CHAPTER 3 - METHOD

Method

Overview

This chapter describes the aim and objectives of the study, the sample selected and the design of research. The tools and techniques used and the statistical techniques adopted in the analysis of data. Finally this chapter discusses the Ethical issues of the research.

3.1 Aim

To identify the psychosocial developmental issues – identity, autonomy, intimacy, sexuality and achievement, among rural adolescents across gender and socioeconomic status.
3.2 Objectives

- To examine the level of identity, Autonomy, Intimacy and Achievement motivation across gender and SES
  - To study identity as a developmental issue among rural adolescent boys and girls from Low, Middle and High SES groups
  - To study Autonomy as a developmental issue among rural adolescent boys and girls from Low, Middle and High SES groups
  - To study achievement as a developmental issue among rural adolescent boys and girls from Low, Middle and High SES groups
  - To study intimacy as a developmental issue among rural adolescent boys and girls from Low, Middle and High SES groups
  - To study sexuality as a developmental issue among rural adolescent boys and girls from Low, Middle and High SES groups

3.3 Hypotheses

- There is no significant difference among rural adolescent boys and girls belonging to low, middle and high SES groups on personal identity
- There is no significant difference among rural adolescent boys and girls belonging to low, middle and high SES groups on social identity
- There is no significant difference among rural adolescent boys and girls belonging to low, middle and high SES groups on relational identity
- There is no significant difference among rural adolescent boys and girls belonging to low, middle and high SES groups on collective identity
- There is no significant difference among rural adolescent boys and girls belonging to low, middle and high SES groups on attitudinal autonomy
- There is no significant difference among rural adolescent boys and girls belonging to low, middle and high SES groups on functional autonomy
- There is no significant difference among rural adolescent boys and girls belonging to low, middle and high SES groups on emotional autonomy
- There is no significant difference among rural adolescent boys and girls belonging to low, middle and high SES groups on achievement
- There is no significant difference among rural adolescent boys and girls belonging to low, middle and high SES groups on intimacy
- There is no significant difference among rural adolescent boys and girls belonging to low, middle and high SES groups on sexuality

3.4 Research Design

The present study utilizes a mixed-methods approach specifically it follows Sequential Explanatory Design to examine psychosocial issues among rural adolescents.
### Table: 3.1

**Visual Model for Mixed Methods Procedures (Sequential Explanatory Mixed Methods Design)**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Procedure</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>quantitative data collection</td>
<td>questionnaire method (N=180)</td>
<td>numerical data</td>
</tr>
<tr>
<td>quantitative data analysis</td>
<td>data scoring, tabulating, percentage distribution and</td>
<td>levels of psychosocial issues</td>
</tr>
<tr>
<td>(section one)</td>
<td>analysis</td>
<td></td>
</tr>
<tr>
<td>quantitative data analysis</td>
<td>normality test</td>
<td></td>
</tr>
<tr>
<td>(section two)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>participants selection for in</td>
<td>purposive selection of participants for in-depth</td>
<td></td>
</tr>
<tr>
<td>depth interview</td>
<td>interview based on the norms of each questionnaire</td>
<td></td>
</tr>
<tr>
<td>qualitative data analysis</td>
<td>individual in depth unstructured interview</td>
<td></td>
</tr>
<tr>
<td>interpretation of entire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>analysis</td>
<td>explanation of the obtained results in quantitative as</td>
<td></td>
</tr>
<tr>
<td></td>
<td>well as qualitative data</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Ivankova and Stick, (2007).

### 3.5 Variables

- **Independent variables**
  - Socioeconomic status
  - Gender

- **Dependent variables**
  - Identity
  - Autonomy
  - Achievement
  - Intimacy
  - Sexuality
3.6 Sampling Technique

List of English medium schools in Belthangady Taluk was collected from the BEO. The schools following the state syllabus were selected from the list. From the selected schools a Stratified random sampling was employed based on gender and SES. From each strata, a purposive method of sampling was adopted to select 180 adolescents.

3.7 Inclusion Criteria

- Adolescents studying in English medium state syllabus schools were included in the study
- Adolescents belonging to the age group of 14 -18 years i.e., mid adolescents as classified by American Academy of Child and Adolescent’s Facts for Families (2008). were included in the study

3.8 Exclusion Criteria

- Adolescents from urban background studying in rural schools were excluded

3.9 Pilot Study

The aim of pilot study:

- was to test the feasibility of the questionnaires
- To determine the approximate time needed to administer the questionnaires
- To understand the cultural relevancy of the tools
A sample of 30 adolescent girls from low, middle & high socio-economic status backgrounds from three different schools of Belthangady Taluk was selected for the pilot study. The heads of schools were met, purpose of the study was explained to them and permission was obtained to collect data from their school. The class teachers were met and their permission was obtained to select a few students from their class for the research.

The purpose of the study was explained to the participants and their written consent was obtained and confidentiality of the obtained information was assured. After that the following questionnaires were distributed individually with a time gap of 10 minutes between each questionnaire. Standard instructions were given to all the participants individually.

- Identity Questionnaire
- Adolescent Intimacy Scale
- Sexuality Awareness Scale
- Deo-Mohan Achievement Motivation Scale
- Adolescent Autonomy Scale

While administering the questionnaire, the Researcher was sitting beside the participant to clarify their doubts and to explain the difficult words while answering the questionnaire.

3.10 Observations Made During the Pilot Study:

1. Questionnaires selected for the study were found to be relevant
2. It was observed that a lot of students have high need for autonomy and intimacy, so it was decided to conduct unstructured interview for adolescents who have very high and very low needs on the psychosocial issues
3. Individual administration of the questionnaires took excessively long time

3.11 Changes Made after Pilot Study:

1. Few items in socio-demographic data sheet were modified according to the need of the study.
2. Few items in sexuality awareness scale were modified
3. Since individual administration of the questionnaires took excessively long time it was decided to administer the different scales in groups of five

### 3.12 Details of Tools used

**Table 3.2**

**Details of Questionnaires**

<table>
<thead>
<tr>
<th>Tools</th>
<th>Developers</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Identity Questionnaire:</td>
<td>Cheek, Smith, and Tropp</td>
<td>2002</td>
</tr>
<tr>
<td>The Intimate Attitude Scale–Revised (IAS-R):</td>
<td>Amidon, Treadwell and Kumar</td>
<td>1983</td>
</tr>
<tr>
<td>Deo-Mohan achievement motivation scale</td>
<td>Deo and Mohan</td>
<td>1985</td>
</tr>
<tr>
<td>Adolescent Autonomy Scale:</td>
<td>Noom et al.,</td>
<td>1999</td>
</tr>
<tr>
<td>Sexuality awareness scale</td>
<td>Researcher</td>
<td>2010</td>
</tr>
</tbody>
</table>

**Adolescent Identity Questionnaire (AIQ):** Cheek et al., (2002) developed AAQ IV which contains 45 items. The questionnaire measures four aspects of identity they are:

**Collective identity (CI):** Represents the importance that is placed on social categories to which an individual belongs. The following questions measure this 4, 7, 10, 13, 24, 29, 38, 42.

**Personal identity (PI):** Describes the importance that is placed on one's private conception of self and subjective feelings of continuity, uniqueness, traits, values and abilities. The question which measures PI are 2, 5, 8, 11, 14, 18, 21, 25, 27, 32.

**Social Identity (SI):** Describes adolescents social roles and reputations and its importance in defining self. The questions which measures SIO are 3, 6, 9, 12, 15, 17, 20.

**Relational identity (RI):** Represents the importance that is placed on other people who are in direct personal contact. 22, 26, 28, 31, 34, 35, 37, 39, 41, 43 these are the question numbers which measure RI.
Overall the questionnaire measures Identity that defines who or what a particular person is and what constitutes the person’s identity. The questionnaire is a likert’s scale and each answer can be scored from 1 to 5, with each rating indicating 1= they are of no importance to me; 2= They are of little importance to me; 3= they are of some importance to me; 4= they are of great importance to me; 5= they are of utmost importance to me.

**Scoring:** Score for each scale is the total of the scores for all the items listed under that scale.

<table>
<thead>
<tr>
<th>Areas</th>
<th>High scores</th>
<th>Average score</th>
<th>Low scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIO</td>
<td>Above and 46</td>
<td>45-37</td>
<td>36 and Below</td>
</tr>
<tr>
<td>RIO</td>
<td>Above and 45</td>
<td>36-44</td>
<td>35 and Below</td>
</tr>
<tr>
<td>SIO</td>
<td>Above and 28</td>
<td>21-27</td>
<td>20 and Below</td>
</tr>
<tr>
<td>CIO</td>
<td>Above and 29</td>
<td>20-28</td>
<td>19 and Below</td>
</tr>
</tbody>
</table>

A high score indicates high value placed on that aspect of identity when constructing self-definition.

**Reliability:** the inner reliability (Cronbach’s alpha) of the sub-scales is 0.84 (Personal Identity), 0.86 (Social Identity), 0.68 (Collective Identity), and 0.74 (Relational Identity)

**Validity:** The English version of the scale shows apparent validity.

**The Intimate Attitude Scale–Revised (IAS-R):** developed by Amidon, Treadwell and Kumar, (1983): This form is the revised form of intimate attitude scale that was originally created by Amidon in 1978. It measures feelings and attitudes that people have toward others and relationships with others. Specifically the items are concerned with attitudes of closeness, level of intimaey, and trust.
The IAS–R consists of 50 items in which 26 items are negatively worded, to prevent mental set and increase the scale’s accuracy, rest of the 24 items are positively worded. All the items of the scale are to be rated on a five-point scale (strongly disagree, mildly disagree, agree/disagree equally, mildly agree and strongly agree).

**Scoring:** for all the statements which are positively stated following points are given 1, 2, 3, 4, 5

For items which are negatively stated reverse scoring of 5, 4, 3, 2, 1 are given. Each of the scaled score is the sum of the answers given to those items.

Table 3.4

**Norms for Intimacy**

<table>
<thead>
<tr>
<th>Scores</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 150</td>
<td>Significantly below average</td>
</tr>
<tr>
<td>151-161</td>
<td>Somewhat below average</td>
</tr>
<tr>
<td>162-172</td>
<td>Average</td>
</tr>
<tr>
<td>173-183</td>
<td>Somewhat above average</td>
</tr>
<tr>
<td>184 and above</td>
<td>Significantly above average</td>
</tr>
</tbody>
</table>

**Structural validity** of the scale was examined by correlating the IAS-R with several intimacy scales and it was concluded that the revised scale is a valid and reliable instrument (Amidon, Kumar and Treadwell, 1983).

To examine the content validity of the scale, it was reviewed and approved by a number of professional editors. The Cronbach alpha measure of internal consistency showed alpha values between .78 and .86 in five different groups. The test-retest correlation is .84

**Deo-Mohan achievement motivation scale (1985):** was used to measure the achievement motivation of adolescents. The scale has been constructed by Dr. (Mrs.) Pratibha Deo and Asha Mohan in 1985; it has both Hindi and English versions. English form of Achievement
motivation scale was used in the present study. The scale consists of 50 items covering the following areas—achievement motivation, need for achievement, academic challenge, achievement anxiety, importance of grades, meaningfulness of task, relevance of school/college to future goals, attitude towards education, work methods, attitude towards teachers, interpersonal relations, individual concern, general interests, dramatics, sports etc. The scale is a self-rating one and can be administered in a group with 5 points to rate viz. always, frequently, sometimes, rarely, never. It has no time limit. The scoring ranges from 4 to 0 for positive items and the reverse of it for the negative items.

The scale has test-retest reliability and split-half reliability of .56 and item validity of .54. The reliability coefficients were found to be .69 and .78 for male and female groups respectively. Cronbach's alpha coefficient for overall male and female groups was found to be 0.86.

Table 3.5

**Norms for Achievement Motivation**

<table>
<thead>
<tr>
<th>Scores</th>
<th>Interpretations</th>
</tr>
</thead>
<tbody>
<tr>
<td>91 to 123</td>
<td>low levels of achievement motivation</td>
</tr>
<tr>
<td>124 to 168</td>
<td>moderate levels of achievement motivation</td>
</tr>
<tr>
<td>169 and above</td>
<td>high levels of achievement motivation</td>
</tr>
</tbody>
</table>

**Adolescent Autonomy Scale: developed by Noom (1999):** This scale has three areas

**Attitudinal Autonomy:** Attitudinal autonomy is defined as “the ability to specify several options, to make a decision, and to define a goal.” This idea of attitudinal autonomy is most closely related to the concepts of beliefs about one’s capabilities (Bandura, 1977) attitudinal independence (Hoffman, 1984); goal setting (Markus & Wurf, 1987) reflection upon preferences, wishes, and desires (Dworkin, 1988); decision making (Frank et al., 1988); and personal goals (Allen et al., 1994). Attitudinal autonomy is achieved when the individual is able to set goals. It can be summarized as the ability to “think before acting”, it relates to notions such as knowledge, consciousness and responsibility.
**Emotional Autonomy**: This dimension involves the perception of emotional independence from parents and peers. Both parents and peers exert pressure on the adolescent to comply with their wishes. Adolescents need to maintain a feeling of confidence in their own goals, while showing consideration for the goals of others. This dimension is emotional autonomy, to be defined here as “a feeling of confidence in one’s own choices and goals.

**Functional Autonomy**: a regulatory dimension referring to the different approaches taken to achieve a goal. The authors affirm that this ability incorporates regulatory processes such as the perception of competence and the perception of control. The perception of competence refers to “the availability of different strategies to achieve a goal. And the perception of control refers to the ability to choose a specific strategy, which is effective enough to succeed. In addition, the functional autonomy dimension also includes the perception of responsibility, an important aspect that can function as an incentive for adolescent behaviour. According to the authors, functional autonomy is achieved when adolescents are able to develop their way in how to reach their goals.

The scale has Cronbach alpha reliability of 0.71 for attitudinal autonomy, 0.60 for emotional autonomy, and 0.64 for functional autonomy.

This autonomy measurement is a five-item likert format scale and each item has values from one (not at all descriptive of me) to five (very descriptive of me). The scores of each subscale were summed separately to form a behavioural autonomy, functional autonomy and emotional autonomy scale

**Scoring**: statements that are positively stated, are scored from 1-5. All statements which are negatively stated are scored from 5 -1

The three dimensions can be examined separately or as one general concept of autonomy.

Table 3.6

*Norms for Autonomy*

<table>
<thead>
<tr>
<th>Areas</th>
<th>Scores and Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----</td>
</tr>
<tr>
<td>EA</td>
<td>20 and above high</td>
</tr>
<tr>
<td>FA</td>
<td>18 and above high</td>
</tr>
<tr>
<td>AA</td>
<td>19 and above high</td>
</tr>
<tr>
<td>Total autonomy</td>
<td>53 and above high</td>
</tr>
</tbody>
</table>

**Sexuality Awareness Scale:** This scale was constructed by the researcher to gather information on need for sexuality education, preferred modes of receiving information about sexuality, awareness about one’s sexuality needs, attitude towards homosexuality. The scale was validated by 3 subject experts in the field of Psychology thus the content validity was established by expert validation.

**Socio Economic Status Scale:** The Kuppuswamy scale proposed in 1959, measures the SES of an individual based on three variables namely, education and occupation of the head of the household and income of the family. Of the three variables, education and occupation of the head of the household do not change frequently with time. However, the steady inflation and the resultant devaluation of the rupee necessitate periodic revisions of the income variable by many researchers. For the present study recently modified version by Kumar, Shekhar, Kumar and Kundu (2007) was used to select the participants based on the SES.

**3.13 First Part of Data Collection**

**Procedure**

Data was collected from 5 different schools of Belthangady Taluk, Mangalore. Heads of all the five schools were contacted personally by the researcher the purpose of the study, participants required, time period to carry out the research was explained to them. After obtaining permission from each head of the institution, class teachers of ninth and tenth standard were met, from the respective class teachers time table was collected and availability of free periods was found out. After which class teachers introduced the researcher to the students. Researcher then explained the purpose of the research along with the benefits of participating in it. The participants were assured of the confidentiality of the information obtained from them and they were also informed that they could withdraw from the research.
any time. Later consent form was distributed to the willing participants and their written consent was obtained.

Socio-economic data sheet which also contained questions on demographic details of the participants were distributed, each item in the data sheet was explained and the participants were given 45 minutes to fill it. While collecting back the response sheet each form was carefully observed to check whether all questions were answered. After collecting the socio economic status data sheet students who fulfilled the criteria were selected.

Researcher followed the time table given by the class teacher. She administered the questionnaires/inventories during the study and other free periods. Assessment was done in groups of five. Data was collected from all the participants in 2 different sessions. Sincere effort was made to establish rapport with each student so that the participants would give their honest response.

3.14 Analysis of Quantitative Data

Data collected was processed and analysed using suitable descriptive and inferential statistics

**Section one:** percentage analysis based on the norms of each variable

**Section two:** two way analysis of variance and t test

3.15 Second Part of Data Collection:

In order to explain specific quantitative findings, participants with low and high level of intimacy, autonomy, identity, achievement and sexuality were selected for in-depth interview and psychosocial issues were discussed in greater detail.

**Procedure Followed:**

By the time quantitative data was analyzed and selection of the participants for unstructured interview was determined the students had progressed to Pre-University hence the heads of two Pre University Colleges in Belthangady Taluk D.K, were contacted personally by the researcher, purpose of the visit was explained and permission was obtained to check if
required participants were studying in their college. The details of the required participants were traced from the college E-register. Each student’s combination, section and mentors were noted after which the class timetable was noted down to check the free class hours, library and lab hours. The students shortlisted for the interview were listed combination wise, after which the heads of the institutions were met again and type and purpose of the interview were explained to them. Later the mentors were met, the purpose of the study was explained and permission was taken to interview their mentees. A set of lead questions for the interview was prepared in consultation with the guide. Each participant of qualitative research was personally met and the purpose of meeting them once again was explained and in-depth interview was conducted.

3.16 Analysis of Qualitative Data

Narrative analysis has been done

3.17 Ethical considerations: abiding by the APA ethical standard the following ethical considerations were incorporated in the research

- Oral consent was obtained from the heads of the institutions
- Participants written consent was taken before the questionnaires/inventories were administered
- Participation in the research was purely voluntary the participants were informed that they could withdraw from the research at any time
- The participant’s right to privacy was safeguarded and they were identified by their register number this helped in protecting their identity
- Researcher’s contact number was shared among the participants for further help and support with regard to the issues assessed