Chapter 3

METHODOLOGY

3.1 Overview

In the first two chapters of this report the significance of the study and review of the related literature were presented respectively. The present chapter is intended for plan and procedure of the investigation. It is divided into seven sections. The first section is the overview. The second section explains the problem of the study, clarification of key words. The third section defines about objectives and hypothesis. The fourth section briefly states the method of investigation, scope and limitations of the study. The fifth section deals with the sample, plan of the sample. The sixth section explains about reliability and validity of the tool and instrumentation. The seventh section gives an account about administration of the tool and collection of data.

After a careful review of related studies and finding the gap. The investigator felt that there is a need to study about the "Role perception and role performance of secondary school pupils".

3.2 Statement of the Problem

The study intends to know how far the secondary school pupils perceive their roles and perform them. It would also find out the answers of following questions.
1. What are different roles of secondary school pupil's that are perceived by them?
2. How far do the secondary school pupil's perceive their roles?
3. Which role is better perceived by them?
4. How far do the secondary school pupils perform their roles?
5. Which role is better performed by them?
6. Is there any association between the role perception and role performance of secondary school pupils?
7. Do the gender, the type of school where they study (private, government schools) economic status, parental education background, rural urban schooling influence their role perception and role performance?
8. Is there any association between their role performance and academic performance?
9. Is there any association between teachers perception of pupils role performance and pupils role performance.

To answer the above questions the topic titled as under.

3.3 Title of the Study

Role Perception and Role Performance of Secondary School Pupils.

3.3.1 Operational Definitions of Key Terms Used in the Study

Role

Role of the secondary pupils is the expression of certain characteristic relations, motives, values, attitudes, actions and behaviours in relation to home, school and society.
Role Perception

Cognizence of the role of the individual in relation to home, neighbourhood, school, peer group and society.

Role Performance

The functions adopted by an individual at home and in the school and society, or the characteristic attitudes and patterns of behaviour that determine the part he/she plays in specific situations.

Secondary School Pupils

The pupils studying in 8th, 9th and 10th classes whose age range may be 12 to 16 years.

3.4 Objectives of the Study

1. To find out the role perception of secondary school pupils and classify them.
2. To find out the role performance of secondary school pupils and classify them.
3. To find out the association between role perception and role performance of secondary school pupils.
4. To find out whether there is any association between the role performance and academic performance.
5. To find out whether there is any association between teacher's perception of students role performance and role performance of secondary school pupils.
6. To find out whether the following variables influence the role perception of secondary school pupils. a) Whether gender influences their role perception. b) Whether the type of school influences their role perception, c) Whether the residential area (rural / urban) influences their role perception, d) Whether economic status of the pupils influences their role perception, e) Whether parental education background influences their role perception.

7. To find out whether the following variables influence the role performance of secondary school pupils. a) Whether gender influences their role performance, b) Whether the type of school influences their role performance, c) Whether the residential area (rural / urban) influences their role performance, d) Whether economic status of the pupils influences their role performance, e) Whether parental education background influences their role performance.

3.5 Hypotheses of the Study

1. There would be no significant association between role perception and role performance of secondary school pupils.

2. There would be no significant association between role performance and academic performance of secondary school pupils.

3. There would be no significant association between teacher’s perception of pupils role performance and role performance of secondary school pupils.
4. There would be no significant influence of the following variables on the role perception of secondary school pupils: a) Whether gender influences their role perception. b) Whether the type of school influences their role perception, c) Whether the residential area (rural / urban) influences their role perception, d) Whether economic status of the pupils influences their role perception, e) Whether parental education background influences their role perception.

5. There would be no significant influence of the following variables on the role performance of secondary school pupils: a) Whether gender influences their role performance, b) Whether the type of school influences their role performance, c) Whether the residential area (rural / urban) influences their role performance, d) Whether economic status of the pupils influences their role performance, e) Whether parental education background influences their role performance.

3.6 Scope and Limitations of the Study

The scope of the present study is to identify the role perception and role performance of secondary school pupils and its relationship with the academic performance of secondary school pupils in private and government schools in rural and urban areas of only Guntur district.

Limitations

1. The study is limited to 754 secondary school pupils.

2. The study is to identify the relationship between role perception and role performance.
3. The study is limited to Guntur district.

4. The study is to identify the relationship between teacher's perception of role performance and role performance of secondary school pupils.

5. The study is limited to two types of schools: a) Government, b) Private.

6. The study is limited to two types of locations: a) Urban, b) Rural.

7. The study is limited to parental education background in three categories:
   a) below 5th, b) 6th to Inter, c) Above Inter.

8. The study is limited to parental economic status: a) Poor, b) Middle, c) Rich.

3.7 Method of Investigation

To collect the data about the role perception and role performance of the secondary school pupils a large sample had to be surveyed. Hence, the descriptive survey of the role perception and the role performance of secondary school pupils was carried out.

Survey research is a method for collecting, analyzing data obtained from a large number of respondents representing a specific population collected through highly structured and detailed questionnaires.

Data were gathered from a sample of cases at a particular time. Items of the questionnaire were framed basing on definite objectives.

The major purpose of the present piece of investigation is to know the role perception and role performance of secondary school pupils and relation between them.
3.8 Population and Sample

A sample is a small proposition of individuals of characteristics which are found in the population.

Sample was selected from the population of secondary school pupils in Guntur district area following the stratified random sampling procedures.

For the present study the investigator had taken up a stratified random sample of 754 pupils of secondary schools from 30 schools in Guntur district. Out of these thirty schools, 15 are government, 15 are private and 15 are urban, 15 are rural schools. The total sample of 754 includes 395 boys and 359 girls.

Plan of the Sample
Guntur District

<table>
<thead>
<tr>
<th>Area of the School</th>
<th>Type of the School</th>
<th>No. of Schools</th>
<th>No. Pupils</th>
<th>No. of Schools</th>
<th>No. Pupils</th>
<th>No. of Boys</th>
<th>No. of Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>Private</td>
<td>7</td>
<td>166</td>
<td>8</td>
<td>211</td>
<td>204</td>
<td>173</td>
<td>377</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>Private</td>
<td>8</td>
<td>198</td>
<td>7</td>
<td>179</td>
<td>191</td>
<td>186</td>
<td>377</td>
</tr>
<tr>
<td></td>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
<td>364</td>
<td>15</td>
<td>390</td>
<td>395</td>
<td>359</td>
<td>754</td>
</tr>
</tbody>
</table>
3.9 Instrumentation

Factual material or data unknown or untapped, so far is essential in every study. They can be obtained from many sources, direct or indirect. It is necessary to adopt or evolve a systematic procedure to collect essential data for collection of new, unknown data, required for the study of any problem, one may use various devices. The selection of suitable instruments or tools is of vital importance for successful research. Different tools are suitable for collecting various kinds of information for various purposes.

As no suitable tool was available for this purpose the questionnaire was developed by the researcher on different roles of the pupils in the specified stage. To identify the main roles of pupil, researcher used Mertous theory of empirical functionalism and Super's theory. According to Super's theory the major areas of the secondary school pupils are school, home and society.

Before going to develop questionnaire, researcher conducted interviews with this specific purpose of their perceived roles and collected information from secondary school pupils. The researcher also studied so many related available standardised tools. Some of them are : Agarwal Parental Encouragement Scale, Dr. Nalini Rao's (Bangalore) PCRS Scale, and Rao's School Attitude Inventory etc. Researcher adopted those tools, modified and developed further to finalise the questionnaires.

Researcher developed a questionnaire consisting of four parts. The first part was to collect the necessary bio-data of the pupil. The second part
was on the role perception in three major areas of life of secondary school pupils, home, school, society. The third part included the items inquiring about their role performance. Part four was simply to find out the opinion of teacher about the role performance of the sample of pupils whom he taught and assessed. Each item of the part two, three and four was assessed against 5 point scale.

3.9.1 Try Out

After preparing the questionnaire, the investigator conducted a pre-test for a small sample of 98 pupils in four schools to know whether the students followed the questionnaire or not and to make it suitable and adequate for this purpose. Afterwards, the investigator conducted post test for the same sample after five months in the same four schools.

3.9.2 Scoring Procedure

The responses of the pupil's questionnaire are set on 5 - point scale.

**Table showing the Scoring procedure of Role Perception of Role Performance of Secondary School Pupils**

<table>
<thead>
<tr>
<th>Marks</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses</td>
<td>Most times</td>
<td>More times</td>
<td>Some times</td>
<td>Few times</td>
<td>Very few times</td>
</tr>
</tbody>
</table>

The responses of the teacher's opinions are also set on 5 - point scale.
Table showing the Opinions of Teachers about the Role Performance of Pupils

<table>
<thead>
<tr>
<th>Marks</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Most responsible</td>
<td>Adequately responsible</td>
<td>Less responsible</td>
<td>Least responsible</td>
<td>Not responsible</td>
</tr>
</tbody>
</table>

3.9.3 Reliability

Reliability is the accuracy, stability, dependability and predictability of a measuring instrument. The reliability coefficient of the secondary school pupils role perception and role performance is calculated by the method, Test - Retest reliability.

The most obvious method for finding the reliability of test scores is by repeating the identical test on a second occasion. The reliability coefficient \( r_{11} \) in this case is simply the correlation between the scores obtained by the same persons on the two administrations of the test. The error variance corresponds to the random fluctuations of performance from one test session to the other. These variations may result in part from uncontrolled testing conditions such as extreme change in weather, sudden noises and other distractions, or a broken pencil point. To some extent, however they arise from changes in the conditions of the subject himself, as illustrated by illness, fatigue, emotional strain, worry, recent experiences of a pleasant or unpleasant nature and the like.
Retest reliability shows the extent to which scores on a test can be generalized over different occasions, the higher the reliability the less susceptible the scores are to the random daily changes in the condition of the subject or of the testing environment.

By using Test - Re-test method researcher calculated reliability coefficient of role perception and role performance.

The reliability coefficient of role perception is \( \gamma \).

\[ \gamma = 0.5167 \text{ which is high.} \]

The reliability coefficient of role performance is \( \gamma = 0.5942 \) which is high.

Therefore, this instrument is found reliable to serve the investigation.

3.9.4 Validity

The present investigation is found to be of great help in identifying the role perception and role performance of secondary schoolers in different areas. The major areas are home, school and society.

**Content Validity**

Content validity refers to the functional area which the test actually measures, or is specifically related to the facts for which it was designed. It is based upon the efforts of subject matter specialists. The criteria of content validity of present role perception and role performance inventories are inclusive of the major areas of secondary school level, sense of identity clarification in adolescence of who one is, what one's role is and what are to be performed.
The home plays a major part in providing the atmosphere within which the child forms his style of life. How the adolescents perceive and relate at home with parents, siblings, grandparents, relatives etc. were inquired in the tool.

When the child moves from home to school, school provides the opportunities to feel their role in varied activities and perform accordingly in relation to school, teachers, friends, peer group, the surrounding community and how he relates with society. Besides how adolescents perceive any one is another area relevant in this study. Thus, the content validity of the present instrument is found to be sound.

Besides, as the test is reliable it is said to be valid.

**Empirical Validity**

It was found based on the reliability co-efficient. Because the index of reliability is sometimes taken as a measure of validity.

\[
\text{Validity} = \sqrt{r}
\]

Validity for role perception = \(\sqrt{0.5167} = 0.71\)

Validity for role performance = \(\sqrt{0.5942} = 0.77\)

**3.10 Administration of the Tool**

The investigator personally visited the schools, got the permission from the respective heads of the institutions and personally administered the questionnaire. The investigator at first explained class teacher about the investigation and also how much of their help and co-operation are needed -
specially emphasizing that the responses supplied by the pupils would be kept confidential. The investigator impressed the pupils to express their feelings without any inhibition by following the instructions. And investigator requested the class teacher to give his / her opinion about their class pupils. In the questionnaire they had to tick (✔) on the chosen alternative among the 5 alternatives given against each of the statements. Sufficient time was given to answer the questions. The investigator received full co-operation from most of the teachers as well as from the pupils while administrating the test.

3.10.1 Collection of Data

Data of the secondary school pupils were collected from rural and urban, private and government schools belonging to Guntur district. The pupils co-operated with the investigator enthusiastically.

3.10.2 Observation

When the questionnaire had to be administered in 30 schools to 754 secondary school pupils of respective schools, the researcher faced many problems in visiting rural areas especially remote villages and in getting permission from some Private - Urban schools. Mainly, heads of the private schools felt that they were loosing their valuable time. They had to be convinced about the study to request them to give time to collect data. But the heads of the Government schools cooperated well.
3.11 Statistical Techniques

The following statistics were applied to analyse the collected data.

a) Mean

For calculating mean of the role perception and role performance of secondary school pupils, the following formula is used.

Arithmetic Mean = $AM + \frac{\sum fd}{N} \times CI$

b) Standard Deviation

For calculating standard deviation the formula used is

$S.D. = \sigma = \sqrt{\frac{\sum fx^2}{N} - \left(\frac{\sum fx}{N}\right)^2} \times CI$

d) 't' Value

To know whether mean differences of the variables are significant or not 't' values are computed by using the following formula

$t = \frac{M_1 - M_2}{S_{ED}}$

$S_{ED} = \sqrt{\frac{\sigma^2_1}{N_1} + \frac{\sigma^2_2}{N_2}}$

e) ANOVA

Means to analyse the variation not only between the groups but also within the groups 'F' test was used there are more than 'two' groups 'ANOVA' was used.

$F = \frac{Mean \ Square \ (among \ means)}{Mean \ Square \ (within \ means)}$
f) Chi-Square

To know the relation between role perception and role performance and teachers perception of role performance and role performance, Chi-square was used.

$$\chi^2 = \frac{\sum (f_o - f_e)}{f_e}$$

- $f_o$ – observed frequency
- $f_e$ – expected frequency.

g) Coefficient of Correlation

To calculate the reliability coefficient of Role perception and Role performance, Scatter gram was computed by using the formula.

$$\gamma = \frac{\sum x'y' - c_x c_y}{N \sigma_x \sigma_y}$$

3.12 Conclusion

In this chapter, statement of the problem, objectives, hypotheses, variables, scope and limitations, method of investigation, sample and sampling, tools, administration of the tool, collection of data and statistical techniques are discussed in detail. In the forth coming chapter, the investigator is going to analyse the collected data and interpret the results.