CHAPTER 3
CHAPTER - 3

PROBLEM AND METHODOLOGY

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3.1 Introduction:

Since very long time, man was continuously trying to get command over environment and to understand and to get knowledge of the events. The processes, he uses for achieving this goal, can be divided in three sections: Experience, logic and research. Research means adventure for the search, development and test. It is an intellectual process and is many years old. Its objectives and forms change continuously. However, it always starts for the search of truth.

Some scientific discoveries have occurred because of sudden happy incidents. Such discovery is accidental which is called “Serendipity” and which is without predecided goal or objective. For example: Invention of fire, invention of penicillin etc but accidental discovery or invention is not a research. Then what is research? According to dictionary meaning research means: “Discovery or search, scientific invention done industriously, perseverantly or accurately and study of finding facts or truth.” Thus, research is creative process which leads to systematic facts clarifying any event.

Research is a systematic, logical and objective process in which systematic information is gathered by proper tool for the test of hypothesis framed according to variables included in problem selected for the study. After proper classification and analysis of these information generalizations or principles are achieved. As a result of which these becomes evolution and development of principles possible.

Research design is a logical and planned tool for giving directive suggestion to research work. Therefore, in psychological research, the importance of research design increases very much. Since psychology is an experimental science there may be any type of research, its results and final conclusion depend upon research design. Objectives, variables, hypotheses, sample selection process, data collection tools, their reliability, validity and selection of statistical techniques etc.
are the basic issues of research. Thus, in this way, research design becomes the lighthouse for the research. In the present chapter, the effort has been made to give detailed explanation regarding research problem, the objectives of research, the hypotheses of research, selection of sample, tools of data collection, research work style and statistical technique used for information analysis.

3.2 Research Problem:
The selection of research problem means to decide objectives of study and from it to decide the title of study. The objectives of research explain matters to be studied, clear the main parts and the sub problems of the study. The title of research problem suggests the content of study and shows presentation regarding main variables included in the study.

Differing parental values and needs are associated with variations in child-rearing styles and the discipline responses of parents to their children (Goodnow and Collins, 1990; Pinderhughes, et al., 2000). One of the overarching goals of effective parenting is to support children’s development—from dependency and external control to internalization, the ability to take initiative and to be socially responsible (Smith, et al., 2005). Within family contexts, children gradually internalize social standards and expectations, a process that facilitates greater self-regulation skills and responsibility for their own behaviors.

"Peer pressure" can be described as the influence exerted by a peer group in encouraging a person to change his or her attitudes, values, or behaviors to conform to the group. A person affected by peer pressure may or may not want to belong to these groups. They may also recognize dissociative groups that they do not wish to belong to, and therefore adopt behaviors in opposition to those of the group (Adams, 1996). In the same vein, according to Harris (1998) peer pressure can cause people to do things...
they would not normally do, e.g., take drugs, smoke, date, marry, have a job, have children and buy expensive items. Research has shown that over the last 50 years peer influence/pressure has emerged as the chief source of values and behavioral influence for adolescents, replacing the influence of adults. Along with this new trend has come a rise in antisocial behavior (Neufeld and Mate, 2005). Although the level of deviance varies between peer groups, the negative actions of one member of a group will increase the probability of other members taking part in similar behaviors. Affiliation with deviant peers predicts delinquent behavior more strongly than community, school, or family characteristics (Gifford-Smith, Dodge, Dishion and McCord, 2005).

Social psychologists have also studied peer pressure, examining how it can influence people to match the opinions of others. In an experimental setting, Omoegun (1995) found that people consistently changed their answers from an obvious correct response to an incorrect response when others gave an incorrect answer. Social psychology experiments have also shown that individuals are more likely to stand their ground about what they know is right and stick to their original answers if just one other person joins or agrees with them. Such studies demonstrate that people can easily resist peer pressure together, and give new meaning to the conventional wisdom that the friends a person chooses really do matter. The best way for teens, or people of all ages, to make peer pressure a positive rather than a negative force is to select friends whose values, goals, ambitions, habits, and behaviors they admire and believe are constructive.

The extent to which a person is influenced by peer pressure depends on many factors (Onwuamanam, 1998). People are less likely to be heavily influenced by their friends and more likely to make their own decisions if they have high self-esteem, individual goals, a positive outlook on the future, good social skills, the ability to interact with people from different backgrounds, and strong connections to family and community.
Further, Adams (1996) posited that people are more likely to be heavily influenced by their peers and less likely to make decisions for themselves if they have low self-esteem, are experiencing problems in their family such as divorce, alcoholism, drug addiction, or unemployment, come from families where there is little support or communication, strongly identify with only one ethnic group, feel distant from school and community activities, and are afraid of not belonging or fitting in.

Given the background presented above, it seems that the socialization experience of adolescents is focused on peer interaction. Adolescents are more likely to discuss their problems with their peers than with their parents and are therefore more susceptible to their peers' perceptions of right and wrong. Evidence abounds to show that peer groups influence adolescents' value orientation and behavior. Adolescents have also been found to be influenced by their peers in other aspects of life, such as sexuality and occupational choices. Some of the social vices that are found in Nigerian senior secondary schools and in society in general are the result of peer group influence on adolescents. Deviant behaviors such as cheating on exams, rape, theft, truancy, drug addiction, smoking, cybercrime, school tardiness and others are due to parents' lack of watchfulness over the types of friends kept by their adolescent children.

Such interactions usually take place under their own discretion and often they are the ones who provide their children with such indispensable opportunities to socialize with people. This way they enable them to develop their social cognitive and relationship formation skills (Ladd, Profilet and Hart, 1992). The nature of parental involvement differs across different stages of development, e.g. in early developmental stages the parents intervene more often and strictly ensure that they take charge of the supervision of their children's social interactions. However once the child enters the adolescent stages, they tend to become more indulgent and non-judgmental about their interactions and activities (Rubin and Sloman, 1984) because at these age adolescents more affected by their peer groups. More than this some other factor like gender, school type, educational stream, sibling, birth rank, father's
occupation, mother’s occupation of adolescents etc. can also affect deeply to children’s susceptibility to peer group. Thus, in modern time, it is very essential to know about certain crucial matters of students like home environment, peer pressure, behavior problems and how all these factors are related to each other. Moreover, it is also important to understand the factors which affect all these important issues of students. By considering this whole matter, the present research was initiated. The problem of this research is entitled as mentioned below:

“A STUDY OF IMPACT OF HOME ENVIRONMENT ON PEER PRESSURE AND BEHAVIOR PROBLEMS AMONG ADOLESCENTS”

3.3 Research Objectives:
The main purpose of the present study is to investigate the impact of home environment and its dimension (control, protectiveness, punishment, conformity, social isolation, reward, deprivation of privileges, nurturance, rejection and permissiveness) on peer pressure and its factor (health risk, relationship peer pressure, risk taking, fear of rejection and entertainment) and behavior problems and its factor (schizoid/anxious, depressed, uncommunicative, obsessive-compulsive, somatic complaint, social withdrawal, hyperactive, aggressive, delinquent and other problems). Some special objectives are needed to frame to study the problem. The main objectives are furnished as under.

1. To investigate the relative contribution of Home Environment’s dimensions of control, protectiveness, punishment, conformity, social isolation, reward, deprivation of privileges, nurturance, rejection and permissiveness in the prediction of peer pressure among adolescents.

2. To investigate the relative contribution of Environment’s dimensions of control, protectiveness, punishment, conformity, social isolation, reward,
Research Hypotheses:

A hypothesis is a tentative statement about the relationship between two or more variables. A hypothesis is a specific, testable prediction about what you expect to happen in your study.

Remember, a hypothesis does not have to be correct. While the hypothesis predicts what the researchers expect to see, the goal of research is to determine whether this guess is right or wrong. When conducting an experiment, researchers might explore a number of different factors to determine which ones might contribute to the ultimate outcome.

Keeping in view the objectives of the present study the researcher had framed several hypotheses which were tested by using various statistical techniques.
The home environment's ten dimensions (controls, protectiveness, punishment, conformity, social isolation, reward, deprivation of privileges, nurturance, rejection and permissiveness) do not significantly contribute to the prediction of peer pressure among adolescents.

There is no significant correlation among health risk, relationship peer pressure, risk taking, fear of rejection, entertainment, schizoid, depressed, uncommunicative, obsessive-compulsive, somatic complaint, social withdrawal, hyperactive, aggressive, delinquent and other problems.

There is not any significant difference between mean scores on peer pressure of adolescent boys and girls.

There is not any significant difference between mean scores on peer pressure of adolescent government and private school.

There is not any significant mean difference on peer pressure of adolescent having science, commerce and arts educational stream.

There is not any significant interaction effect of gender and types of school on peer pressure.

There is not any significant interaction effect of gender and educational stream on peer pressure.

There is not any significant interaction effect of types of school and educational stream on peer pressure.
There is not any significant interaction effect of gender, types of school and educational stream on peer pressure.

There is not any significant difference between mean scores on behavior problems of adolescent boys and girls.

There is not any significant difference between mean scores on behavior problems of adolescent government and private school.

There is not any significant mean difference on behavior problems of adolescent having science, commerce and arts educational stream.

There is not any significant interaction effect of gender and types of school on behavior problems.

There is not any significant interaction effect of gender and educational stream on behavior problems.

There is not any significant interaction effect of types of school and educational stream on behavior problems.

There is not any significant interaction effect of gender, types of school and educational stream on behavior problems.

There is not any significant mean difference on peer pressure of adolescents having less, moderate and more siblings.

There is not any significant mean difference on behavior problems of adolescents having less, moderate and more siblings.

There is not any significant mean difference on peer pressure of adolescents having different birth rank (first rank, middle rank and last rank).
There is not any significant mean difference on behavior problems of adolescents having different birth rank (first rank, middle rank and last rank).

There is not any significant mean difference on peer pressure of adolescents to government job, private job, business and other work father’s occupation.

There is not any significant mean difference on behavior problems of adolescents to government job, private job, business and other work father’s occupation.

There is no significant difference among mean scores of behavior problems on adolescents belonging to housewife and working mother’s occupation.

3.5 Research Variables:

A variable is such type of characteristic that can be given a value. Any characteristic of person, group or environment which can be changed is known as a variable.

For the present study, the researcher has taken into account four types of variables, such as independent, dependent, predictor and control variables.

3.5.1 Independent Variables:

Considering the present research following variables are selected for the study:

- Independent Variables:
  - Variables
  - Levels
- Home Environment
  - Control
  - Protective
  - Punishment
  - Conformity
  - Social isolation
  - Reward
  - Deprivation of privileges
  - Nurturance
  - Rejection
  - Permissiveness

- Gender -
  - Boys
  - Girls

- Type of school -
  - Government
  - Private

- Educational stream -
  - Science
  - Commerce
  - Arts

- Sibling of adolescent -
  - Low
  - Medium
  - High

- Birth rank of adolescent -
  - First child
  - Middle child
  - Last child

- Father's occupation -
  - Government job
  - Private job
  - Business / other work
Mother’s occupation
- House wife
- Working

3.5.2 Dependent Variables:

1. PEER PRESSURE
   A. Health risk behavior
   B. Relationship peer pressure
   C. Risk taking
   D. Fear of rejection
   E. Entertainment peer pressure

2. CHILD BEHAVIOR CHECKLIST
   A. Schizoid
   B. Depression
   C. Uncommunicative
   D. Obsession-Compulsion
   E. Somatic Complaint
   F. Social Withdrawal
   G. Hyperactive
   H. Aggression
   I. Delinquency
   J. other problems

3.5.3 Predictor Variables:

In the present study following ten variables were selected as predictor variables:

A. Control
B. Protective
Control Variables:
In the present study the following factors were excluded and treated as controlled variables:

- Subjects for the present study were selected only from Rajkot city.
- Only educated adolescents were selected.
- The students who were selected for this study were having Gujarati mother tongue.
- The students who have both the parents were only selected for this study.

Research Design:
Research design is the first step of research. It is regarded as fundamental matter for research which proves to be a brick of building for research. Research design means planning of full process from beginning to end of research oriented study. It is such type of plan which clears all type of information and sources related with research problem. It is one type of strategy which guides the way for collecting information and analyzing it. In other words, research design helps the researcher to reach the realistic target.
A research design is the conceptual structure within which the research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data.

The main objective of the present investigation was to study the impact of home environment and its ten dimensions (controls, protectiveness, punishment, conformity, social isolation, reward, deprivation of privileges, nurturance, rejection and permissiveness) on peer pressure and its five factors (health risk, relationship peer pressure, risk taking, fear of rejection and entertainment) and behavior problems and its ten factors (schizoid, depressed, uncommunicative, obsessive-compulsive, somatic complaint, social withdrawal, hyperactive, aggressive, delinquent and other problems).

Moreover, to find out the impact of other independent variables are Gender, type of school, educational stream, sibling, birth rank, father’s occupation and mother’s occupation on peer pressure and behavior problems of adolescents.

Mainly the purpose was to study peer pressure and behavior problems from three different viewpoints:
1. To identify some predictor variables
2. To find out inter correlations
3. To establish cause effect relationship

Looking to the objectives of the study the research was planned to be conducted in three sections and accordingly the research design for these three sections.

Section – 1: In the first section of research, one of the objectives of the present was to study the prediction power of some variables. When the study is on a large scale, more variables are included in the study as the investigator is generally interested to...
The present researcher also planned to search out factors that could predict the peer pressure and behavior problems of adolescents. For this purpose the first section of research was designed. Under the plan of this section ten variables were selected as predictor variables. They are control, protectiveness, punishment, conformity, social isolation, reward, deprivation of privileges, nurturance, rejection and permissiveness. Moreover, it was also planned to find out the relative contribution of these 10 variables in the variability of peer pressure and behavior problems among adolescents. Separate analysis was carried out sample of peer pressure and behavior problems. The statistical technique of Multiple Regression Analysis was decided to use for searching the predictors of peer pressure and behavior problems of adolescents. Peer pressure and behavior problems were the only criterion variable selected for the study.

Table 3.1 summarises the name, type and levels of all the variables selected for the study.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Variable</th>
<th>Type of Variable</th>
<th>Factors of Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Home environment</td>
<td>Predictor</td>
<td>control, protectiveness, punishment, conformity, social isolation, reward, deprivation of privileges, nurturance, rejection and permissiveness</td>
</tr>
<tr>
<td>2</td>
<td>Peer pressure</td>
<td>Dependent</td>
<td>health risk, relationship peer pressure, risk taking, fear of rejection and entertainment</td>
</tr>
<tr>
<td>3</td>
<td>Behavior problems</td>
<td>Dependent</td>
<td>schizoid, depressed, uncommunicative, obsessive-compulsive, somatic complaint, social withdrawal, hyperactive, aggressive,</td>
</tr>
</tbody>
</table>
In the second section of research, it was decided to check the correlations among health risk, relationship peer pressure, risk taking, fear of rejection, entertainment, schizoid, depressed, uncommunicative, obsessive-compulsive, somatic complaint, social withdrawal, hyperactive, aggressive, delinquent and other problems. It was planned to use Karl Pearson Product Moment Correlation test for this purpose.

In the third section of research, it was designed to measure the impact of independent variables like gender, type of school, educational stream, sibling, birth rank, father’s occupation and mother’s occupation on dependent variables peer pressure and behavior problems. To study the impact of gender, type of school and educational stream 2x2x3 factorial design with equal number of subjects in each cell was decided. The levels for the gender were boys and girls, for the type of school were government and private and for the educational stream were science, commerce and arts. For examining hypotheses framed with reference to factorial design, three way ANOVA was planned. The impact of sibling, birth rank and father’s occupation of adolescence on peer pressure and behavior problems were examined by using the design with one way ANOVA. Tukey Test was decided to be used as Post ANOVA statistical technique. The three levels of sibling (less, medium and more) was identified by using Q technique, The four levels of birth rank (first rank, middle rank and last rank) and The four levels father’s occupation (government job, private job, business and other work) were considered to classify adolescents and compare them on above mentioned dependent variables. Moreover, to find out the impact of other independent variables like mother’s occupation (housewife and...
Working on peer pressure and behavior problems, the design using the test was planned. Table 3.2 summarises the name, type and levels of all the variables selected for the study.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of Variable</th>
<th>Type of Variable</th>
<th>Levels of Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Peer pressure</td>
<td>Dependent</td>
<td>health risk, relationship peer pressure, risk taking, fear of rejection and entertainment</td>
</tr>
<tr>
<td>2</td>
<td>Behavior problems</td>
<td>Dependent</td>
<td>schizoid, depressed, uncommunicative, obsessive-compulsive, somatic complaint, social withdrawal, hyperactive, aggressive, delinquent and other problems</td>
</tr>
<tr>
<td>3</td>
<td>Gender</td>
<td>Independent</td>
<td>boy and girl</td>
</tr>
<tr>
<td>4</td>
<td>Type of school</td>
<td>Independent</td>
<td>Government and private</td>
</tr>
<tr>
<td>5</td>
<td>Educational stream</td>
<td>Independent</td>
<td>science, commerce and arts</td>
</tr>
<tr>
<td>6</td>
<td>Sibling</td>
<td>Independent</td>
<td>Low, Medium and High</td>
</tr>
<tr>
<td>7</td>
<td>Birth rank</td>
<td>Independent</td>
<td>First child, Middle child and last child</td>
</tr>
<tr>
<td>8</td>
<td>Father’s occupation</td>
<td>Independent</td>
<td>Government job, private job, business and other work</td>
</tr>
</tbody>
</table>
Selection of Sample:
The aim of sampling method is to take some representative sample of the population to know the characteristics of the population. Generally, in behavioral sciences, to study the entire population is somewhat difficult. For the present study, sample was drawn from the Rajkot city. The stratified sampling method is used. The principle of randomization provides protection against the effects of extraneous factors. The variations caused by extraneous factors can all be combined under the general heading of "chance". For a better estimation of the experiment error, the randomization technique is applied.

Main purpose of this study was to investigate the impact of home environment and its dimensions (control, protectiveness, punishment, conformity, social isolation, reward, deprivation of privileges, nurturance, rejection, and permissiveness), gender, type of school and educational stream on peer pressure and behavior problems of adolescents. Considering this purpose, first effort was made to select adolescents from different schools and colleges of Rajkot city through stratified random sampling method. Therefore, questionnaires were administered to only those subjects who agreed for giving the information. Thus, by making a change in the original design, selection of subjects was made through purposive sampling method.

By using the above-mentioned method, a total of 240 boys and 240 girls were selected in the sample for the present study. Again in each group of boys and girls, 120 adolescents had government school and 120 adolescents had private school. Again in each group of 120 adolescents, 40 were selected from science and 40 were selected from commerce and 40 were selected from arts. Thus, the whole sample comprised...
of 480 adolescents with equal number of boys and girls. Characteristics of the sample presented in Table 3.3.

Research Tools:

While studying the research problem, researcher collects information with the help of certain tools and instruments. In psychological research, the matter of choosing tools and instruments mostly depends on the type of research problem and the method of study. From different types of tools, researcher decides the instrument suitable for his study. If readymade instrument is not available, the researcher makes standard tool. To collect necessary information for the present research, mainly instruments described below were used.

3.8.1 Personal Data Sheet:

Certain personal information about respondents included in the sample of research is useful and important for research. Here also, for collecting such important information’s, personal data sheet was prepared. With the help of this personal data sheet, the information about gender, type of school, educational stream, sibling, birth rank, mother’s occupation and father’s occupation of adolescence etc. were collected.

3.8.2 Home Environment Inventory:

Translated Gujarati version of Home Environment Inventory constructed by Dr. Karuna Shankar Mishra (1989) was used to collect information about psychosocial climate of home as perceived by children. Gujarati version of this questionnaire was prepared with the help of experts having good command over Hindi and Gujarati. It provides a measure of the quality and quantity of the cognitive, emotional and social support that has been available to the child within the home. HEI has 100 items belonging to ten dimensions of home environment.
### Table 3.4: Item number for each aspect by Home Environment

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Inventory Dimensions</th>
<th>Items Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Control</td>
<td>1, 11, 21, 31, 41, 51, 61, 71, 81, 91</td>
</tr>
<tr>
<td>B</td>
<td>Protective</td>
<td>2, 12, 22, 32, 42, 52, 62, 72, 82, 92</td>
</tr>
<tr>
<td>C</td>
<td>Punishment</td>
<td>3, 13, 23, 33, 43, 53, 63, 73, 83, 93</td>
</tr>
<tr>
<td>D</td>
<td>Conformity</td>
<td>4, 14, 24, 34, 44, 54, 64, 74, 84, 94</td>
</tr>
<tr>
<td>E</td>
<td>Social isolation</td>
<td>5, 15, 25, 35, 45, 55, 65, 75, 85, 95</td>
</tr>
<tr>
<td>F</td>
<td>Reward</td>
<td>6, 16, 26, 36, 46, 56, 66, 76, 86, 96</td>
</tr>
<tr>
<td>G</td>
<td>Deprivation of privileges</td>
<td>7, 17, 27, 37, 47, 57, 67, 77, 87, 97</td>
</tr>
<tr>
<td>H</td>
<td>Nurturance</td>
<td>8, 18, 28, 38, 48, 58, 68, 78, 88, 98</td>
</tr>
<tr>
<td>I</td>
<td>Rejection</td>
<td>9, 19, 29, 39, 49, 59, 69, 79, 89, 99</td>
</tr>
<tr>
<td>J</td>
<td>Permissiveness</td>
<td>10, 20, 30, 40, 50, 60, 70, 80, 90, 100</td>
</tr>
</tbody>
</table>

Each dimension has ten items belonging to it. The instruments requires pupils to tell the frequency with which a particular parent-child interaction behavior has been observed by them in their homes i.e. he/she is requested to tell whether a particular parental behavior (as mentioned in an item) occurs—"mostly", "often", "sometimes", "least", and "never,". There are five cells belong to five responses. Assign 4 marks to "mostly", 3 marks to "often", 2 marks to "sometimes", 1 mark to "least" and 0 mark to "never" responses. Count the marks assigned to A, B, C, D, E, F, G, H, I and J dimension. There is no time limit to complete this tool, but on an average participant took 30 minutes to complete the tool.

**Reliability:**

The "Home Environment Inventory" was administered to 113 students (54 boys and 59 girls) studying in intermediate classes of five schools. Split half reliabilities were worked out separately for all the dimensions of home environment.
The split-half reliabilities (corrected for length) for various dimensions of home environment are as follows:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Inventory Dimension</th>
<th>Reliability coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Control</td>
<td>0.879</td>
</tr>
<tr>
<td>B</td>
<td>Protectiveness</td>
<td>0.748</td>
</tr>
<tr>
<td>C</td>
<td>Punishment</td>
<td>0.947</td>
</tr>
<tr>
<td>D</td>
<td>Conformity</td>
<td>0.866</td>
</tr>
<tr>
<td>E</td>
<td>Social isolation</td>
<td>0.870</td>
</tr>
<tr>
<td>F</td>
<td>Reward</td>
<td>0.875</td>
</tr>
<tr>
<td>G</td>
<td>Deprivation of privileges</td>
<td>0.855</td>
</tr>
<tr>
<td>H</td>
<td>Nurturance</td>
<td>0.901</td>
</tr>
<tr>
<td>I</td>
<td>Rejection</td>
<td>0.841</td>
</tr>
<tr>
<td>J</td>
<td>Permissiveness</td>
<td>0.726</td>
</tr>
</tbody>
</table>

Table 3.5

Intercorrelation among the ten scale scores on HEI are shown in table 3.6.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Inventory Scale Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>0.37</td>
</tr>
<tr>
<td>C</td>
<td>0.37</td>
</tr>
<tr>
<td>D</td>
<td>0.37</td>
</tr>
<tr>
<td>E</td>
<td>0.37</td>
</tr>
<tr>
<td>F</td>
<td>0.37</td>
</tr>
<tr>
<td>G</td>
<td>0.37</td>
</tr>
<tr>
<td>H</td>
<td>0.37</td>
</tr>
<tr>
<td>I</td>
<td>0.37</td>
</tr>
<tr>
<td>J</td>
<td>0.37</td>
</tr>
</tbody>
</table>

Intercorrelation among HEI scales

Table 3.6

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Inventory Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>A</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>1</td>
</tr>
<tr>
<td>G</td>
<td>1</td>
</tr>
<tr>
<td>H</td>
<td>1</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
</tr>
<tr>
<td>J</td>
<td>1</td>
</tr>
</tbody>
</table>

113
Observation of table 3.6 shows that eight coefficients of correlation are moderate/high. However, the scale scores may be treated independently in analyses. No effort should be made to get a composite score.

The reliability of Gujarati version was checked through the administration of both Hindi and Gujarati versions to 50 girls and boys having good command over both Hindi and Gujarati languages. The correlation between both the scores was calculated and the correlation coefficient of which was satisfactory ($r=0.95$).

**Validity:**
Home Environment Inventory has been found to possess content validity as measured with the help of views expressed by judges. Criterion-related validity could not be established because of the lack of appropriate external criteria.

### Table 3.7: Items number for each aspect by Peer Pressure

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Scale Factor</th>
<th>Items Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Health risk peer pressure</td>
<td>1, 2, 3, 4, 5, 6</td>
</tr>
</tbody>
</table>
The scale consists of 22 statements with a five-point Likert scale with options "strongly disagree", "disagree", "neutral", "agree", and "strongly agree". There are five cells for each response. Assign 1 mark to "strongly disagree", 2 marks to "disagree", 3 marks to "neutral", 4 marks to "agree", and 5 marks to "strongly agree" responses. The minimum and maximum score ranges between 22 and 110. High score indicates higher peer pressure and vice versa.

**Reliability:**
The internal consistency of the scale was established by using Cronbach's alpha coefficient and a reliability of 0.80 was established. Nunnally (1976) suggested that an alpha of 0.70 should be the minimum acceptable standard for demonstrating internal consistency.

The reliability of the Gujarati version was checked through the administration of both English and Gujarati versions of the scale to 50 girls and boys who had a good command over both English and Gujarati languages. The correlation between both versions was calculated and the correlation coefficient was satisfactory (r=0.90).

**Validity:**
The Andrew and Hatch (1999) conducted a pilot study of peer pressure scale with 22 items, found a high significant relation with variables like HIV risk perception, alcohol and drug attitude scale. It was found that peer pressure was significantly correlated with HIV risk perception (r=0.20**) and attitude towards alcohol and drug abuse (r=0.22**). Both studies were conducted on a sample of around 200 each and the author reported coefficient of alpha for the scale was 0.80. Alpha coefficient tells us how much variance a group of items had in common.

<p>| | | |</p>
<table>
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</tr>
</tbody>
</table>

115
Child Behavior Checklist (CBCL) constructed by Thomas, M., Achenbach (1981) was used to collect information about behaviour problems in children. In original scale, there were 120 items but as 10 items were not relevant in the context of India. Thus, Neelam Sude (1997) discarded 10 items from the original scale. Thus, final scale consisted of 110 statements with three point scale having responses ranging from 0 = Not True, 1 = somewhat or Sometimes True, 2 = Very True or Often True. All the 110 items categorized in 10 dimensions (Table 3.8). Similar questions are grouped into a number of syndromes, e.g., aggressive behavior, and their scores are summed to produce a score for that syndrome. Some syndromes are further summed to provide scores for Internalizing and Externalizing problem scales. A total score from all questions is also derived. For each syndrome, problem scale and the total score, tables are given that determine whether the score represents normal, borderline, or clinical behavior. These categorizations are based on quintiles from a normative sample.

Gujarati version of Child Behavior Checklist (CBCL) constructed by Dodiya (1999) was used to collect information on this matter. In this scale, there are 108 statements.

- **Reliability:** Test-retest has been demonstrated by the original authors (r=0.95) and Inter Interviewer reliability (r=0.95). The reliability of Gujarati version was checked. The test-retest was satisfactory (r=0.92) and again both English and Gujarati version of the scale to 100 students having good command over both English and Gujarati languages. The correlation between both the scores was calculated and the correlation coefficient of which...
The author of the scale reported satisfactory levels of reliability and validity. For Table 3.8, the items are presented as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>CBCL Dimensions</th>
<th>Items Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Schizoid / Anxious</td>
<td>1, 28, 29, 38, 45, 48, 64, 69</td>
</tr>
<tr>
<td>2</td>
<td>Depressed</td>
<td>13, 17, 30, 31, 32, 33, 34, 40, 43, 48, 50, 65, 83, 84, 86, 97, 106</td>
</tr>
<tr>
<td>3</td>
<td>Uncommunicative</td>
<td>12, 59, 63, 65, 69, 73, 81, 97</td>
</tr>
<tr>
<td>4</td>
<td>Obsessive-Compulsive</td>
<td>8, 12, 16, 45, 48, 52, 60, 70, 73, 78, 79, 80, 87, 88, 94</td>
</tr>
<tr>
<td>5</td>
<td>Somatic Complain</td>
<td>47, 49, 52, 54, 75</td>
</tr>
<tr>
<td>6</td>
<td>Social Withdrawal</td>
<td>24, 33, 37, 40, 46, 58, 59, 105</td>
</tr>
<tr>
<td>7</td>
<td>Hyperactive</td>
<td>1, 7, 9, 12, 16, 19, 37, 57, 58, 59, 72</td>
</tr>
<tr>
<td>8</td>
<td>Aggressive</td>
<td>3, 6, 15, 18, 21, 22, 24, 26, 36, 41, 46, 55, 62, 68, 81, 82, 83, 85, 87, 89, 90, 91, 103</td>
</tr>
<tr>
<td>9</td>
<td>Delinquent</td>
<td>19, 20, 22, 41, 61, 66, 76, 77, 85, 95, 100</td>
</tr>
<tr>
<td>10</td>
<td>Other problems</td>
<td>54, 56, 67, 71, 74, 92, 93, 99, 101, 102, 103, 104, 107, 108</td>
</tr>
</tbody>
</table>

Procedure of Data Collection:

The task of data collection begins after a research problem has been defined and the research design checked out. In the study, like the present one, a researcher can obtain primary data through a questionnaire. This method of data collection is quite popular, particularly in case of big inquiries. In this method, a...
The questionnaire is sent to the persons concerned with a request to answer the questions and return the questionnaire. Considering the purpose of research, adolescence was selected from different institutes like government and private school, college in Rajkot city. For collecting information from permissions were obtained from the Head of the institution. After meeting them on their comfortable time questionnaires were administered for collecting the required information.

After collecting information, scoring was done for each questionnaire as per manual. Statistical calculations were performed for examining the hypotheses. Looking at the objectives of the study conclusions was derived and all the results were discussed in detail.

3.10 Statistical Analysis of Data:

To obtain general findings and to examine the framed hypotheses several statistical techniques were employed. As the present study were different statistical techniques used:

1. Multiple Regression Analysis
   As one of the objectives of the present study was to examine the predictive power of several variables regarding peer pressure and behavior problems statistical technique Multiple Regression Analysis was used.

2. Pearson Product Moment Correlation technique
   To find out intercorrelation among health risk, relationship peer pressure, risk taking, fear of rejection, entertainment, schizoid, depressed, uncommunicative, obsessive-compulsive, somatic complaint, social withdrawal, hyperactive, aggressive, delinquent and other problems Karl Pearson Product Moment Correlation technique was used.
To study the impact of gender, type of school and educational stream on peer pressure and behavior problems of adolescents, a 2x2x3 factorial design was planned and accordingly, a three-way analysis of variance (ANOVA) was used to test the related hypotheses. Tukey Test was used as a post-ANOVA technique to find out the significance of mean differences.

The hypotheses regarding the impact of sibling, birth rank and father’s occupation on peer pressure and behavior problems were examined by using one-way ANOVA. Tukey Test was used as a post-ANOVA technique to find out the significance of mean differences.

Moreover, to test the hypotheses about the impact of other independent variables like mother’s occupation on peer pressure and behavior problems, a t-test was used.

Briefly speaking, in the present study, for the first section of research, multiple regression analysis technique was applied. For the second section of research, correlation method was used, and for the third section of research, three-way and one-way ANOVA, t-test and Tukey test were used.