CHAPTER-III

RESEARCH METHODOLOGY

3.1. Introduction

The new media has and is having a profound sociological and psychological impact in the globalized era. It has played as a catalyst in the process of globalization. The new digitalized technological communication gadgets are accessible to students and common man at an economical prize has connected the world just a click away.

In the backdrop of multimedia information explosion the present study was aimed to examine the access exposure and impact of new media on school going children at Mysore city. The methodological approach for the said study is enumerated as follows in this chapter.

3.2 Research Design

The media researchers have made use of a number of methodologies to gather information on the impact of media with reference to the students’ community and otherwise. The present study approached the problem through a systematic survey method appropriate to the nature of the current investigation. A structured and pre-tested interview schedule was administered to the high school students in Mysore city in order to gather primary data on the impact of new media among high school students. Primary data were gathered through face to face surveys with self administered questionnaires apparently the most appropriate data collection method. The structured questionnaire was designed to explore the understanding of the students about the use, access and impact of new media. The questionnaire consisted of six segments for the students which focused the attention of the respondents on the dependent variables of the study such as communication media exposure of students; new media use pattern, new media habits, attitude towards new media and impact of new media besides personal information of the school going children at Mysore city.
3.3 Hypotheses of the Study

The objectives of the present study and the analysis of the findings of the studies reviewed in the earlier chapter have led to generating the following set of hypotheses.

H1. The communication media exposure is inadequate among the high school students.

H2. The new media are not accessible to the high school students.

H3. The new media preferences of high school students are not different.

H4. The high school students have not cultivated a positive attitude towards new media.

H5. The new media do not have a positive impact on the high school students

3.4 Study Variables

Keeping the above hypotheses in view, the following variables were selected for the study on the basis of review of literature and discussion with subject experts.

3.4.1 Independent Variables

a. Gender
b. Age
c. Educational Standard
d. Type of Schools
e. Economic Status
f. Social Status

3.4.2 Dependent Variables

a. Communication media exposure.
b. New media use patterns.
c. New media preferences.
d. Attitude towards new media
e. Impact of new media
3.5 Locale of the Study

The study was carried out in the two zones of Mysore city namely – North Zone and South Zone. The Department of Public Instruction, Karnataka Government, Mysore has three zones namely North, South and Rural. As the scope of the study was limited to the Mysore city the rural zone has been done away with. The map of Mysore City Corporation was used for the purpose of locating the two different zones of the city. The Mysore Deputy Director of Public Instruction was approached by the researcher to select 07 public schools and 07 private schools for the purpose of primary data collection from the high school students representing 08th, 09th and 10th standard students who constitute the community of ‘high school students’ of Mysore city. The social and economic status of the parents was also primarily taken into account to examine the relationship between the demographic features and new media exposure of high school students of Mysore city.

3.6 Sampling Procedures

The researcher chose two different zones of Mysore city in consultation with the officials of the Department of Public Instruction. The high school students were selected on the basis of incidental sampling and stratified sampling methods since these methods also produce reliable data according to media researchers. About 480 high school students were approached for the purpose of primary data collection. But only about 415 high school students (212 boys and 203 girls) representing both public and private schools were retained for the study since they furnished complete information. The Cochran formula for sampling is widely used by the researchers across the globe which is as follows.

$$n = \frac{Z^2 pq}{e^2} = \frac{(1.96)^2 (.5) (.5)}{(.05)^2} = 385$$

This is valid where n is the sample size, $Z^2$ is the abscissa of the normal curve that cuts off an area a at the tails (1-a equals the desired confidence level, e.g., 95%), e is the desired level of precision, $P$ is the estimated proportion of attribute that is present in the population and we assumed $P= .5$ (maximum variability), and $q$ is 1-$P$. 
The value for Z is found in statistical tables which contain the area under the normal curve.

Morgan Table was followed by the researcher to select about 415 high school students representing both public and private high schools of Mysore city. The sample size was divided among the two zones by following the proportionate stratified random sampling technique.

Table.3.1. Distribution of Study Area and Sample

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Mysore City</th>
<th>Number of Boys</th>
<th>Number of Girls</th>
<th>Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public School</td>
<td>203</td>
<td>92</td>
<td>110</td>
<td>202</td>
</tr>
<tr>
<td>Private School</td>
<td>212</td>
<td>120</td>
<td>93</td>
<td>213</td>
</tr>
<tr>
<td>Total</td>
<td>415</td>
<td>212</td>
<td>203</td>
<td>415</td>
</tr>
</tbody>
</table>

Figure .3.1. Distribution of Study Area and Sample
It may be noted that about 212 boys and 203 girls were selected for the purpose of study in the first stage. All the 415 respondents were the true representatives of the genders, public and private educational institutions, different age groups, religious groups, caste groups, income groups and so on.

### 3.7 Tools of Data Collection

In the present study interview schedule and interview methods were used as the principal tools of data collection by the researcher. A set of interview schedule was developed for the purpose of collection of primary data from the students regarding the new media exposure, accessibility of the new media, uses of new media and impact of new media from the high school students’ point of view in Mysore city.

### 3.8 Primary Data Collection

Primary data was gathered by administering the interview schedules to the high school students studying in public and private educational institutions located in two zones of Mysore city namely-northern zone and southern zone. Stratified sampling technique was used to select the subjects. Further, the study was conducted in two phases. In the first phase, general information regarding family background and personal details were collected from the subjects of the study. The data on the socio-economic status were also collected by administering the interview schedule. In the second phase of the study, the standardized interview schedules’ scales on the
new media exposure, new media access, uses of new media and impact of new media were administered to the subjects. The responses from about 415 subjects (212 boys and 203 girls) were noted down by the researcher and a team of trained investigators after interacting with the subjects and explaining the aims and objectives of the study.

3.9 Secondary Data Collection

The present study was also systematically carried out on the basis of relevant secondary data such as, Census Report, annual reports of Ministry of Human Resources Development, Ministry of Information and Broadcasting, annual report of education departments, health and family welfare reports, reviews of professional journals, proceedings of national and inter-national seminars and conferences, media reports and other publications related to the research topic. The secondary data also contained discourses and critical examinations on various aspects of the new media exposure, accessibility and utility of information services to the high school students of Mysore city. The writings which were found from all these sources were also systematically analyzed for the purpose of gathering additional authentic information on the salient features of the present empirical study.

Computation of Data

The primary data gathered from the survey on the new media exposure, new media access, uses of new media and effects of new media services with reference to Mysore city were consolidated and computed by using descriptive analysis which consisted of frequency counts and percentage distribution. These methods revealed the relationship between the independent and dependent variables considered in the study.

3.10 Pilot testing

The purpose of the pilot test is to refine the questionnaire so that respondents will have no problems in answering the questions and there will be problems in recording the data. The researcher is also required to understand the relevance of the questions identified by him / her and get the questionnaire pilot tested. Usually, for most questionnaires the minimum number for a pilot is 10.
Accordingly, the pre-test was conducted in the non-sample area namely Mysore during January, 2013. The contents of the questionnaire were subjected to changes and modifications in order to make the questionnaire fit into the context of the empirical study. The entire study was exploratory in nature and that several ideas were also incorporated into the research design on the basis of informal discussions and consultation with communication, psychology and human development fields.

3.11 Reliability and Validity of Data

Reliability

This is about the results of the investigation, which has to be reliable. If nothing changes in a population between two investigations in the same purpose, it is reliable. From a deductive point of view if the measure yields the same results on different occasions, or from an inductive point of view if similar observations be made different researches on different occasions.

Robson (1993) stated that there may be four threats to reliability:

1- Subject error has to do with when the interview is carried out, it is of great importance to select a neutral time and date.

2- Subject bias is a great problem in organizations where the management is of an authoritarian character where the interviewee might say what the manager wants them to say, not what they feel.

3- Observer error can be lessened with a high degree of structure to the interview schedule.

4- Observer bias is a question about how the interviewer interprets the data received.

For reducing the subject bias the researcher tried to make respondents certain that their answers were considered confidential. Since the questionnaire was designed as a survey format we did not face with observer error or the observer bias.
Validity

Validity is concerned with whether the findings are really about what they appear to be about (Saunders et al., 2000). There are tests for validity:

1- Construct validity establishes correct operational measures for the concepts being studied.

2- Internal validity is applicable for explanatory and causal studies only (not for descriptive or exploratory studies). It establishes a causal relationship; thereby certain conditions are shown to lead to other conditions.

3- External validity establishes the domain to which a study’s findings can be generalized.

If a question can be misunderstood, the information is said to be of low validity, the researcher arranged a semi-interview environment and the questionnaires were given to respondents face to face, so that if they faced any difficulties while filling out the questionnaire, the ambiguity could be explained. The validity was thus, increased. Since this study is descriptive no consideration is taken to internal validity. As for external validity, this study could be generalized with a 95 percent level of certainty and a 5 percent margin of error.

3.12 Gratification Scale

Communication researcher Greenberg (1974) developed a motives scale to assess London school students’ reasons for watching television. Since then, researchers have used motives scales in determining the gratification audience seeks from mass media including new media. The television motives scale developed and refined by Rubin (1981) is also adopted by the communication researchers in varying ways either independently or in combination with other motives scales in new media gratification studies.

Researchers have defined motivation as a need, want, interest or desire that propels the users of media services in a certain direction. In this context of the media use, it is the motives that make audience seek out and use certain media and their contents to satisfy their needs from time to time. The motives are driven by certain socio-psychological needs resulting in the gratification of needs. Thus,
gratification is defined as a source of satisfaction, reward, pleasure or fulfillment of a need by the researcher. The socio-psychological and goal directed media use activity driven by motives is explained by Rubin (1994) thus: “communication behavior, including media selection and use, is goal-directed, purposive and motivated; people take the initiative in selecting and using communication vehicles to satisfy felt needs or desires; a host of social and psychological factors mediate people’s communication behavior; and media complete with other forms of communication (i.e., functional alternatives) for selection, attention, and use to gratify their needs or wants”.

Several media researchers namely Katz, Blumler and Gurevitch (1974), Greenberg (1974), Rosegren (1974), Palmgreen et.al. (1980), Wenner (1982), Rubin (1983), Perse and Dunn (1998), Kaye (1998), Ferguson and Perse (2000), Papacharissi and Rubin (2000), Kaye and Johnson (2002), Johnson and Kaye (2003), Stone (2003), Choi, Watt, Dekkers and Park (2004), Kaye (2005) and others have examined the factors associated with the uses and gratification of various communications media from the point of view of audience across the globe. These researchers have also distinguished between the motives for media consumption and the gratification perceived from this experience. They have differentiated between gratification sought and gratification obtained which constitute the scientific evaluation of perceived outcome of a particular experience in a given communication situation.

Empirical studies have also validated the concepts and showed the correlations between the motives or gratification sought and the gratification obtained. Thus, motives function in concert with one another to produce certain patterns of media gratification. Accordingly, most uses and gratification studies have used motive statements to assess the gratification audiences seek from the media. It has been a common practice among the new media researchers to adapt the motives scales developed and validated by past researchers in conjunction with the identification of new motives elicited from a sample of media users.

Researchers have also combined motivation items from several sources and modified them for the study of uses and gratification of new media among the various audiences. In particular, Choi, Watt, Dekkers and Park (2004) have
identified varying gratification typologies for their study of new media used in the US, the Netherlands and South Korea which primarily included two new gratifications of self improvement and economic incentive. Thus, researchers developed gratification scale to assess the gratification users seek from the new media. Researchers have also assessed the gratification by using statistically tested and tried scales.

3.13 Statistical Analysis

The primary data were analyzed on the basis of certain standardized statistical tests which include – percentage analysis, graphical representation, Chi-square test and cross tabulation. All the statistical methods were carried out through the SPSS for Windows (version 16.0). A brief discussion of these statistical tests is as follows.

Descriptive Procedure

The descriptive procedure displays uni-variate summary statistics for several variables in a single table and calculates standardized (z-scores). Variables can be ordered by the size of their means (in ascending or descending order), alphabetically, or by the order in which the researcher specifies.

Frequencies and Percentages

A host of variables can be described through the graphical displays that are useful for using the frequencies and percentages of the statistical data. Further, percentages provide the values out of hundred for each group or sector selected with frequencies.

Cross-Tabs

The cross-tabs procedure forms two-way and multi-way tables and provides a variety of tests and measures of association for two-way tables. The structure of the table and whether categories are ordered determine what test or measure to use. The present study employed contingency coefficient analysis.
Chi-square test

The Chi-Square Test procedure tabulates a variable into categories and computes a chi-square statistic. This goodness-of-fit test compares the observed and expected frequencies in each category to test either that all categories contain the same proportion of values or that each category contains a user-specified proportion of values. In the present study chi-square test was applied to find out the significance of difference between frequencies of various responses under each statement, tool or channels of communication. P<0.05 states the significance level.

Contingency Table analysis

In the current study contingency table analysis was applied to find out the association between independent variables such as age, gender, educational qualification, social status and economical status besides types of schools with the 5 point scale responses obtained and deduced to 3 point for interpretation under each statement. All the statistical calculations were done through SPSS for Windows software (Version 16.0).

3.14 Limitations of the Study

Recording the opinions of all the stakeholders on the impact of new media among high school students of Mysore city was not possible due to lack of time. The researcher experienced the functional problems of administering the accessibility of data to all the educational institutions located in Mysore city. Communication, Human inadequacy, resource constraints and recollection, such common limitations of the survey method was encountered by the researcher. It was not possible to contact all the high school students, parents, policy makers and NGO’s connected with educational institutions of Mysore city mainly due to huge numbers, lack of time and other constraints. Stratified sampling method was followed in selecting the respondents. The memory bias on the part of the respondents cannot be completely ruled out though much care has been taken to collect the primary data.
3.15 Definitions of the Terms Used in the Study

3.15.1 Communication

Communication is an ongoing process of every human interaction. Human life cannot be imagined without communication, it is as important as the heart beat for the survival. The levels, techniques and sophistication of communication depend on access to information, education, entertainment, participation and progress. Communications media include – interpersonal communication, traditional media, modern mass media, and new media. The New media as a powerful communication medium has filled the knowledge gaps in the new millennium. Communication brings development.

3.15.2 Development

Development has various dimensions and layers. Socio-economic and environment conditions besides political interventions of the state play a pivotal role in development of the people. Development has various approaches such as inclusive, exclusive, sustainable, and integrated to name a prominent few. Development v/s Environment is a burning issue of the current times. Participation of the people is crucial in achieving the goals of development. In this study the term development is confined to digital, technological, computer, and new media communication gadgets whereby to assist developing a knowledge society driven by information explosion.

3.15.2 High school Students

The ‘high school students’ are the students who study in the high schools after higher primary level of education in Mysore city. They attend the high school between the age ranges of 13-15 under common conditions. Having access to school education is the primary indicator of human development. The high school students who have new media exposure have influence on the personal and academic life. The study primarily focuses on the high school students who have access to new media either at home or elsewhere.
3.15.4 Socio-Economic Status of High school Students

Socio-economic status is a combined phrase to measure the combined impact on a research problem. The social identity, living standard, sources of income generation, occupation, the ownership of property and educational status are collectively measurable variables. The sum computation of the above defines the status of the members of a particular family. Socio-economic status of a member or a family indicates a degree of respect, prestige and influence in a given social structure.

The new media exposure among the high school students has a bearing on the socio-economic status. The empirical evidence justifies the fact that high school students who have the privilege of better socio-economic status are bound to fare well in academic competency as compared to their counterparts who are socio-economically under-privileged. Personal, social and economic constraints are the obstacles to develop better personality for the school going children. The current study has classified the different social groups and income groups under the socio-economic influence on the new media exposure and its various effects on the high school students of Mysore city.

3.15.5. Gender Differences

There exists a glaring difference insofar as gender is concerned with regard to biological development and emotional developments. The perception, attitude and reaction of the male in comparison to female differ. There are basic gender differences which affect the individual identity. There are identity conflicts within the family and society among the genders. There is a significant gender difference within the family and outer society. The problems during adolescence differ in gender as boys and girls face different challenges and have different emotional needs. The psychosomatic issues such as depression, poor body image, eating disorders, lower self-esteem, and lack of self confidence are more prone towards girls. Girls are usually found to be yielding and while boys are more aggressive. Girls also face the additional domestic tasks more so than boys. In the present study, the relationship between the gender and new media exposure, new media access, uses of new media and impact of new media among the high school students
of Mysore city are examined. However in recent times girls have risen to the occasions and are empowering themselves breaking the stereotype.

3.15.6 Environmental Influence on High school Students

The influence of environment is extended on physical, social, economic and psychological forces which have a domineering impact from individual to a larger level of society. The environment consists of all surrounding forces which may influence the person in his efforts toward maintenance. Several studies lament that the students experience environment related stress symptoms in the globalized times. In the present study, the relationship between the private/public environment in general and the new media exposure, new media access, uses of new media and impact of new media among the high school students of Mysore city are examined.

3.15.7 Social Status

Society is a complex institution. The heterogeneity feature of the society has sheltered diverse people regardless of their age, gender, education, profession, income and status. Understanding the social environment and learning to live and let live is crucial to maintain social harmony. Intercultural communication skills with a holistic approach help develop cordial and pro social relations. The need of the hour is to be useful citizens of the society. It is possible when individual and other members of society keep common goal of maintaining mutually beneficial relations. The respondents’ social status has a bearing on their exposure to the old and the new media in present times.

3.15.8. Economic Status of High school Students

The financial status, possession of movable and immovable property decides the economic status of the people. People with reasonably good economical status enjoy a good deal of social mobility, educational access, media association, political contact and other privileges. The high school student’s personal and academic development has a bearing on their economic status. The economically privileged students enjoy the benefit of reach and access to new media.
3.15.9. New media Access to High school Students

The media institutions are the fourth estate of democracy. New media is considered as the fifth estate of democracy. Communications media as informal centers of learning educates society and students through the process of dissemination of information and entertainment. Media is considered as the common mans university. The social and economic status of the people decides the media access and reach. Cultivating healthy media habits in this age of globalization and competitiveness is essential. Communication gap hinders the progress of individuals in the era of knowledge society. Active media access acts as a catalyst of development for students and others in terms of education, health, modernization, mobility and personality development. Over use of new media carry addiction and inflict a narcotic effect among the heavy users.

3.15.10 New media Exposure of High school Students

The advent of new media has brought about increasing expansion of human knowledge across the globe and has resulted in creating the knowledge industry. The intervention of new media for dissemination of information has transformed knowledge into a commodity. Information as a commodity is accessed by all the netizens besides the school going children. The transmission of knowledge through new media is based on technological progress and computational technology. The proliferation of new media into the remotest corner of the world has filled the knowledge gaps in society and has fostered globalization. The high school students are benefited to a great deal through new media exposure in present society however the exposure is also packaged with shortfalls.

3.15.11 New media use Behavior of High school Students

New media use behavior is assessed in terms of place of new media exposure, availability of different information resources, types of information services, duration of New media browsing, control over the choice of contents and other aspects of New media use by various people including the students in schools or otherwise. Tapscott (1997) observation coincides with the above discourse. “Children are not viewers; they are users and they are active. They do not just observe; they participate. They inquire, discuss, argue, play, shop, critique, investigate, ridicule, fantasize, seek, and inform.”
3.15.12 Attitude of High school Students toward New media Exposure

The high school student’s bondage and perception towards new media essentially constitute the attitude of students under the study. The new media exposure comprises both positive and negative dimensions of attitude. New media exposure has given scope to a good number of studies conducted by the researchers to assess the attitude of the people including students. The present study primarily focuses on the attitude of high school students towards new media.

3.15.13 Type of New media users of High school Students

The New media users including the high school students are known for different levels of association with the new media medium in terms of time spent on new media usage. By and large, there are heavy users, moderate users and light users. In the present study three levels are taken as the basis for classifying the high school students as heavy, moderate and light new media users. The students who use the new media from 0-1 hours per day are considered as light users, the students who use the new media from 2-3 hours per day are considered as moderate users of new media and the students who use the new media for more than 3 hours per day are considered as heavy users.

3.16 Summary

The new media exposure of high school students of Mysore city suffers from lack of comprehensive scientific studies. In the present study the primary data were gathered from 415 high school students who were selected on the basis of stratified sampling method. The present study approached the problem through a systematic survey method. Tools and techniques of non-participant observation, informal discussion and secondary literature review were also used for the purpose of data collection. Acclaimed statistical analysis techniques such as percentage analysis, graphical representation, Chi-square test and cross-tabulation were also employed in the current study. This investigation primarily deals with the scientific evaluation of the new media exposure, new media access, uses of new media exposure, impact of new media exposure and limitations of new media exposure from the point of view of high school students of Mysore city.