

CHAPTER - 2

**REVIEW
OF
RELATED STUDIES**

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2.1 Introduction

First chapter reveals that how mass media can influence human life and learning. Besides, the same chapter also describes the need and significance of the study in the present era. It also consists hypothesis, objectives of the study, statement of a research problem, definition of such important terms like what is mass media? and certain unavoidable limitations of the study.

Present chapter deals with the related studies for the sound base of investigation.

In the words of Good (1972) "The Key to the vast store house of published literature may open doors to sources of Significant Problems and Explanatory hypothesis, and provide helpful orientation for definition of the problem, background for selection of procedure and comparative data for interpretation of results. In order to be truly creative and original, one must send extensively and critically as a stimulus to thinking".³

Review of related literature is an important component of any research work. This helps in building a solid foundation on which research is based. The scanning of literature develops clarity about components, procedures and different steps followed in research. Moreover, it helps in refining and developing insights into research problem. Hence, Walter R.

³ Cited by Aggrawal, J.C. in Educational Research: An Introduction. New Delhi, Arya book Depot, 2002. 152 P.

Borg rightly says, "The literature in any field forms the foundation upon which all future work will be built".⁴

A few studies have been undertaken on the area of effect of mass media and school but the investigator did not come across any study related to effect of mass media and text book on the word power of the students of class VIII.

However, in the present study for the sound base of the investigation some reviews and inferences are taken into consideration by the investigator. For the purpose of reviewing and drawing inferences these studies may be grouped into the following: -

- (1) Studies conducted in India.
- (2) Studies conducted abroad.

2.2 Studies Conducted in India

Studies conducted regarding the impact of Television on student's learning.

Sindhi (1963) conducted a study of the provisions prevailing and the use being made of television in the teaching of Hindi to Class-X of Delhi Higher Secondary Schools.

Naureth (1966) evaluated the Delhi Television Project,, in its early stages. His main hypothesis had to do with kinds of knowledge that would be better learned with television than without it. He divided the questions into three types (1) Factual- things learned by heart from books or lectures, (2) Visual, where the student draws primarily on experiments, diagrams or

⁴cited by Aggrawal, J.C.in Educational Research : An Introduction. New Delhi, Arya Book Depot., 2002. 152 P.

pictures, and (3) Under-standing- where the student has to draw on his ability to generalize, to make deductions, to recognize a problem or a connection, even when it comes in an unfamiliar form. He hypothesized that television students would do better with visual questions and about the same as control on factual questions; he left open the question, as to which group would do better with understanding questions.

In this study he reported four rounds of tests. Each round was given to a different sample of 250-350 television students and 100-150 control students. Television students did somewhat better over all and on all types of questions. They did best comparatively on visual questions and the difference was least on factual questions, thus being in general agreement with the hypothesis. The results that most surprised the experimenter were that television students did distinctly better on the understanding (problem solving) questions. One of the tests, he gave again, after a month's interval. The television students again did better, on all the three kinds of questions, but the difference between the television and non-television students was less on the delayed test.

Sharma (1967) studied the problems and challenges faced by the teacher in teaching through television in the Higher Secondary Schools of Delhi.

Swami (1967) conducted a study to find out the opinion of teachers and students of Educational Television Schools regarding television lesson in physics.

Studies Conducted Regarding Learning Through the Medium of Television and Their Comparison with Other Media or Traditional Teaching:

When television was introduced in the schools the research on educational television was concentrated on its effect as compared to traditional/conventional on teaching. Later some studies were conducted to find combinations, which would be more efficient than only classroom teaching or only television teaching. Some of these studies are mentioned in this section.

Day (1968) studied the relative effectiveness of radio and television. The study indicated that on an average, television viewers gained and retained higher knowledge than radio listeners in all the programmes. The extent of average gain in knowledge with television viewers was 30.95 per cent against 21.22 per cent with radio listeners.

Sethi (1976) conducted one investigation on, '**A Study of a Programme in English Spelling in Relation to Visual and Auditory Presentation**' for his Ph.D. work.

The objectives of the study were to find out:

- The relative merits of visual and auditory modes of presentation for learning programmed material.
- The comparative effects of visual and auditory modes of presentation of programmed material performance on delayed test, and
- The comparative effects of visual and auditory modes of presentation of programmed material among boys and girls.

The sample consisted of 180 boys and girls studying in standard X of four English Medium High Schools at Simla. The McClellands T.A.T. and

verbal reasoning test were used in the study. 'Analysis of variance' and 't' test were employed to analyse the data.

The findings were:

- The auditory mode was found to be superior to the visual mode in presentation of the programme in English Spelling to Class-X students of English medium schools.
- Girls performed better than the boys.
- The auditory and sex interaction was not found to be significant, the auditory and time factors were not found to be significant.
- The interaction difference in the performance of boys and girls appeared to be independent of the modes of presentation.
- Time of test appeared to have a significant effect on the performance of boys and girls.
- Boys seemed to perform better on the delayed test in terms of their performance and the immediate tasks.
- The auditory mode of presentation was more effective for performance on the delayed test.

Aghi (1977) that TV exposure of Science education programmes stimulated an interest among the experimental school children of Grades III and V. They became "High" performers from "Low" performers compared to control school children among which the trend was "low" to "medium" and "medium" to "high" performance. Out of seven items tested, statistically significant information gain as a result of TV viewing of Science education Programmes was observed on items like "Fuel", "Plant Root System", "milk", "Transportation" and "counting".

In a study conducted by Space Applications Centre, Ahmedabad (1979) in Kheda, a series of Science programmes for children of 6 to 12

years were transmitted. These programmes were on nutrition, hygiene, environmental science, nature and the Universe, etc. Various questions were asked in order to know the impact of the ETV Programmes. The children of experimental villages gave appropriate answers, in response to questions relating to principle of hygiene, simple experiments, and information about surroundings as compared to control villages.

Kanade (1982) studied the impact of instructional television on the behaviour of the rural elementary school children. The sample consisted of 216 children drawn from television and non-television schools. The major findings were as follows:

- (a) Creative behaviour of the children was found to be positively influenced as a result of exposure to instructional television. Verbal and non-verbal aspects were influenced, to some extent.
- (b) Curiosity behaviour was not affected. But inquisitive aspect of curiosity appeared to have been stimulated.
- (c) Children's language fluency was improved. But language refinement remained unaffected.
- (d) Children showed more positive attitude.
- (e) There was no evidence to suggest that intelligence together with television influenced criterion behaviour.

Kumar (August 1977) is one of the most extensive studies attempted in India so far. The general objectives of this investigation were:

- (a) to study the changes in the behaviour and cognitive development of primary school children exposed to SITE programmes.
- (b) to study changes in the behaviour, attitudes and teaching strategies of teachers of schools where SITE Programmes are shown.
- (c) to compare the impact of these programmes on different grades.

(d) to study the difference in the impact, if any, in different regions.

The major findings of the study were noticed in the following areas.

The improvement in language of children exposed to TV was quite evident. Four sub-tests were administered to samples of two populations from six clusters. Out of 48 recording of difference between gain scores of experimental and control groups, 46 were positive i.e., in favour of experimental group. As many as 33 differences were statistically significant.

Going to the evidence of significant differences, the younger children seemed to have benefited in language development more by this intervention than the older ones. The general rate of growth of language may be different for two age groups, the rate being higher for younger ones.

The study also revealed some interesting findings about Orissa. In Oriya, for some reasons, the proportion of telecast in dance and music was much more than say, in Hindi, wherein many more things are shown or discussed. Still the children of Orissa did show better gain in their mother tongue than children in Hindi speaking regions who had to remain content with the programmes produced in Delhi for the entire region.

In contrast to language development, the picture was neither very clear nor persistent for achievement in other school subjects. In none of the subjects did the experimental group score better in all (or most) States.

On the whole, it seemed that exposure to SITE did not affect children's achievements in school subject or affected it to a very small extent. It may be recalled that to begin with no direct relationship between

SITE Programmes and achievements was visualized. Later on, a large chunk of Science programmes was introduced and even though it was not based on the curriculum of any State, it did overlap with the curricula in science of many States. The achievement of experimental group was not persistently better in Science.

That the children did not learn from the content presented in telecast was evident from their achievement in science which was dealt with specifically in the programmes. One possibility was that the programmes went over the heads of the children. Another, that they were so different in their approach, that even though they had a positive influence, it was not caught in the tests. Thirdly, all the programmes were prepared counting on teacher-intervention in the form of pre-telecasts and post-telecast activities.

The study concluded

"It is sensible not to deal with the syllabus. There is so much else to know, to learn and to explore. The media should continue to expose the world which is larger than that the school text books can present".⁵

Samant (1983), studied the Role Efficacy of Communication Media (Radio and TV) with the main objective to find out to what extent a climate for development has been created by extensive use of media. Through the measurement of "gain" in knowledge (Impact) and attitude, and the extent to which instructional communication (the content) have been utilised by the audience, he made a thorough analysis of the role efficacy of the two broadcast media: Radio and TV.

⁵ Mohanty P.C., Mass-Media and Education; New Delhi, Ashish Publishing House, 1992. 30. P.

In his study Samant made a comparison between the two media between treatments (Exposure to media and no exposure) and between occasions (three different durations of exposure) in order to compare gain in knowledge and change in attitude of the target groups at different levels. While between media differences at various exposure levels were found to be non-significant, between treatment and between occasions differences were found to be significant.

Results of the multivariate analysis for each of the two criterion measures, for the "gain" for three durations of exposure, revealed that the difference between Television Experimental and Control Groups was non-significant, but the difference between Radio Experimental and Control Groups was highly significant.

Seth (1983) studied the effectiveness of educational television on the educational development of primary school children. The results of the study indicated that the scholastic achievement of students exposed to ETV Programmes along with intervention was higher than the ETV and non-ETV groups. For ETV group also the results were in positive direction on achievement in language and science but not in social studies. Out of the nine comparisons made in three school subjects, only five reached the level of significance.

Centre for Educational Technology, N.C.E.R.T. (1983) conducted a study of the impact of educational television programmes on the children Class-IV and V Sambalpur District (Orissa). The study had shown a positive effect of educational television on pupil's learning. The extent of gain, was, however, only 3.2 per cent as compared to the children of non educational television school. However, the gain was not statistically

measured. One of the objectives of the study was to invite suggestions of teachers to make the programme more effective. Sixty-five per cent of the teacher respondents (N. 31) suggested that the educational television programmes should be supplementary to class-room teaching rather than of enrichment type alone as this would be a better way of using the medium for improving the teaching-learning process. The researches added to the basis of their observations that teachers were not always confident to teach all topics effectively and wanted television to support them. The study concluded that a three pronged approach would be useful for the effective utilization of medium: (1) to improve the functioning of television sets, (2) to improve the quality of educational television programmes and (3) to improve the utilization of educational television programmes.

2.3 Studies Conducted Abroad

Gordon (1960) in his experiment of Language teaching through television has showed some difference between television teaching and face-to-face teaching by the regular teachers. The students of Hawaiian schools who had pronunciation problems were taught remedial speech by either television or their own regular teacher. The students performances were recorded through tape-record before and after the remedial programme. Students taught by television had an average gain score of 9.8 as compared with slight average loss of 0.4 for students taught by their own teachers.

Impact of Television on Students' Learning:

Edward (1975) has studied the following subject: "**The Relation of Selected Television Teaching Methods to Learners' Preference and Achievement**".

A major variable was the exclusion or inclusion of persons in addition to the instructor in the televised teaching formats. Tape one used only the instructor in the presentation.

The 229 subjects used for testing were enrolled at Iowa States University in a psychology course. Videotape teaching format treatment was randomly assigned to experimental groups. The subjects viewed the tapes as part of their normal course.

From the experimental results, it could be concluded that in populations similar treatment groups, an increase in achievement will result from the use of any of the three television teaching formats. However, the inclusion or exclusion of students in the format will not provide any significant difference in achievement or preference. An exception to this is the indication of a relationship between teaching format and students sex and their effect on achievement.

"The Correlation Between Television Viewing Practices and Academic Achievement"

This study established that a negative correlation coefficient existed between the number of television viewing hours per day and SRA Achievement Test scores of selected fourth and seventh grade students in one south-west Louisiana Parish. The general hypothesis tested was that an increased number of television viewing hours resulted in decreased achievement test scores in all components of the SRA achievement battery.

The control group to be tested consisted of 457 fourth grade students and 445 seventh grade students in one Parish school system. After the necessary authorization was obtained from parents and school authorities,

the investigator conducted the surveys of two viewing days per week for four weeks. Each subject marked the appropriate item. Number of hours viewed and SRA Achievement Test data were then correlated by computer, and a coefficient was established by using Pearson's product moment procedure. A negative correlation indicated that there was an inverse relationship between the number of television hours viewed and scores on the SRA Achievement Test. The correlation was statistically significant at the 0.01 level of confidence. In the group surveyed, SRA scores decreased when number of hours of television viewing increased.

Clements (1982) carried out one research project on "**The Relationship Between Television Viewing, Selected Students' Characteristics and Academic Achievement**".

Data gathered through the 1981 Pennsylvania educational quality assessment for students in grades five, eight and eleven were analysed to determine the relationship between the amount of television viewing and academic achievement.

Findings of the study indicated that:

- A consistent pattern of negative correlation between the amount of television viewing and academic achievement existed for all groups examined in this study, although television viewing accounted for only a small percentage of the variance in achievement.
- A significant negative relationship existed between the amount of television viewing and academic achievement for sub-groups based on sex, race, type of community and socio-economic status.
- A substantial drop in mean score achievement occurred when students watched five or more hours of television daily.

- A significant negative relationship existed between the amount of television viewing and academic achievement even when socio-economic status was controlled.
- The largest shift away from the amount of time spent viewing television occurred between grades eight and eleven.
- Blacks, students from urban communities and low socio-economic level spent more hours watching television daily although viewing habits were modified by age.

Edger (1983) undertook one study on "**The Relationship of School Achievement to Time Spent Watching Television Among 10th and 12th Grade Pupils in United States High School**".

The research was conducted in two general ways:

- Standardized reading scores, used as an indicator of achievement, were correlated with the amount of time pupils watched television.
- Teacher-assigned grades were used to represent pupil achievement and correlated with television viewing time. The reading scores used met conventional standard for validity and reliability while the grades were students' self-reported.

Increased amount of time spent watching television, for these samples of 43000 pupils in United States High Schools, were found to be a statistically significant predictor of lower achievement. These findings were strongest when viewing time was correlated with standardized reading scores. However, increased viewing time was a predictor of lower teacher assigned grades as well. Because of the large sample size the researcher calculated and reported effect on sample sizes in all findings. In subordinate tests, the increased viewing time was significantly associated with lower

achievement achievers. In fact, the results were most often mildly positive, but not significant for low achievers.

Gadey (1984) carried out an investigation on "**Television and Scholastic Achievement: A Study of American High School Students**".

This study of the reciprocal relationship between media used and academic achievement among American High School students focuses on the processes by which television influences achievement and achievement influences media used. Premised on negative displacement, it was hypothesized negatively because it displaced other more beneficial activities and the negative effects of television should be greater on those who came from richer educational environments since negative displacement would be greater on them. It was proposed that print use has a positive impact and for both television and print their impact would be greater on reading than on math's achievement.

It was theorized that media are used to maintain cognitive equilibrium and selected on the basis of achievement according to Zapf's principle of least efforts. Thus, it was hypothesized that achievement, particularly reading achievement, negatively influenced television use and positively influenced print use.

The evidence does not clearly support the hypothesis of negative effects of television on achievement, or the process of displacement or of selection of television according to achievement specifically, for all students television effect on achievement and achievement effect on television, are relatively consistently, but not significantly, estimated as being negative. And the estimated effects were not more negative for those in high resource environments. For print use the evidence was stronger, suggesting print had

positive effects, at least on reading achievement, and that print was selected by those with higher reading achievement. Additionally, the evidence suggested that other hypotheses on the process of television's effects were generally not well supported either.

2.4 Conclusion

After scrutinizing critically the related studies the investigator arrived at the conclusion that the nature of exposure of the students to television programmes is of two kinds.

- (1) Exposure of students to different programmes of television.
- (2) Exposure of students to educational programmes of television.

In other countries, the studies conducted were concerned with the exposure of students to different television programmes, whereas studies conducted in India concentrated on the exposure of students to television programmes which are related to education, and structured programmes with definite educative value. Thus former studies reveal the fact that there is a negative effect of television on the students' achievement. But the latter studies, since they were structured programmes, show the positive correlation between the television programmes and students' achievement.

The effect of television on the academic achievement depends upon the type of programme to which students are exposed. However, as far as Word-power enrichment is concerned, the researcher hypothesizes that, the effect of television programme, irrespective of the programmes the students are exposed to is always positive.