#### Chapter 2

### REVIEW OF THE RELATED LITERATURE

Since the introduction of television in the 1950s, considerable attention has been given to the possible impact of television during childhood and adolescence. This has led to studies on a wide spectrum of television-related phenomena. In this review, focus and emphasis are given to studies on amount of television viewing and programme preference.

### 2.1 Historical Background

Historically, the media have raised much concern about their influence. Parents and educators have long been concerned about the possible effects of comic books, movies, the radio and television on children.

The rapid growth of the motion picture industry in the 1920s has raised public concern over the possible effects of the movies on children's moral values and behaviour. As a result, systematic research

was carried out to study the effects of movies on attitudes, values and behaviour.

When television became reality in the early 1950s in the United States, there was optimism and expectation of television as a great aid to learning. This anticipation turned to dismay as the negative effects seemed to outnumber the positive. The public was concerned that rising rates of juvenile delinquency might be traced to the viewing of programmes with themes of violence. Since then, public interest has been sustained. This interest has not only focused on aggression and violence but also on other aspects of children's development and behaviour. One particular concern was its potential effect on academic achievement.

The appearance of television and its universal popularity raised concern about its effects on children and their school performance. These fears subsided after early studies failed to produce clear evidence that television was related to low academic achievement. However, an unprecedented decline in the national Scholastic Aptitude Test (SAT) score averages in the United States rekindled the issue. This led to studies which provided evidence of a small negative effect of television viewing on achievement.

## 2.2 Viewers and Non-viewers of Television

In the early days of the introduction of television, one of the techniques for studying the effects of television was to compare children who lived in homes with television with children whose homes were without television.

In December 1950 to February 1951, Maccoby (1951) interviewed 332 mothers of children between the ages of 4 and 17. Maccoby found that children in homes with television spent at least two and a half hours on weekdays and one hour more on Sundays, watching television. For children in homes with television, moviegoing, radio listening and reading had decreased. However, these children spent so much time watching television that their total mass-media time per day was about one and a half hours greater than in homes without television. Much of the television time was taken from play time with other children, helping with the household work and bedtime.

The most notable examples of these early studies are the ones made by Schramm, Lyle and Parker (1961) in the United States and Himmelweit, Oppenheim and Vince (1958) in Great Britain. The research designs of these two major studies of the introduction of

television enabled the researchers to study the effects of television viewing on children's leisure, knowledge and values. These two studies were among the earliest to provide systematic knowledge about the influence of television on the lives of children.

Himmelweit, Oppenheim and Vince (1958) adopted the experimental method to study 946 thirteen- to fourteen-year-olds and 908 ten- to eleven-year-olds. Half of each group were viewers (who had television at home) and the other half were controls (who had no television at home). The groups were matched for age, gender, mental ability and social class. The subjects were asked to keep diaries for one week and to answer questionnaires containing detailed questions about their leisure activities and interests.

In addition to this survey, the British researchers also had the opportunity to conduct a before-and-after study with a smaller sample of 376 children in Norwich. Questionnaires were first administered at a time when hardly any family had a television set. A year later, comparisons were made between a group of children who had since acquired television sets and another group who had not.

The main findings of the study may be summarised as follows:

- (a) Viewers in both age groups watched 11 to 13 hours a week which was more time than they put in any other leisure activity.
- (b) Lower viewing was related with high intelligence, an active life, and parental example.
- (c) The chief correlates of heavy viewing were lower intelligence, insecurity, maladjustment and inadequate contacts and friendships.
- (d) No social class difference was found in amount of viewing.
- (e) Boys and girls also did not differ significantly in their amount of viewing.
- (f) In their school work, brighter children who were viewers fell behind children who were non-viewers.
- (g) The majority of children watched programmes which were designed for adults, particularly crime thrillers. Documentaries and discussions were not popular.

Schramm, Lyle and Parker (1961) carried out a series of studies between 1958 and 1960 on the use of television by children. The eleven studies involved 5 991 students from the first six grades and the eighth, tenth and twelfth grades, 1 958 parents and several hundred teachers and officials in ten communities in the United States and Canada. The communities studied represented cities, towns and

isolated areas. Schramm, Lyle and Parker also investigated two communities in Canada which were similar in most respects except that Teletown had access to televisions whereas Radiotown did not.

The American researchers provided a detailed account of children's usage of media at different age levels. The findings may be summarised as follows:

- (a) In the early grades, children spent an average of two hours a day on television. Thereafter, viewing increased to more than three hours a day at the sixth and seventh grade. Viewing time decreased throughout high school to between two and two and a half hours on weekdays.
- (b) Brighter children watched more television until about the age of eleven when high IQ children watched less than the low IQ children.
- (c) Children of highly educated parents watched less than other children.
- (d) The amount of viewing of boys and girls did not differ significantly.

- (e) Children with television in the home entered school with a greater vocabulary than those without television. However, among older children, heavy viewers do less well in school than light viewers.
- (f) Children watched mostly adult programmes of the fantasy and entertainment type.

The easy availability of television later made it nearly impossible to locate people who have not been exposed to television before. Early studies of the before-and-after type were replaced with correlational studies which focused on the amount of viewing time and made comparisons between heavy viewers and light viewers of television.

## 2.3 Factors Influencing Amount of Viewing

Estimates of average number of viewing hours conceal tremendous variations. Some children watch less than one hour of television in a day. At the other end of the spectrum are the heavy viewers who watch up to five or six hours of television per day. However, heavy viewers have been defined in various ways in the studies. Himmelweit et al. (1958) described the top third of each age group in their sample in terms of the amount of viewing as television

'addicts'. Hendry and Patrick (1977) classified heavy viewers as those who estimate that they watch television for four hours or more on an average weekday evening and for several hours on weekends. Medrich (1979) categorised heavy viewers as those who watch television for three hours or more daily.

Researchers have been concerned with the effects that heavy viewing may have on children and have tried to investigate what kind of children become heavy viewers.

Furu (1971) studied children in three age groups (510 9-year-olds, 560 12-year-olds and 1800 15-year-olds) in Tokyo, Japan. Surveys were conducted which included administrations of questionnaires, ability tests and knowledge tests. In his study, Furu took up various variables which might be related to television behaviour. The variables were: (a) demographic factors such as social class, living conditions, age and gender; (b) individual predispositions such as intelligence and adaptability; (c) social relations such as reference groups and parent-child conflicts; (d) sociological and psychological factors such as the viewing situation in the family, attachment to television and self-control.

Furu found a significant partial correlation between social class and viewing hours. The four categories of social class which was based on parents' occupation were: (a) Class I, specialists and administrators; (b) Class II, owners of small enterprises; (c) Class III, office workers and technicians; and (d) Class IV, skilled or unskilled labourers and factory workers. Children in Social Class I watched the least television, those in Social Class IV watched the most and those belonging to Social Classes II and III were midway.

Furu found that the viewing situation in the home greatly influenced children's amount of viewing. 'Viewing situation' referred to parental control and the viewing habits of family members. Furu made a scale from the answers to such questions as: "Does some member of your family watch television constantly?", "Do you sometimes do your homework in the room where the TV set is placed?", "Are you disturbed by TV sounds while you are doing homework?" and "Until what time are you permitted to watch TV?". High scores on the scale reflected a highly tempting television viewing situation. Furu found that the television viewing habits of family members as well as parental control affected the amount of viewing of the children. Children from highly tempting viewing situations

watched more television than children from homes where parents regulated their viewing time.

In Medrich's (1979) study, a survey of children's after-school time use was conducted with 764 sixth graders and their mothers in California. Medrich found that families with lower incomes and mothers with lower levels of education watched more television. These families also comprised the majority of homes where parental control of television viewing was weak. Medrich called these households 'constant television households' which he defined as homes where the television is turned on for most of the day whether or not anyone is watching. The majority of children from constant television households were heavy viewers.

In the research by Murdock and Phelps (1973) on the influence of television and other media on secondary school children, questionnaires were administered to 1071 first year and third year students. The findings indicate that the two principal predictors of the amount of viewing were type of school and social class. Grammar school children watched less television than comprehensive and secondary modern school children. Father's occupation was used as the principal indicator of social class which was categorised into

middle-class, upper working class and lower working class. Forty per cent of lower working class children watched four hours or more of television on an average weekday evening whereas the corresponding proportion for upper working class children was 35 per cent and for middle class 25 per cent.

The researchers explained the findings as due to the differing amenities in the home. In many low SES homes, the television occupied central position in the only living room. Therefore, children tended to watch television whenever the set was on. This is in contrast with the middle class homes where there was often a second living room for the children to go to if they wished to avoid watching television. Secondly, parental control was strong in middle class homes.

As in most of the other studies, Ward, Mead and Searls (1983) found that the disadvantaged groups (children from low SES families and whose parents' educational level was low) watched the most television.

In the study by Francis and Gibson (1993), social class was measured by father's occupation. The researchers also found that children from low SES families watched more television.

However, no significant social class differences were found between heavy and light viewers in the study by Hendry and Patrick (1977). The sample consisted of 1044 boys and 1258 girls aged 15 to 16 from twelve schools. Questionnaires were used to obtain data on amount of viewing and social class. Viewers who watched television for four hours or more on a typical weekday evening and for several hours on weekends were classified as heavy viewers. The three categories of social class according to parents' occupation were: professional, non-manual workers and manual workers.

Ward, Mead and Searls (1983) investigated the television viewing habits of 9-, 13- and 17-year-olds based on data gathered by the National Assessment of Educational Progress (NAEP) during its 1979-1980 assessment of reading skills. It was found that the time spent on watching television decreased as age increased. Students who watched more than four hours of television a day comprised 25 per cent of 9-year-olds, 17 per cent of 13-year-olds and only 8 per cent of 17-year-olds. In all age groups, boys watched more television than girls. The researchers explained that the gender difference was partly because girls spent more time on reading and doing homework.

The findings of the study by Francis and Gibson (1993) also disclosed that the amount of viewing decreased slightly as the ages of the children increased. Boys spent slightly more time watching television than girls. In their study, questionnaires were completed by 5 432 pupils between the ages of 11 and 15 years.

One of the main findings of Furu's (1971) study was that boys watched a greater amount of television than girls. Furu explained that this difference could be due to the different role expectations of boys and girls. In Japan, girls were expected to help with the household chores, leaving them with less opportunity to watch television. Boys, on the other hand, faced fewer restrictions in television viewing.

## 2.4 Television and Academic Achievement

Since television takes up so much of children's time, it diverts them away from activities such as reading and completing homework. This may have a negative effect on achievement. Researchers have responded to this concern of the relationship between television viewing and achievement with mainly non-experimental bivariate and multivariate studies.

In a major study by Himmelweit, Oppenheim and Vince (1958), school performance was measured by teachers' assessment based on school marks and test results. Comparisons between viewers and non-viewers were restricted to children from the same classroom. Each class teacher was given a form on which the viewers and the controls were listed in pairs. The teachers (who did not know the viewers from the non-viewers) were asked to compare each pair on a number of school subjects. Altogether, assessments were obtained for 172 pairs of 10- to 11-year-olds and 13- to 14-year-olds. The results showed a slight but non-significant tendency for the non-viewers to be ranked better by their teachers: 47 per cent of the controls did better than viewers matched with them whereas only 36 per cent of the viewers did better than the controls.

Schramm, Lyle and Parker (1961) administered a standard test of oral vocabulary to the first graders in Teletown (with access to televisions) and Radiotown (without access to televisions). Children of high intelligence as well as children of below average intelligence in Teletown scored higher in vocabulary than the corresponding children of Radiotown. In the upper grades, tests to measure the children's knowledge in a variety of areas such as science, literature and general

knowledge were given to sixth graders and tenth graders in Teletown and Radiotown. No significant differences were found between the children of the two communities. The findings indicated that younger students with television have higher vocabulary test scores. However, there was no evidence of television-related advantage to children in the upper grades.

In the same study, children in the eighth, tenth and twelfth grades were asked about the helpfulness of television viewing to school work. In all grades, the high intelligence students were more likely than the slow ones to say that television helped them in school. In the twelfth grade, more students indicated that television did not help them in school.

A bivariate study on the relation between television and achievement was carried out by Ridder (1963) on seventh and eighth graders of three junior high schools in California, Folders to record all television programmes viewed during a 7-day period were administered to all 2428 students. A random sample of every tenth child listed alphabetically was used as the source of data for the study. Following the return of the folder, questionnaires, consisting of 11 questions on students' background and 25 questions on television

habits and opinions, were administered to the subjects in their respective classes. Subject grades were obtained from the school records. The upper- and lower-achieving groups were compared on the total viewing hours. No significant relationship was found between academic achievement and viewing hours.

Thompson (1964) reported a negative correlation of r = -.29 between television viewing hours and achievement for a sample of 100 third graders. A control for mental age resulted in a partial correlation of r = -.02. Thompson concluded that intelligence accounted for the relationship between television and achievement as the less intelligent child watched more television.

In Furu's (1971) study, achievement was measured by the total scores for all subjects obtained from the final-term records. The achievement scores of the heavy viewers were lower than the scores of the light viewers in all the three age groups (9-, 12- and 15-year-olds). Furu found a negative relationship between television viewing and achievement when intelligence was held constant. When additional controls such as social class, creativity and positivity were introduced, the partial correlation between television viewing and achievement did not reach the significant level of 0.05.

Childers and Ross (1973) used a sample of 100 middle elementary pupils to study the relationship between amount of viewing and achievement which was measured by grade point average (GPA) scores. A multiple regression analysis was carried out with GPA as the dependent variable and IQ and IOWA Basic Skills scores and viewing hours as predictors. The relationship between viewing hours and GPA was negative but not significant.

Hornik (1978) conducted a longitudinal study on the effects of television access on achievement among El Salvadoran children in grades 7 to 9. Three cohorts of students were followed over a 2- to 3-year period: 902 seventh-grade students in Cohort A were followed from 1969 to 1971; 707 students in Cohort B were followed from 1970 to 1972 and 600 students in Cohort C were followed over a two-year period from 1971 to 1972.

Achievement in mathematics, science and social science was measured before and after each school year. The examinations comprised 50 multiple choice questions derived from the El Salvadoran curricula. General ability and reading ability were also measured. 'Television ownership' (defined as having a television in the home) and television watching (defined as number of days spent

watching television in a week) were ascertained by questionnaire. Hornik used the data to ascertain two types of cognitive effects of television use: the effects on short-term achievement (as measured by achievement in Mathematics, Science and Social Science) and on long-term growth in basic cognitive skills (as measured by the general ability and reading test).

The findings showed that television ownership was positively correlated with achievement in Mathematics, Science and Social Science. However, when other variables such as parents' education, age and gender were introduced as controls, none of the partial correlations were significant. Similarly, television watching was significantly correlated with achievement in the three subjects but non-significant partial correlations were obtained when controls were introduced. The findings supported the null hypothesis that no consistent relationship existed between television viewing and specific school achievement.

In the analysis of long-term effects, each cohort was divided into three groups: Group I included students who owned a television throughout the duration of the study; Group II were students who obtained a television during the study; and Group III were students

who did not own a television throughout the study. General ability and reading skills were measured over a period of two to three years. It was found that Group II students showed less growth in reading ability than the other groups. The results were replicated in all three cohorts.

The findings of negative effects on basic skills tests but not on specific subject achievement tests indicate that access to television (in particular recent acquisition of a television set) was related to long-term growth but not short-term achievement. This suggests that the negative effect of television on achievement was small but cumulative.

In the study by Morgan and Gross (1980) of a sample of 625 sixth through ninth grade students, achievement was measured by the 1970 edition of the California Achievement Tests. The tests included the Short Form Test of Academic Aptitude which was used as the IQ measure. Amount of television viewing was obtained from a direct question. SES was measured on the basis of the father's occupation and educational level.

Morgan and Gross found a negative correlation between achievement and viewing hours. The correlation did not change significantly when controlling for gender, grade, SES, birth order and number of siblings. The partial correlations were reduced when IQ

was held constant, except for achievement in reading and comprehension. The results concurred with the findings of Hornik (1978).

The California Assessment Program or CAP, which annually assesses and investigates factors that influence students' achievement, also found an inverse relationship between television viewing hours and achievement (California State Department of Education, 1980). The CAP test, Survey of Basic Skills, consisted of three subtests: reading, written expression and mathematics. In 1980, the CAP for the first time required more than 280 000 sixth grade students and 230 000 twelfth grade students to indicate on the assessment sheets how much time they spent watching television, doing homework or assigned reading.

At both grade levels, the test scores for all portions of the CAP tests decreased as viewing hours increased. Among the sixth graders, achievement became noticeably worse for students who watched more than four hours of television in a day. This sharp drop in achievement at the 4-hour point was not observed among the twelfth graders.

The negative relationship was more pronounced for the twelfth graders than the sixth graders and for high SES students than low SES

students. But for the lowest SES students (parent's occupation in the category of unskilled workers), achievement scores increased as viewing hours increased up to three hours. When viewing hours exceeded four hours for all the subjects, achievement dropped. This means that viewing more than four hours a day was associated with lower achievement, regardless of social class.

Fetler (1984) used the results of the CAP tests and survey of television viewing habits conducted in 1981 to investigate the relationship between television and achievement. The study sample comprised 10 603 sixth graders. Fetler noted that most studies have tended to find a negative correlation between viewing hours and achievement in the area of reading but not in other content areas. However, Fetler found a negative correlation in all the three areas measured by the CAP: reading, written expression and mathematics. The findings of the study confirmed those of the previous CAP study. Fetler explained that these findings may be due to the larger sample size in the CAP studies.

Fetler also found a sharply lower achievement for students who watched more than six hours of television a day. Fetler (1984, p.117) concluded, "There appeared to be a 'threshold' amount of viewing

beyond which television has a striking negative association with achievement which is not easily explained by other variables".

With regards to the effect of the interaction between viewing hours and SES on achievement, Fetler's study replicated that of the previous CAP study. The negative relationship was more pronounced for students from lower SES.

Fetler also compared heavy viewers and light viewers (viewers in the upper and lower ten per cent of the sample) on their viewing habits. Some of the findings were: (a) heavy viewers were more likely to do homework in front of the set, (b) to watch the same programmes as their parents and to discuss programmes with them, and (c) to watch more often before school and late at night.

During its assessment of reading skills in 1979-1980, the National Assessment of Educational Progress or NAEP also surveyed the viewing habits of 9-, 13- and 17-year-olds (Ward, Mead and Searls, 1983). Students were asked to indicate the number of hours watched on the previous day according to the categories: (a) under an hour; (b) 1 to 2 hours; (c) 3 to 4 hours; and (d) more than 4 hours. The findings disclosed that reading skills of students increased as television viewing also increased up to one to two hours per day for

the 13-year-olds and up to three to four hours per day for the 9-year-olds. For the 17-year-olds, reading skills decreased as television viewing increased. However, for all age groups, students who watched more than four hours of television per day had the poorest reading skills. The findings confirmed those of the CAP studies where students' test performance became noticeably worse for those who watched television for more than a certain number of hours per day.

Williams, Haertel, Haertel and Walberg (1982) employed the techniques of research synthesis to integrate findings on the impact of television viewing on achievement. In their research synthesis, correlation coefficients between television viewing and achievement were calculated from 23 studies which represented findings in England, Japan, Canada and the United States. The subjects of these studies ranged from kindergarten children to twelfth graders. Different SES and races were also represented in the studies.

The 23 studies spanned a period of 26 years from 1954 to 1980. Sample sizes ranged from 67 to 33 233. Measures of achievement included grade-point averages, standardised achievement test scores, criterion-referenced tests and teacher ratings. Methods of

data analysis of these studies ranged from use of cross-tabulations and frequencies to cross-lagged panel correlations.

Findings of this research synthesis indicated a slight negative relationship between amount of viewing and achievement. However, the findings disclosed that there was a slight increase in achievement for viewing hours of up to ten hours per week. Beyond ten hours, achievement decreased as viewing increased.

The researchers explained that parental control was greater in homes where children watched less than ten hours of television per week than in homes where children viewed more than ten hours. Another possible explanation was that viewing which exceeded ten hours per week interfered with homework, reading and other intellectually beneficial activities.

The research synthesis of Williams et al. also showed that the negative correlation between viewing hours and achievement was stronger for girls than for boys and for high IQ students than for low IQ students.

The negative association between television viewing hours and academic achievement has been found to be more pronounced for certain subgroups. One of the highly susceptible subgroups that have

Department of Education, 1980; Furu, 1971). Television displaces homework and studying which are beneficial to academic achievement. The academic demands faced by students in the upper grades are greater and they need to spend more time on activities that are beneficial to academic success. The negative association between viewing hours and achievement is also more pronounced for children from high SES families (California State Department of Education, 1980; Fetler, 1984; Ward, Mead and Searls, 1983).

Walberg (1984) suggests that television reduces time spent on doing homework. Walberg's synthesis of 3000 educational productivity studies found that homework, especially graded homework, had a strong and significant relationship with school learning. The quality of homework time may also be reduced when television is watched while homework is being done. This division of attention may reduce the quality and productivity of this activity.

# 2.5 Measurement of Amount of Viewing

Most studies agree that children watch more television on weekends than on weekdays. However, findings on amount of weekly

viewing hours vary from 15 to 25 hours per week. The findings differ partly because the studies were carried out in different years and the samples were children of different ages. More importantly, the data were obtained in different ways.

A variety of methods for measuring children's viewing time has been used. These methods range from a simple question which asks for a general estimate of viewing time to elaborate diaries requesting information on students' after-school activities. For instance, the study by Childers and Ross (1973) used a questionnaire which asked for an estimate of the number of viewing hours on a typical weekday night (Sunday through Thursday nights were termed weekday nights because most children did homework on nights preceding school days). Morgan and Gross (1980) also used a questionnaire to obtain the number of viewing hours in a day. Francis and Gibson (1993) measured amount of viewing with two questions. The first was on the number of days television was watched during the previous week and the second on the number of viewing hours on the previous day. The CAP studies (California State Department of Education, 1980; Fetler, 1984) asked the sixth graders to indicate their viewing hours on the previous day on a 5-point scale which comprised 0-1 hour, 1-2 hours, 2-3 hours, 3-4 hours and more than four hours.

Zuckerman, Singer and Singer (1980) involved parents who were asked to keep a record of all the television programmes that the family watched during a 4-week period.

Thompson (1964) and Medrich (1979) were among those who used individual interviews with the children. In addition to the interviews, Medrich also asked the mothers to fill out a questionnaire on the amount of family viewing.

Researchers have pointed out that different methods of measuring children's viewing time give different results. Himmelweit et al. (1958) and Schramm et al. (1962) employed various methods in their studies and made comparisons of these methods to identify their strengths and weaknesses. Both studies found that the diary method tended to give lower estimates because viewing and other activities often took place simultaneously. In addition, the child did not always write down what he had viewed. The two studies agreed that using programme-recall lists gave the most accurate time estimates. However, the programme-recall lists referred only to one particular week, which may or may not have been typical. Besides, written

programme-recall lists may sometimes be overestimates since some children may watch television in order to have something to record. Free estimates were judged to be inaccurate, especially from younger children. However, estimates from children in the sixth grade or higher were fairly accurate.

According to Furu (1971), the time-scaling method was simpler and more accurate than the programme-recall method. In his study, fourth and seventh graders were asked to fill in a time-scale sheet (1 unit = 15 minutes) to show the amount of their TV viewing from Thursday through Sunday. The teachers were asked to spare five minutes before the commencement of the first school period to enable the students to fill in the hours spent on TV viewing the day before. In the 10th grade, it was difficult to get permission from teachers to use their class periods. Therefore, the viewing time for weekdays, Saturdays, and Sundays, respectively, was asked for by direct questions. According to Furu, the use of direct questions to measure viewing hours was fairly reliable for children of higher grades.

### 2.6 Programme Preference

It has been found that the type of television programmes watched was related to children's reading habits and other school-related behaviour (Zuckerman, Singer and Singer, 1980). In a study of 232 third, fourth and fifth graders, demographic information was assessed by a questionnaire administered to the parents. Parents were also asked to keep a record of all the programmes that the family watched in a four-week period of 1978. The data were analysed in terms of the amount of time spent watching particular types of programmes. The categories assessed included cartoons, comedy, sports, game/variety shows, news/documentaries and drama.

In addition, teachers were asked to rate the children on three items which were their imaginativeness, attentiveness in class and enthusiasm in class. In one of the schools, teachers kept records of the number of books that the children read.

Findings of the study indicate that children who watched more fantasy violent programmes spent less time on reading. The researchers explained that fantasy violent programmes provide the same kinds of excitement as adventure books and comics. Therefore, needs for escapism and fantasy were similarly satisfied. The results

Oppenheim, 1958; Schramm, Lyle and Parker, 1961) which found that the most often watched programmes were those of fantasy and entertainment, namely comedy, adventure and mystery programmes. Information programmes such as news and documentaries were hardly mentioned as favourites.

In Thompson's study (1964), third graders were asked to name their three favourite programmes. Of the ten most popular programmes, seven were children's programmes, two were adult westerns and one was adult comedy. Of the total 42 programmes mentioned, 31 per cent were westerns, 23 per cent comedy and 16 per cent drama.

In the California Assessment Program study (Fetler, 1984), sixth graders were asked to estimate the frequency of watching each of 27 television programmes listed in the questionnaire. It was found that of the ten shows most frequently watched by heavy viewers, the majority of them could be classified as light entertainment. In comparison, the ten shows most frequently watched by light viewers were on public affairs, performing arts or educational programmes. None of these programmes were among those watched by the heavy

viewers. Fetler explained that the differences in programme preference reflect the home environment and the parents' views of television.

Parents of light viewers actively controlled their children's amount of viewing and the selection of programmes.

Gender and SES have been found to affect programme preference. According to Hendry and Patrick (1977), more boys than girls named sports as their favourite category of TV programme. Girls were more interested in soaps or serials. Boys also tended to watch more factual programmes than girls. Girls were more likely to watch films, plays and variety shows.

These findings were replicated in the study by Francis and Gibson (1993). In the study, students aged 11 to 15 years were asked to rate the frequency with which they watched 25 listed programmes on a 3-point scale: often, sometimes and never. The programmes were subsequently categorised into soap, sport, light entertainment and current awareness. Girls were more interested in soaps and light entertainment programmes. Boys, on the other hand, were more interested in sports and current awareness programmes.

The study also found that children from lower SES reported watching more frequently soap, sport and light entertainment

programmes. On the other hand, low SES children watched information programmes less frequently than high SES children.

### 2.7 Summary

Results of previous research, although not necessarily consistent, indicate that background factors such as age, gender, SES and influence of family and environment all bear some relationship to amount of viewing and programme preference. Almost all studies consistently report small negative correlations between amount of television viewing and achievement. Hornik (1981) noted that a large percentage of studies did not implement control variables. When control variables were introduced, the partial correlations between television viewing and achievement in most studies were reduced to almost zero. This means that the negative association may be a spurious one.