONMENT INVENTORY (SEI)

For the present study, School Environment Inventory developed by Dr. Karuna Shankar Misra (2011) was used. School Environment Inventory is an instrument designed to measure the psycho-social climate of schools as perceived by the pupils. It provides a measure of the quality and quantity of the cognitive, emotional and social support that has been available to the students during their school life in terms of teacher-pupil interactions. SEI has items belonging to six dimensions of the school environment.

(a) Description

SEI contains 70 items related to the six dimensions of school environment. Twenty items belong to the Creative Stimulation (A) dimension while each of remaining dimensions has ten items belonging to it. Five responses i.e. Always, Often, Sometimes, Rarely and Never are indicated with a particular teacher-pupil interaction behaviour in which the student puts 'x' mark on any cell indicating the five responses.

(b) Dimensions

- (A) **Creative Stimulation-** It refers to a teacher's activities to provide conditions and opportunities to stimulate creative thinking.
- (B) **Cognitive Encouragement-** It implies a teacher's behaviour to stimulate cognitive development of the student by encouraging his actions or behaviour.
- (C) **Permissiveness-** It indicates the school climate in which students are provided opportunities to express their views freely and act according to their desires with no interruption from teachers.
- (D) **Acceptance-** It implies the measure of a teacher's unconditional love, recognizing that students have the right to express feelings, to uniqueness, and to be autonomous individuals.
- (E) **Rejection-** It refers to a school climate in which teachers do not accord recognition to students' right to deviate, act freely and be autonomous persons.
- (F) **Control-** It indicates autocratic atmosphere of the school in which several restrictions are imposed on students to discipline them.

(c) Reliability and Validity

Reliability

The School Environment Inventory was administered to 113 students studying in intermediate classes of five schools situated in city areas of Agra and Mainpuri. The

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split-half reliabilities for various dimensions of the school environment have been shown in Table 3.4.

The 'School Environment Inventory' was administered to 100 adolescent students studying in senior secondary schools of Haryana state by the investigator. Split-half reliability coefficients were computed for various dimensions of the Inventory and values of 'r' as follows:

Table 3.4
SPLIT-HALF RELIABILITY COEFFICIENTS FOR SIX DIMENSIONS OF
SCHOOL ENVIRONMENT INVENTORY

Scale dimension	Reliability Coefficient	By Investigator
A. Creative Stimulation	.919	.89
B. Cognitive Encouragement	.797	.76
C. Acceptance	.823	.83
D. Permissiveness	.673	.68
E. Rejection	.781	.81
F. Control	.762	.78

Validity

School Environment Inventory was found to possess content validity as measured with the help of views expressed by judges.

(d) Scoring

In the inventory five alternatives were given in the form of cells indicating the intensity of the responses. 4 marks are assigned to 'Always', 3 marks to 'Often', 2 marks to 'Sometimes', 1 mark to 'Rarely', and zero mark to 'Never' response. The particular item belongs to which area was indicated by a letter of the alphabet near the serial no.

3.5 COLLECTION OF DATA

Prior to the administration of the composite booklet containing Self-Disclosure Inventory, Study of Values Test, Family Relationship Inventory and School Environment Inventory to the adolescent students of the senior secondary schools, the investigator took the permission of her supervisor for collecting the data and after that a permission letter was received from the Chairperson, Department of Education, KUK. Then the investigator took the permission of the Principals of the schools and with the

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cooperation of teachers the tools were administered to the students. All the students under study were assured that the information would be kept strictly confidential and it would be used only for the research purpose. While handing over the booklets of the inventories, they were requested to go through the printed instructions and understand them correctly before responding to the items of the tools. The investigator explained the printed instructions to the students and emphasized the paramount need of the genuine data i.e. the need to respond to the items of the research tools with utmost honesty and truthfulness. The data pertaining to gender (male/female), organizational setup (government/private) and location (rural/urban) were obtained from the particulars given by the students on the title pages of the scales used. Sufficient time was given to the respondents to respond.

After the collection of the data, the responses of the subjects were scored in the light of the criteria laid down for each tool used, as described in the description of the tools. Thereafter, the scores of the subjects pertaining to each variable were tabulated with SPSS.

3.6 STATISTICAL TECHNIQUES USED FOR DATA ANALYSIS

In order to analyze the data, the following statistical techniques were adopted in the present study:

- Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis of the scores of the adolescent students were calculated for the variables of self-disclosure, values, family relationship and school environment of adolescent students to ascertain the nature of score distribution.
- Product-Moment coefficient of correlation method was used to find out the relationship between dependent (self-disclosure and values) and independent variables (family relationship and school environment).
- To find out the differences between mean scores of self-disclosure, values, family relationship and school environment with respect to gender, organizational set-up and location t-test was employed.