INFLUENCE OF TELEVISION ON ACADEMIC ACHIEVEMENTS OF SCHOOL STUDENTS IN KERALA

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By

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DECLARATION

I, Smitha P, hereby declare that this thesis entitled, **Influence of Television on Academic Achievements of School Students in Kerala,** is a bona fide record of research work done by me and that it has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title or recognition in the University of Calicut or any other Universities.

University of Calicut

Date: **Smitha P**

CERTIFICATE

This is to certify that the thesis entitled **Influence of Television on Academic Achievements of School Students in Kerala** submitted to the University of Calicut for the degree of Doctor of Philosophy in Journalism is a bona fide record of research carried out by **Smitha P** under my supervision and guidance.

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PREFACE

We live in a society drenched by mass media. Media developed in to an important educational tool and its role in shaping children's perceptions on society and the world cannot be ignored. Television has become an essential part of an adolescent's life. In such a situation, the intellectual and moral growth of adolescents is a major concern. They spend the vast majority of their leisure time with the media especially television. Many studies before have made it clear that television can influence the academic matters of the school students. However this form of media is still in promising state in Kerala. I wanted to concentrate my study within Kerala.

As such I wanted to convey the overview of influence of television on academic achievement of school students in Kerala. The goal is to provide a comprehensive research oriented treatment of how adolescents interact with the media and of the role it has assumed in their everyday lives.

The present study is organised in to five chapters. The first chapter introduces the relationship between television and adolescents, role of television in student's life and academic achievement, how much their family and school environment comprehend them in achieving their goal.

The second chapter presents the related relevant literature integrating the research done in the past in a chronological order. The third chapter details study objectives and methodology used. Analysis and findings are presented in the fourth chapter. The final chapter discusses the conclusion and recommendations of the study.

The overall outcome of the study points to the fact that there is a wider chance of using visual media particularly television as a strategic tool for teaching and learning process. Television is the most popular mass medium among the school students in Kerala. The present study, I believe, will be immensely helpful for media managers, educational media planners and curriculum developers. Governments may consider insisting a particular percent of educational content meant for students a mandatory component of daily television programming.

CHAPTER I

INTRODUCTION

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INTRODUCTION

It's all around us. Media, in the form of television, radio, newspapers, magazines, journals, and the Internet, exists almost everywhere in the modern world. This basic tool of information keeps us abreast with news and trends. The past decade has witnessed media sneak into every home worldwide. It has got interwoven into modern day living so intricately that media is now the part and parcel of people's lives. It plays a significant role in constructively changing society as a whole, and the youth in particular. The intensity of media influence is now recognised as a significant part of the social ecology of children and teenagers. In the past decade, this influence has become explicit and volatile. It has a huge impact on their lifestyle and is vital in shaping their personality.

Media plays a leading role in upholding education which persuades children's academic goals, achievement and behaviour. This is improving day by day with the convergence of media. Many researchers find a link between media use and children's creativity, language development, school-related learning and more (Anderson *et al.* 2001). Media has a tremendous influence on young minds in shaping their values and even attitude. Not only books, but television also helps improve the intelligence quotient (IQ) and general knowledge of every section of society. It is now an essential in every adolescent's daily life. On the other hand, there is also rising concern about the way media affects the youth. They are inundated with information, especially from the social media. The constant overload of information pushes them into believing that what's on media is the immediate reality. Studies show that audiences acquire information from media but may forget its source. At times, they are unable to recall whether an event was real or simulated.

The nature of content in media determines the effect it has on viewers. Exposure to media violence at a tender age has adverse effect on children. Exposure to media violence is a peril for people as well as for society. Drawing analogy, Anderson & Bushman (2001) shows the effect media violence has on a child's aggression is much more than the effect calcium intake can have on a child's

bone mass, or lead exposure on a child's IQ. Children who are exposed to media violence confirms to poorer academic performance than those who are not exposed to. It has an adverse impact on their psychological processes as well. The influence of media on children is steadily increasing as novel and more sophisticated media types are being continually introduced.

Television is considered one of the most powerful and popular mass media. As its users require the eyes and the ears, it is simply called the audio-visual medium. With the development of novel technologies, there has been a steady increase in the use of this media. It is an inevitable truth that television has become an integral part of modern life. Its growing criticism has done little to diminish its immense popularity, especially among children and the youth as it caters to their desires and moods.

Television and Adolescents

Television controls children's mind from a very tender age. It shapes their cognitive as well as collective growth. A major part of their life is spent watching television, so it plays a dominant role in their mental development and maturity. Television is one of the chief agents that teach adolescents about society. Just like family, peers and school friends, it enables them to identify their position in relation to society. It helps them differentiate between the right and the wrong, and choose a path for themselves.

But who is an adolescent? The task of defining an adolescent is difficult because each one has different and unique transition from the early years to later years of life. Adolescence is often characterised as a time of challenge and turbulence (Roth & Brooks-Gunn, 2000). The adolescent age marked dramatic body changes thereby the teens experience increased independence and a growing sense of self-discovery. Scholars who have studied adolescent development noted this developmental changeover between childhood and adulthood as vital.

Media provides adolescents with the basic lessons on norms and reinforces the values and beliefs present in society. They subconsciously internalise these and use them in life. Thus, media works as a much-needed informal teacher. Cultivation analysis observed television as a powerful medium that shapes people's perception

on a variety of subjects. It helps viewers form their own opinion on different topics. Even though the new technology and the Internet have gained vast reach, television still remains very popular among teenagers. Many research studies point out that adolescents spend most of their time watching television.

Diverse views are there regarding the children's perception towards television and their interaction with the medium. It is important to explore how society perceives children and television, and the interaction between these two. In America, youngsters between two and 17 years watch television for an average of three-and-half hours per day. One in five youngsters in the same age group watches television for more than 35 hours per week (Ozdemir 2006).

Adolescents undergo development on biological, physical, psychological, and social levels. These developments are accompanied by positive or negative behaviour, depending upon the environment the child is brought up in. They watch television for several purposes; it could be for leisure, to acquire knowledge or to satiate their interests. They identify with the content of television programmes. The content that they see on television screens has both positive as well as negative effect.

As a medium for children's learning, television is a potent medium of information, education, and entertainment. The term infotainment is often used in the context of television programmes. The word 'infotainment' is a portmanteau of information and entertainment. Many television programmes are created with the objective of blending information and entertainment to make the process of learning interesting for students. It is one of the most significant technological developments for the advancement of society (Kaur J 1998). Educational programmes provide opportunities for the adolescents to attain skill and knowledge and are thus, associated with academic outcome.

As television is a dominant feature in the daily lives of the youth, the medium becomes a major source of information about the world around them. Arguably, the proliferation and globalisation of media are among the key factors that have shaped the character of youth in many countries**.** Some of the respondents in a study (Okpala *et al*. 2012) agree that television viewing introduces different career opportunities and thereby expands people's professional horizon. On the other

hand, most of the respondents agree that television viewing inculcates violent behaviour in adolescents. In its report, American Academy of Pediatrics showed that television viewing has possible harmful consequences such as vicious or insistent behaviour, substance use, sexual activity, obesity, poor body image and lower school performance.

Television viewing has strong links to negative behaviour and poor school performance among children and teenagers (Christakis *et al*. 2004). Amplified viewing pilots to lack of interest, minimum attention span, and hyperactivity among pre-school children. In another study Schlozman,S.C reported that frequency of television viewing is correlated to the behaviour of young people. As the frequency of television viewing increases, deviant behaviours like sexual intercourse, drinking, smoking, cheating, and stealing also increases.

Landhuis *et al*. (2007) found an important link between childhood and adolescent television viewing behaviour. The early attention problem and their attention problems are correlated here in the study. The study concludes that too much television viewing may lead to attention problems among children and adolescents. Schemidt and Vandewater found that children who have been often exposed to television are more likely to lose attention than others. Television viewing is a very popular activity in which a lot of people take part. The viewers can be trained whatever thing from the contents produced by the television channels; it could be violence as well as care.

Television as a Medium of Instruction

Television is a very powerful medium available today which can be used effectively for academic purposes. Research shows that educational television is an effective tool which contributes to students' learnings and academic achievements. It works constructively in spreading and inculcating values that turn learning into a proactive process. Teachers make use of several tools to educate students, television being one among them. However, they do find television very useful in giving some enriching demonstrations. Several experiments have shown that instructional television can improve a classroom and has a constructive effect on students.

The year 1932 was a landmark in the history of television as it marked the beginning of using it as an educational medium. The State University of IOWA in

the USA attempted it on an experimental basis in a world fair. However, when World War II broke out television lost its prominence and its introduction became sluggish. By 1948, very few educational institutions were using television as an instructional medium despite the enthusiasm shown by educationists. Understanding the competence of television as an educational tool, “the Federal Communication Commission in the USA set aside 242 frequencies for educational broadcast on non-profit and non-commercial basis in 1952”.

Television has redefined every field, and education is no exception. In India, television was introduced primarily as an educational tool. Television remains a widely used medium for acquiring knowledge. It transforms messages to visuals that have the ability to remain in the viewer’s memory, quite unlike other modes of communication. This strong influence of television as an educational tool is reinforced by the fact that modern educational practices rely on visual presentation of content rather than the conventional way of using printed texts. Several experiments have been undertaken in the field of education by using television as the medium of communication. There are many studies related to the use of television as an educational tool.

While family conflicts have a negative impact on children, educational media has a positive influence on children’s reading skills (Vandewater *et al*. 2004). Other factors having a negative impact on children are maternal depression and lack of economic resources. The study revealed that family conflict is a powerful stressor in children’s lives, reading skills, and educational media use. The study suggests that parents should encourage educational television viewing. Television has its own role in enhancing the academic achievement of students; watching educational television programmes supplements school readiness and academic performance of the students.

Educational Television in India: An Overview

The government as well as private sectors has witnessed a tremendous growth of television, yet, there has been no significant growth of educational television in the country. In India, the history of educational television can be traced to the very inception of the audio-visual medium. Television was introduced in the country as an educational tool. Educational programmes were telecasted for students in

various schools of Delhi. The year 1959 marked the beginning of television being used as an educational medium in India. The government's agenda was to spread literacy and eradicate poverty. In 1961, the government started this service for schools. Educational development and entertainment became the new motto of the government. Many education-related programmes were produced and broadcasted on television.

The year 1975 witnessed the beginning of SITE (Satellite Instructional Television Experiment) in India. This was the government's strenuous effort to implement educational television programmes in the country. Television programmes telecasted using SITE were exclusively designed for the rural community in general and students in particular. A major outcome of SITE was the launch of Kheda Communication Project, an experiment to address the social tribulations present among the rural folks of Kheda district in central Gujarat. The instructional television project ran successfully for 10 years and showed how television can be used effectively for developmental and educational communication. Before the SITE experiment, television use in the higher education sector was limited to a few infrequent attempts at setting up video production facilities for in-house training and research activities institutions engaged in higher education.

SITE and the Kheda project brought about the understanding that television is a very powerful instructional medium. As a result, the University Grants Commission (UGC) of India started a countrywide classroom (CWCR) on Doordarshan's National Network for undergraduate and postgraduate students across the country in 1984. To propagate the CWCR projects among students, UGC established many media centers. The three levels of these centers were set up in different universities considering the inter-disciplinary nature of planning educational television programmes and the diverse needs of students and teachers in different geographic locations.

CWCR started as a one-hour afternoon transmission every day for six days in a week. It expanded rapidly in the next six years. The number of media centers which are producing these television programmes has increased from 4 to 13. The total number of programmes produced has proliferated from 109 to 1,800. This has completely changed the earlier dependence on foreign programmes. To boost

educational telecasts, the Ministry of Human Resource Development and the Indira Gandhi National Open University (IGNOU) launched Gyan Darshan, a satellite channel devoted exclusively to education.

India's experiment with direct broadcasting satellites for education provided valuable lessons to other developing countries involved in similar planning. However, as Mulay V (1982) observes, the fruits of technology, be they satellites, computers or other spin-offs, are merely tools that should be integrated into the entire planning scenario for education. EDUSAT, India's first and exclusive satellite for educational purpose which is conceived and developed by Indian Space Research Organisation (ISRO), is used to offer satellite-based education across the country, thereby creating a virtual classroom in rural areas. Nowadays, EDUSAT helps in building a learning environment and infrastructure to provide quality learner-centered education.

Gyan Darshan

On January 26, 2000, the Ministry of Human Resource Development, the Ministry of Information and Broadcasting, Prasar Bharti, and IGNOU jointly launched Gyan Darshan. The country's exclusive educational television channel offers interesting and informative programmes for specific sections of people such as pre-school children, primary and secondary school children, college and university students, youth seeking career opportunities, housewives, adults, and so on. In addition to educational fare, programmes from abroad are also broadcast to offer viewers a window to the world (Agrawal and Raghaviah, 2006). Educational media agencies like CEC, CIET and IGNOU prepare interactive programmes for this channel.

The popularity of the programmes prompted the government to extend the opportunities to technical education as well. Ekalavya, India's first technology channel fully aimed at technical education was launched in January 2003. The channel was intended to aid the students of engineering colleges and provide them with quality education from skilled ones. This marks an era in the dissemination of quality technical education in the country. With the launch of EDUSAT, Ekalavya has the potential to be tapped for video-streaming, e-textbook, e-lessons and e-classes, thereby revolutionising technical education in India.

ViCTERS

India's first broadband network on EDUSAT for schools, ViCTERS (Virtual Classroom Technology on Edusat for Rural Schools) was launched on July 28, 2005 in Thiruvananthapuram, Kerala. It proffers interactive virtual classrooms that facilitate school students and teachers to hold discussions with subject experts and education specialists. It also assists students and teachers to receive high quality education from authentic sources. ViCTERS is the only complete educational channel of Kerala which telecasts programmes of educational value, general awareness and interest and has becoming the most sought-after channel among students, parents, teachers and the general public. ViCTERS telecasts specific curriculum-based programmes, regional, national and international programmes on education, especially on Science and Technology. The channel is now available all across the state through local cable, DTH networks, receive only terminals and also live through the Internet at www.victers.itschool.gov.in.

Television and Academic Achievement

One of the most vital concerns raised against television is the negative impact it has on children and teenagers and their academic performance. There are two divergent arguments that are relevant to the issue. Television has created a brighter and more aware environment with greater knowledge about the world and deeper insight into its history and culture. As television has succeeded in bringing everyone into the living room, the children of this decade are exposed to information more than the people earlier had access to in their whole lives.

On the flip side, television is contributing to the deteriorating basic and traditional academic skills. There is a steady decline in creativity and increase in illiteracy among avid television viewers. The argument is that television is to be blamed for decreased intellectual development on a broad social level. It adversely affects reading skills, destroys concentration skills, and impedes the acquisition and practice of scholastic discipline. Both the arguments are valid, and the reality is a combination of the two. Television has positive as well as negative effects on the academic achievement of adolescents.

Academic achievement refers to the performance a person demonstrates in an instructional environment, especially in school, college, and university. These

serve as an indicator to assess the accomplishment of certain pre-determined goals of the academic activities. The school system mostly defines cognitive goals that either apply to multiple subject areas, that is, critical thinking, or include the acquisition of knowledge and understanding in a specific intellectual domain.

The most common way of measuring academic achievement is through examination or continuous assessment, but there is no general agreement on the best way of testing or the aspects that must be prioritised. Academic achievement assumes importance as a key factor for personal progress and personal worth (Padma, 1991). A student's academic achievement is the prime topic for discussion in an educational society. It is a major concern for parents, teachers and society as a whole.

The relationship between television viewing and the academic performance of children and teenagers has for long been a topic of great contention. The amount of time spent on watching television is directly related to the time spent on other activities. A number of researches were conducted to find out the impact of television on academic achievements. Television has proved to be the most useful medium that brings academic materials to students. Arya K (2004) observed that television increases knowledge among children. Children who watch television perform slightly better in reading and general knowledge tests at school. Additionally, television programmes heighten children's creativity. Children's programmes such as cartoons subtly help in gaining information which enhances their learning. Television viewing makes the students capable of imbibing information for their academic as well as personal well being.

Children are sensible viewers of television and there is not much evidence of its harmful effect towards the children's behaviour. As they are more rational in television viewing, television's influence on children may also vary according to diverse factors in viewing and interpreting the content. Moderate viewing helps children in their academic performance and cognitive skills. Kureishi and Yoshida (2012) found no evidence to prove the negative impact of television viewing on school performance.

The association between television exposure and school achievement is quite complex. The conflicting findings in the existing literature indicate certain

relevant core patterns among different types of academic achievement, television programme exposure, and students. Educational television programmes guarantee better performance in vocabulary appraisal and other cognitive tasks like problem solving (Anderson *et al.* 2000). However, non-educational programmes were associated with low vocabulary scores of the students. Television did not influence the vocabulary scores either positively or negatively. Instead, reading educational books enhanced short-term memory skills and thereby, the vocabulary performance.

While a number of researchers focus on the ways in which television increases the academic achievement of children, some are concerned about how it becomes a hurdle in the academic journey. It is often argued that television viewing has more negative effects than positive on the academic achievement of students. Students' excessive use of media, especially television, adversely affects their academic growth. Excessive television viewing by students resulted in their poor performance in Hindi and English languages. In contrast, those who watched less television performed better. Overall, television viewing can be a potential barrier to the scholastic performance of school students (Morgan and Gross 1980).

Soap operas play another significant role in the academic achievement of students. Operas are powerful enough to affect the school performance of students in many ways. Many researchers have evidence in proving the position of soap operas in bringing the students to forefront in their environment. Poole *et al.* (2003) found that watching soap opera can influence a student's performance. Soap operas were found to obstruct the habit of doing home work of students.

Screen exposure time and the content had an adverse effect on student's performance at school. Frequent exposure to sensation-seeking programmes also increased behavioural problems among children. In a study which discusses the academic achievement of students, there are two important factors that are worth mentioning — school and home (Shariff I *et al*. 2010). Although the study focuses on the relationship between television viewing and academic achievement, school and home environment equally play a primary role in determining the academic performance of children. They require a healthy school and home environment to produce the best possible outcome.

School Environment and Student Lives

A sound learning environment enables students to realize their hidden capabilities. The importance of school environment in the lives of students cannot be overlooked. It not only influences the quality of teaching that the students receive, but also the extent of attention they pay to lessons in school. Children need a safe and healthy environment to learn and grow. Since they spend most of their time in school, its environment plays a vital role in their development and academic achievement. According to Eric S (2005), school environment has a wide influence on students' social, emotional, and ethical development. The school community is a means of fostering academic success.

Lawrence, A. *et al*. (2012) stated that students living in urban areas get a better school environment than rural students. Urban students live in a stressful environment because they lead a mechanical and hectic life. They prefer a school environment which makes studying convenient. Sophisticated school environment enables students to concentrate better in their studies which ultimately results in good academic performance.

At the same time, there are many factors that throw in to students' poor academic achievement in school. These are: poor study habits, lack of academic resources, poor school climate, indiscipline, inadequate facilities, teachers' ineffectiveness, inefficient teaching methods, and poor learning environment. The poor performance of students in primary schools may be an indication of the type of learning environment provided. An effective learning environment should possess well-trained teachers, infrastructural facilities, discipline, and above all, a healthy and clean climate.

Television Viewing Habits and Family

Watching television is much more addictive than many other habits. Researchers say that children watch television to learn, for companionship, as a source of conversation, for escape, for stimulation and to pass time. In India, television viewing is not a lonely individual activity. In fact, it is a family affair that involves and caters to each family member's changing mood, emotional priority, and personal agenda; television channels change accordingly. This does not mean that we cannot generalize on the outline and the normative style of television viewing in an

individual family, and across families. We must, however, keep in mind that these are highly complex and dynamic patterns, mentions Mahajan and Luthrra (1993) quoting Lull (1988).

Several factors in a family influence television viewing and consequently low level of activity. These include individual, family, social and environmental factors. The relationship between family environment, television viewing, and low level of activity is complex. Television has brought a sea change in our family life. In fact, it has become an inseparable member of every family (Salmon J *et al.* 2005). Nowadays, every home has at least one television set. Television transmission is likely to affect the internal and external network of family relations. On the other hand, familial, social and cultural ethoses are likely to manipulate television viewing behaviour patterns as well as understanding of programmes.

Thus, in a country like India where the family interferes with every individual activity, television viewing cannot be an individual affair. Members of every household watch some programmes collectively depending upon the time available to them as well as their interest. While some members continuously watch television programmes, others watch them infrequently.

Home Environment and Academic Achievement

Studies point out the ways in which exposure to television affects children's thought processes and academic achievements. Its negative effects can be minimised to an extent by a supportive family. A safe and happy home environment helps build a positive attitude. A supportive family fosters the development of children's intelligence and advances their creative thinking ability. This consequently plays a big role in their academic performance. The motivations that children receive from people they interact with in the initial stages of life determine their academic performance in the later years. Quasi-experimental strategies of parental education have been found to have positive effects on children's outcomes. Parent's involvement in various practices such as communication with the child, support, and encouragement enhances the child's academic performance and brings success.

Home environments differ from child to child based on aspects such as parents' education, their economic status, occupational status, religious background, attitude, values, interests, their expectations from the child, and family

size. A study conducted by Kamar (2008) revealed that parents with better financial status and educational background held beliefs and expectations that were closer to the actual performance of their children. On the contrary, parents with low income had high expectations and performance beliefs that were not similar to their children's actual school performance.

Parental involvement at home like discussing school programmes, school activities and other activities done in the classroom has a significant cause on children and their academic performance. Vellymalay. S (2012) realised that parental involvement at home has a positive and significant relationship with the child's school performance. Children achieve better result in school when their parents show more interest in their education at home. Parent's interest towards children at their home caters more in improving their skills and talents and their academic behavior as a whole.

Parent's educational status also plays a crucial role in bringing up their children both cognitively and personally. Their socio economic statuses have direct control in their children's academic achievement. Family always stood as a powerful factor in the upbringing of an individual. Parents' education and the family's socioeconomic status have a positive correlation with the students' quality of achievement. Educated parents provide an environment that is best suited to their children's academic success. Parents actively manage their children's school activities in a way that can have a direct effect on their children's academic achievements. 'Studies show that children with educated parents performed better in academics than those whose parents were illiterate. Furthermore, results indicated that parental education was significantly related to the academic achievement of students (Shashidhar *et al.* 2009, M S Farooq *et al.* 2011).

Apart from school, students spend more time in their families. Family background and parent's status, economic and educational, thus plays inevitable responsibility in their children's future, especially academic life. Students with high socioeconomic family background perform better than those who have middle class socioeconomic family background. Similarly, students with middle class socioeconomic family background perform better than those who have low socioeconomic family background (Garson 2006, Kahlenberg 2006, Kirkup 2008). Thus, parents' involvement in studies at home has a positive effect on children's

academic achievement in school. The more the parents get involved in academic activities, better would be their child's academic success.

SCOPE AND RELEVANCE OF THE STUDY

Studies conducted on the effect television viewing has on the academic achievements of children and teenager find that the measure of achievement is directly proportional to the time spent in front of the television. The studies often find the association negative, indicating greater achievement with lower exposure to television. However, it also is a fact that the associations are restricted. Findings of the correlation studies are difficult to infer. While it may be true that television viewing lowers academic achievement, it is equally conceivable that academically challenged children are more pinched to television as a spare time activity.

This study investigates the association between demographic variables relevant to Kerala and foresee the influence of children's television exposure on their academic achievement. It clings to vast significance especially in the context of Kerala. At a time when the state is witnessing steady boost in the number of television channels and unpredictable programme multiplicity, students here continue to show academic excellence, unlike their counterparts in other states.

CONCLUSION

The past few decades have seen television emerge as a very influential and powerful mass media. It works to daily influence people from every social strata. Many studies have been conducted to understand the effect television has on children; many more are still under progress. Researches push government and private companies to take measures that can be construed as constructive as well as destructive.

Recently, a few leading fast food companies declared that they will not give their advertisements to television channels exclusively for children. The decision was based on the on-going controversy on the negative impact of such advertisements on children's health. Such decisions need careful thought as television exerts its influence on all aspects of children's life.

As television plays the central role in children's lives, it is essential to explore the impact of television viewing on their performance in school and

academic achievements. A plethora of studies delve into the aspects of television viewing, but its impact on the academic progress of the children in Kerala is obscure. Previous studies on the influence of television on the academic performance of students have been conducted from the Western context, or with a pan Indian perspective. This study will lay stress on the interference of socio-cultural factors in the relationship between the fundamental variables, media exposure and academic achievement. The result of the study will help media managers, educational media planners, and curriculum developers.

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CHAPTER II

REVIEW OF LITERATURE

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Is there any relation between television viewing and academic achievement of school students? Is it beneficial or harmful? What all the factors that influence this relation? Media viewing habit and academic achievement of students grabbed the attention of researchers across the globe specifically after the advent of educational TV channels. The lineage dates back to 38 years beginning with Morgan and Gross (1980) and the huge amount of data amassed so far flashed light on the nature of this relation.

Most of the studies across the globe observed that television viewing adversely affected the academic achievement of the students whereas some suggested that there was no evidence to prove the negative impact of television viewing on academic performance. However, researchers observed that education for students, teachers, parents, media organization, government and entire society on positive and negative effects of television viewing on students' academic performance is a must for the development of any media-driven society.

The present study seeks to determine the relationship between television viewing and academic achievement of school students in Kerala, the most literate state in India. Integrating the research done in the past in a chronological order, the attempt here is to get a better understanding of the trend of research in the area.

Morgan and Gross (1980) in their study "Television viewing, IQ and academic achievement" examined the implication of television viewing on IQ and academic achievement of students. The sample of 625 students was categorized into low, medium, and high groups on the bases of their television viewing, IQ level and socio-economic status. California Achievement Test (CAT) - which involves reading, mathematics, and language - was employed to measure the academic achievement. The study found that television viewing and IQ were in negative correlation. The more the IQ level of the students the lower was their television viewing. Among high IQ students, the study showed, heavy viewers tended strongly to get low scores. Similarly, among the students with medium IQ, especially boys,

heavy viewers were likely to get lower scores. Interestingly, among low IQ students, especially girls, heavy viewers got slightly higher scores. In general, television viewing adversely affected the academic achievement and IQ level of the students under investigation.

"Television viewing pattern of primary school children and its relationship to academic performance and cognitive skills" by Shastri and Mohite (1997) sampled 727 second, third and fourth grade students. The data was collected from the parents of the respective students. Duration of television viewing and academic performance of the respondents was studied using Teachers Rating Scale, Graded Word Test, Reading Analysis Test and School Records. The Study found that there was no significant difference in the academic performance of heavy, moderate and light television viewers, except in the students' performance relating to oral reading and selected cognitive skills. The study concluded that the children were moderate viewers of television and there was no evidence of its harmful effect on them. Moreover, moderate television viewing was a contributing factor of the children's academic performance and selected cognitive skills.

Examining the relationship between television viewing and academic achievement of both African-American and White students, Caldas and Bankston (1999) studied "Black and white TV: Race, television viewing, and academic achievement." The Graduation Exit Examination score was used to measure the academic achievement of the students. The study revealed that African-American students watched television more than that of White students. Television viewing had a moderate negative effect on the academic achievement of the advantaged group (Whites) but received no positive consequence on the achievement of the deprived group (African- Americans). Socioeconomic status of the family owned a potent effect on the academic achievement of white students. While the family structure of schoolmates had the strongest effect on African-American students' academic achievement. In addition to that television watching had a statistically significant negative association with the test scores of White adolescents. For African-American adolescents, although the relationship between viewing and achievement is extremely weak, it was not statistically significant. Thus the study provided interesting evidence on how the prevalence of family structures affected the relationship between a television peer culture and academic achievement.

Four major dimensions of the human personality are: social, moral, cognitive and emotional. Nellisseri (2001) examined the role of family environment quality in deciding TV viewing and its impact on children in the study titled “The impact of television on children: Socialization in family as a mediating factor.” Surveying 300 children from three regions in Kerala, the study revealed that the children did not watch television in excess. They watched TV for 1-2 hours a day on working days and 2-4 hours on holidays. Boys watched TV more on working days. Socialized children watched TV for a shorter period as they received loads of other interesting work to be hired in. Religion, region, education, and income did not have much influence on television viewing habit of children in Kerala. When the program preference of children was brought into account, it was found that they liked to watch the film. Educational programs were sixth in their preference list. Children approached television primarily as an entertainment medium. It was concluded that the effect of TV would be less for children of better-socialized family and it would be more on children from poorly socialized families. Television affects the social attitude and behavior of children which in turn depended upon the family environment. Children who had a good quality family environment were less influenced by TV viewing habit.

Verma and Larson (2002) in their study “Television in Indian adolescents’ lives: A member of the family” made an attempt to realize the daily context and experience of TV viewing of middle-class Indian adolescents. Surveying 100 urban middle-class Indian families, the study addressed several questions about daily context and experience of adolescents’ television viewing. Television viewing of Indian middle-class adolescents was largely a family activity, the study observed. It was a relaxing experience that brought the family together with a shared activity helping the family members to avoid the stress of the day. The study also revealed that adolescents’ television viewing rate was related to their parents’ television viewing rate and was higher if the mothers were unemployed. There existed a negative correlation between TV viewing and time spent for studies. In general, the television viewing of middle-class Indian youth was typically a relaxed cure to the stresses of the day that they shared with their families.

Adopting experimental method, Pool, M. M., Koolstra, C. M. & Voort, T. H. (2003) enquired “The impact of background radio and television on high school

student's homework performance" among 160 students from eight grades. The study found that the soap opera influenced the students' performance. It interfered with the homework performance both in paper and pencil assignment and memorization assignment. Students on an average needed the same amount of time for the paper and pencil assignment and memorization assignment. Expectedly, background television was more likely to interfere with homework performance than background radio. In short, homework combined with watching soap opera was found to be an obstruction to the students' performance.

Arya (2004) examined the influence of television on changing values of children between belonging to the age group of 6 to12 years in the study titled "Time spent on television viewing and its effect on changing values of school going children." The sample comprised of 150 children of two government and private schools. Questionnaire cum interview schedule were used to collect data. The average time spent in front of the television was found to be one to three hours. There was no significant gender difference in the religious values of the respondents. The study revealed that the boys liked to read extra books than girls. Television increases the knowledge value of the children and males had better knowledge value than females. There was not much difference between males and females regarding religious values, but females were slightly more religious than males. Additionally, females had better aesthetic values while males had better knowledge values.

Vandewater and Bickham (2004) in their study "The impact of educational television on young children's reading in the context of family stress" inspected the influence of educational media on the use of young children's reading skills and pre-reading skills within the context of family stress. The study on 310 children showed that children's reading skills were related to their home environment and educational television viewing. Consequently, family conflict negatively and educational media use positively influenced the children's reading skills. The home learning environment was directly related to children's reading skills. It was also influenced by maternal depression or lack of economic resources. Further, the family conflict made children's lives more stressful especially in terms of reading skills and educational media use. Hence the study suggested that the parents should encourage educational television viewing.

Salmon, J., Timperio, A., Telford, A., Carver, A., & Crawford, D., (2005) analysed the association between the family environment and children's TV viewing and the likelihood of children being low-active, in their study of "Association of family environment with children's television viewing and with low level of physical activity". A questionnaire survey was conducted among 878 children to collect information about their television viewing and family environment. The study found that several factors in the family influence the television viewing and the low active group. The influencing factors were individual factors, family and social factors, environmental factors, etc. The relationship between the family environment and TV viewing and low-level activities were complex and those behaviors were quite distinct. And the rules about eating meals in front of the television were associated with a decreased likelihood of watching TV. The study also revealed that parents' television viewing was positively associated with their children's television viewing.

Krcmar and Vieira (2005) in their article titled "Imitating life, imitating television: The effects of family and television models on children's moral reasoning" investigated the impact of family communication, exposure to television violence and parents moral reasoning on children's moral reasoning. The results revealed that the family communication had an important role in children's exposure to television violence. Communication orientation was negatively related and control orientation was positively related to children's exposure to television violence. Families with freer communication orientation watched less fantasy violence and families with greater controlled orientation watched more fantasy violence. Television violence negatively affected children's moral reasoning and fantasy violence was negatively related to children's ability to perspective take and more fantasy violence led to less advanced moral reasoning. In addition to that when the age of the child was controlled, parents' moral reasoning was unrelated to that of their children.

"Television viewing higher secondary students; Does it affect their academic achievement and mathematical reasoning" by Shejwal and Purayidathil (2006) analyzed the relation between academic achievement / mathematical reasoning among students and their television viewing. A Survey was conducted among 654 higher secondary school students. The study revealed that gender differences were noted in both academic achievement and mathematical reasoning. Television

viewing was harmfully linked with boys' mathematical reasoning. And the excessive media use of students, especially television viewing caused the loss of academic growth. Hence the educational system should be changed and pedagogical skills of the teachers should be advanced to improve the academic growth of the students, the study suggested.

Analyzing the "Association between television movie and video game exposure and school performance", Sherif and Sergant (2006) tested the relative effects of a television movie and video games screen time and content on adolescents' school performance. The sample consisted of 4508 school students from 5 to 8 classes. School performance, screen time, content etc. were measured. The result showed that the content exposure and screen time had an independent detrimental association with school performance. This finding supported parental enforcement of the American Academy of Pediatrics guidelines for media time (particularly weekday) and content limits to enhance school performance.

Ozdemir (2006) investigated the effect of television on children and adolescents in his study titled "Affects of television as a natural educator: Can television be a tool as an informal educator? a trnc sample". The sample comprised of 250 children and adolescents belonging to the age group of 4 to 17 years old. A Questionnaire survey was used for collecting data from both students and parents. The Results showed that children and adolescents spent majority of their time with television. The male students liked to watch fight, action, comedy, and horror film while female students preferred comedy, horror films and TV series. Mostly they honoured a character and wanted to act like them. Children did not like to watch educational programs as they were not broadcast on prime time. In general, the television viewing was very prominent among all the family members and viewers learned things like violence, love etc. from the depictions in the television channels.

Landhuis, C.E., Poulton, R., Welch, D.,& Hancox, R.J in their study "Does childhood television viewing lead to attention problems in adolescence?" attempted to analyze the impact of childhood television viewing on attention problems in adolescents. The study found that there was a significant correlation between childhood and adolescents' television viewing. The early childhood attention problem and adolescents' attention problems were correlated. Television viewing hours during childhood was associated with the symptoms of attention problems in

adolescents. However, both childhood television viewing and adolescents' television viewing independently predicted attention problems in adolescence. The study warned that excessive television viewing might lead to attention problems among children and adolescents.

"Home media and science performance: A cross-national study" by Notten and Kraaykamp (2009) analyzed how media resources effect the science performance of school students. The data was collected from 345,967 respondents belonging to 53 countries. Results found that home media could influence both positively and negatively on science performance of the children. The attitude of parents towards reading and the availability of large number of books at home were associated with better science performance of the children. The positive reading climate at home benefitted children's science performance. In short, television improved the knowledge level of science. Again, children of parents with higher educational level and occupational status could perform better in science. In case of gender, girls performed less than boys in science performance. In addition to this, age had a significant positive impact on science performance and older students performed better. The study also proved that all the media assets influenced the science performance of the students and that the television improved their knowledge level.

Comparing male and female students' academic achievements in urban and rural Technical colleges, Umnadi (2009) conducted "A relational study of students' academic achievement of television technology in technical colleges in Delta state of Nigeria". The Sample consisted of 731 students from six technical colleges. It was found that male students performed better than their female counterparts. There was a significant difference in the subject of television in rural and urban technical colleges; urban students performed better than their rural counterparts as the facilities were not available there in the rural area. This could be the result of the students' background and location of the technical college. In conclusion, the study recommended to the implementation of intensive teaching, coaching using past questions, and extra-moral classes to improve the students' academic achievement in external examinations.

Saraswati, S.,Rao,C., &Radhakrishna, H. (2009) in their study "Factors affecting scholastic performances of adolescents" examined the social influence,

study habits and health factors that affected scholastic performance of adolescents and compared these factors among the adolescents of different schools. A total of 1230 students were studied from both corporate and private schools. Students were categorized as high achievers and low achievers. Scholastic backwardness is a universal problem. The results of the study indicated that high achievers were more in private school and low achievers were more in corporate school. Further, the family environments affected the adolescents' scholastic performance. Parents' education also affected the adolescents' education; children from a family with higher parental education were better in their scholastic performance. At the same time, television viewing did not influence the scholastic performance.

Jackson, L. A., Eye, A. V., Witt, E. A., Zhao, Y., & Fitzgerald, H.E (2010) examined the effect of internet use and video game playing on children's academic performance in their study titled "A longitudinal study of the effects of Internet use and video game playing on academic performance and the roles of gender, race, and income in these relationships". The role of gender, race, and income was considered the effects on the use of these two technologies (internet use and video game playing). The study also investigated the relationship between internet use and reading skills, GPA (grade point average) score. The number of participants in the study was 482. The results suggested that the socio-demographic characteristics like age, gender, race and household income were related to both IT use and academic performance. Internet use relates positively to academic performance. Video game playing was negatively related to academic performance, but it was associated with better visual-spatial skill and with lower GPAs. Gender, race, and income influenced Internet use, video game playing and academic performance. Females performed better than that of males in the classroom academic performance (GPAs) but not in reading and mathematical skills. There was no gender difference in visual-spatial skills. Overall, this study revealed that the internet use played an important role in children's academic performance.

Sharif, I., Wills,T.A., & Sergent, J. D in their study "Effect of visual media use on school performance: A prospective study" attempted to identify the mechanisms for the impact of visual media use on adolescents' school performance. A Telephone survey was used among 6486 youth belonging to 10 to 14 years. The Variables involved in this study were substance use, school problem behavior, and

sensation seeking. In this study, researchers explored three indirect pathways between visual media exposure and school performance. And it also tested for the possible direct effect of media variables on school performance. The results showed that screen exposure time and content had an adverse effect on school performance. Screen exposure had an indirect effect on poor school performance through its increased sensation seeking. The study also revealed that visual media use adversely affected school performance as it increased sensation seeking, substance use and school problem behavior.

"Impact of television on rural development" by Nazari (2010) assessed the role of television as an educational tool that influenced the farmers' knowledge. The survey method was used to collect data from 424 primary students spreading across different grades. The study found that the educational intervention through the TV program improved knowledge of the farmers. Most participants believed that producing a suitable agricultural program in the local language and culture could be very useful for farmers. Producing and broadcasting local agricultural program could be the best form of such interference. The use of local language in this agricultural program was very effective. This study showed that television could influence farmers' knowledge so as to develop their skills. Giving more importance to the agricultural program would help to develop the farming system and to enhance farmers' awareness and knowledge in the area.

Ferguson (2011) in his article "The influence of television and video game use on attention and school problems: A multivariate analysis with other risk factors controlled" examined the relationship between television and video game use on attention problem and school performance of the students. The results of the study found that the intrinsic factors such as anxiety, antisocial traits, male gender etc. were predictors of attention problems. Family income could influence the school performance and higher income was related to high-grade point average or school performance. It also revealed that the time spent for television viewing and video game did not affect attention problems or school performance.

Analyzing the socio economic status, parental education, and occupation on the quality of students' academic performance, Farooq, M.S., Chaudhry, A. H., Shafiq,M.,&Berhanu,G. (2011) conducted a study on "Factors affecting students' quality of academic performance: A case of secondary school level". And it aimed

to find the difference in the quality of students' achievement in relation to their gender. A sample of 600 students from 10th grade was surveyed to gather information about different factors affecting academic performance. The study found that the socio-economic status and parental education affected on the students' performance and achievement in the subjects of Mathematics and English. A higher level of socio-economic status might improve the quality of academic achievement. Parents' occupation related to their children's academic performance at school. In case of gender, girls perform better than the boys. Expectedly, higher level of socio-economic status was the best indicator that contributed to the quality of academic achievement of the students.

Martins and Harrison (2011) in their article titled "Racial and gender differences in the relationship between children's television use and self-esteem: A longitudinal panel study" scanned whether media consumption was related to children's self-esteem by means of a longitudinal panel survey. Many studies had shown that high self-esteem was related to students' motivation, persistence and academic achievement and children spend an average of 6-7 hours per day with television. The participants of the study were 396 White and Black pre-adolescent boys and girls. The results indicated that the television exposure significantly related to children's self-esteem and television exposure predicted a decrease in self-esteem for all children except White boys. White boys are portrayed as powerful , strong and positive in nature, girls are emotional and sensitive. In case of black children, boys were a buffoon like and girls were exotic and sexually available in their characters. Overall the study revealed that television consumption had a great impact on children's self-esteem.

"Social outcomes associated with media viewing habits of low-income pre-school children" by Burrow and McKelvey (2011) was an attempt to find out the relationship between preschool children's social outcomes in the classroom and their media viewing habits. Social outcomes involve hyperactivity, aggression, and social skills. The study used the parent's reports on media viewing habits of children and teacher reports on classroom behavior of 92 low-income pre-kindergarten children. The results of the study showed that children watched television more than three hours a day and that most of them watched cartoon programmes. There was no relationship between media viewing and hyperactivity.

But gender was associated with hyperactivity. Boys were more hyperactive than girls. On the other hand, the amount of media viewing was not related to aggression. But children who watched in appropriated content had high aggression scores. Gender was related to aggression, with boys having a higher score. Media viewing was not related to social skills. But children who watched inappropriate content have lower social skills. Gender and social skills were also related and girls had higher social skills than boys.

Kloosterman,R., Notten, N., Tolsma,J.,&Kraaykamp, G., (2011) conducted a study on "Academic performance: A panel study of primary school pupils in the effects of parental reading socialization and early school involvement on children's the Netherlands" to analyze the effect of parental reading socialization and school involvement on children's academic performance. A Questionnaire survey was used to collect data from primary school children. The study investigates both direct and indirect effect of parental practices on children's academic performance. It estimated the effects of parental education, parental reading, socialization, and parental school involvement in children's academic performance during primary school. The results of the study indicated that parental education, reading, socialization and school involvement affected the children's language performance. Children with highly educated parents scored higher on language proficiency than children with less educated parents. These factors also influenced the arithmetic performance of children. Children with highly educated parents were more successful in arithmetic than children with lower educated parents. The study also found that there was a strong positive relationship between parental education and children's language and arithmetic performance in successive primary school grades. In general, the social background and parental education were important factors that influenced children's academic performance.

"A study on the impact of electronic media, particularly television and computer consoles, upon traditional childhood play and certain aspects of psychosocial development amongst children" by Keating (2011) tried to find out the influence of electronic media especially television and computer consoles on the child's development. A mixed research methodology comprising of both quantitative and qualitative was chosen to examine the effects of electronic media on a child's development. In this study, second and sixth standard pupils, their parents and the

teachers were surveyed. The results of the study revealed that the electronic media made an impact on the child's development in varying forms. In addition to that different opinions of parents regarding the influence of electronic media on their family life and child's development were elicited. And the teachers also expressed their anxiety upon child's development.

Babey, S.H., Hastert,T.A., & Wolstein, J., (2012) in their study "Adolescent sedentary behaviors: Correlates differ for television viewing and computer use" examined correlates of leisure computer use and television viewing among adolescents in California. Participants in the study were 4029 adolescents in California. Interview cum survey method was used in this study. Family factors were associated with television watching and computer use. Physical activity was also related to both television watching and computer use. Adolescents engaged more time in physical activity. Consequently, it led to spending less time on television viewing and computer use. The race also associated differently with television viewing and computer use. African American and American Indian teens spent more time watching TV than white teens, but Asian adolescents spent more time using the computer. Income was also associated with television viewing and computer use. Lower household income was associated with more hours of TV viewing, but less leisure-time computer use. In conclusion, the study suggested that reducing sedentary behaviours might decrease obesity risk among teens.

"Television viewing and scholastic performance" by Verma and Tiwari (2012) investigated the television viewing habit of 6 to 8 grade rural students and their performance on Hindi and English language. The sample consisted of 100 students. The results of the study found that heavy television viewing led to poor performance in Hindi and English languages compared to light viewers. Urban girls watched television more than urban boys. Time spent with television was dangerous for language skills of students. There was no significant difference between gender and time spent with television. The study warned that excessive television viewing was dangerous to the scholastic performance of the school students.

Kant (2012) aimed to examine television viewing habit and creativity of secondary school students in "A study of creativity of secondary school children as a correlate of some television viewing habits". Verbal test of creativity and

questionnaire were used among 400 secondary students from Rampur city to elicit the data. Students viewed a variety of program on television; however, both low achievers and high achievers acquired knowledge and information through television. Time spent on television viewing and creativity of high achiever students was negatively related. They spent more than two hours a day for watching television. In case of low achiever student, there is a positive relationship between spending time for television viewing and creativity. Television viewing helped low achiever students to collect all types of information that enhanced both their learning and creativity. Low achiever students watched television program illogically. Television seemed to affect the originality of low achieving students as they did not act when watching television. The television program was almost imaginative and so they did not want to imagine. A number of channels and creativity of higher achiever students were positively related, but there was a negative relationship in the case of low achieving students. Yet the study concluded that there was no evidence to suggest television viewing was adversely affected on child's imagination and creativity.

Ofili and Osaretin (2012) tried to determine the effect of instructional television on the academic performance of senior secondary physics students and had any gender effect on physics students in their study "Instructional television utilization for the enhancement of cognitive learning skills: Implication for the challenges in science education". Quasi-experimental test was used among experimental and control groups making a total of 80 students. The study showed that instructional television performed better in the experimental group than among the control group. It improved the performance of male and female students alike. Overall the study revealed that the use of instructional television improved the academic achievement of students in the learning and teaching of students. Gender had no effect on the use of instructional television in the learning process. Based on those findings, the study recommended that instructional television should be used in the teaching of physics to enhance learning and government and non-governmental organizations should equip the schools with instructional media facilities for effective teaching.

Imaobong, M.O., Awujo. C G, & Alaxander, N .O (2012) in their study "The influence of television viewing on adolescent, behavior among public secondary

school students in obio/akpor LGA in river state" examined whether television can influence adolescents' career choice, violent behavior, dressing, drinking, and sexuality. Questionnaire survey method was used to obtain data from 1000 students from different schools. The results showed that television could make impact on adolescents both positively and negatively. It positively influenced the various forms of adolescent behavior like career, violence, sexual behavior, drinking, and dressing. Television viewing introduced adolescents to different career opportunities influencing their career choice. It also influenced their dressing style, what they saw on television. Majority of adolescents had been influenced by television viewing and encouraged them to consume alcohol. Television viewing had an important role in adolescent's sexual behavior too. Watching sex on television seemed to rush adolescents' sexual instigation. In brief, the study revealed that television had a huge impact on adolescent behavior, either positively or negatively. Education for students, teachers, parents, media firms, government and entire society on harmful effects TV has on teenagers was a necessity, the study observed.

"Parental involvement at home and students' academic achievement" by Vellymalay (2012) attempted to find out how parents affect their children's academic achievement. The sample comprised of 80 students aged between 8 to 11 years. The study focused on parents' background (socio-economic status) and parental involvement at home. Parental involvement at home had given a positive impact on children's school performance. Majority of parents were involved in their children's education at home. Children achieved the best result at school when their parents were more involved in their education at home. The study also revealed that mothers were more involved with child's education when compared to fathers.

Kureishi and Yoshida (2012) in their study "Does viewing television affect the academic performance of children" examined the impact of children's television viewing on their school performance. Questionnaire survey method was used for the study. Mothers reported that heavy television viewing leads to low school performance of their children. On the other hand, the results of the study found there was no evidence to prove the negative impact of television viewing on academic performance. Moreover, television viewing positively influenced the school performance of children.

Nuutinen, T., Ray, C.& Roos, E. (2013) in the article titled “Do computer use, TV viewing, and the presence of the media in the bedroom predict school-aged children’s sleep habits in a longitudinal study?” attempted to find out the effect of television and computer use in children’s bedroom and sleeping habits. A Questionnaire survey was used among 352 school children from 27 schools. The Study found that computer use and television viewing predicted shorter sleep duration and later bedtime. The boys tended more to keep a computer in their bedroom than girls. It also revealed that media presence and computer usage of boys predicted poor and irregular sleeping habits. Children used the computer about an hour a day whereas watched television over one hour per day. Computer and television adversely affected the sleeping habits of children. In this way, the study concluded that presence of media in children’s bedroom might reduce sleep duration and would delay bedtime.

‘Children and television news’ by Ozdinc and Baker (2013) examined the response of the children to television news. The number of participants in the study was 186 belonging to 8 to13 age group. The results of the study indicated that the children understood news as real. Mothers revealed that children perceived news as real, serious and dangerous rather than a film or TV show. Children and mothers response in the study most commonly endorsed fearful coverage of TV news in which children who get hurt, children who are kidnapped, starving children in poor countries, animals who get hurt, and people getting murdered. The findings of the study also revealed that mothers reported girls mostly manifested difficulty in sleeping, while boys mostly acting irritably as a reaction to fearful TV news coverage. Other most frequently observed behaviors of girls were obsessive thoughts about events in TV news and nightmares. At the same time, mothers frequently reported that boys manifested obsessive thoughts about events in TV news similar with girls and also acted as nervous. Both for girls and boys the least reported behavior of mothers was an upset stomach. In addition to that four factors differed significantly: interpersonal violence, war and suffering, fires and accidents, and fantasy characters. In conclusion, children between 8-13 years old were aware of real situations in TV news and they showed some behaviors as reactions to fearful coverage. Mothers were not aware of TV news induced fears of their children and they overestimated children’s fear.

Alloway ,T.P., Williams,S., Jones, B.,&Cochrane, F., (2013) in their study "Exploring the impact of television watching on vocabulary skills in toddlers" investigated the impact of television viewing habits on vocabulary skills at a critical developmental period. Questionnaire method was used in this study. Vocabulary skills included short-term memory (verbal and visual-spatial) and reading habits (fiction and educational books). The age group of the toddlers considered for the study was 2-3 from British child care center spent more time on reading than watching television, and also, they spent more time on reading fiction and picture books than factual books, and watching more movies and cartoons than educational programs, adult entertainment, or baby DVDs. The study also found that television did not influence the vocabulary scores, either positively or negatively. Instead, reading educational books and short-term memory skills predicted vocabulary performance. However, the study concluded that the television viewing did not affect the vocabulary skill in toddlers negatively.

"Impact of television watching on the academic achievement of adolescents with special reference to their socioeconomic status" by Amin (2013) was an attempt to find out heavy and low viewers of television and to distinguish the academic goal on the basis of their socio-economic status. The sample contained 240 adolescents from different schools. Blank self-constructed television viewing information and marks in different subjects were used for the study. Academic achievements of heavy and low television viewing adolescents were different. The study had shown that low television viewer adolescents achieved more scholarly than a heavy television viewer group of adolescents. There was no significant difference in academic achievement on the basis of gender.

Nazari,M.R., Hassan, M.H.,Ozman,M.N., Yazin,M.B.,& Parhizkar,S (2013) in their study "Influence of television programs genre non-violent behaviour among young children" attempted to analyze the relationship between television program genre and aggressive behavior in primary school students. Data was collected from 424 primary students residing in five provinces of Iran. The results indicated that there was a significant relation between television program genre and aggressive behavior of children. Children coded their favorite program in order of Action adventure, Action, Sport and Horror. Another finding of the study was male adolescents preferred to watch action movies more than any other types of movie.

In short, the study revealed television program, particularly its genre, had an important role in deciding adolescents' behavior pattern.

Ahinda,A.A.,Murundu,Z.O.,Okwara,M.O.,Odongo,B.C &Okutoyi,J., (2014) analyzed the "Effect of television on academic achievement and language of pre-school children." It employed questionnaire survey among 40 teachers and 132 parents from 20 pre-schools. The majority of teachers and parents revealed that television viewing had a harmful effect on the academic achievement of pre-school students. Most of the parents and teachers believed that television had an adverse effect on languages. While a minority of teachers and parents believed it had a positive effect on language and this should implement in the pre-school curriculum. The study concluded that the television viewing had a harmful effect on both academic performance and language acquisition of pre-school children. The study recommended that the ministry of education and both parents and teachers should be involved in the selection of desired educational programs for pre-school children.

"Influence of home television viewing on the academic achievement of children in upper basic education Kadina state Nigeria" by Viola G.P.J (2015) recognized the television viewing had an impact on the pupil's language development and academic achievement in basic science and determined the numeracy development and academic achievement in social science. Television viewing identification questionnaire survey was conducted among 320 school children. Assessment score of mathematics, English languages, basic science and social science were collected for the study. The findings revealed that home television viewers scored higher than the nation-viewers on basic English and basic mathematics. The study recommended for television viewing in homes and schools, especially academic performance should be encouraged by parents and teachers to develop pupil learning.

'Media use and school performance' by Jishengli (2017) tried to find out the association between adolescents' media use time and school performance and also to explore the relationship between the personality traits and family environment. The survey was conducted among 914 school students from 8^{th}, 9^{th} and 10^{th} standards. Variables like demographics, screen time, media use habits, personality traits, school performance were assessed for the study. The results showed that the media use time was a significant predictor of school performance. The adolescent

who spent more time in media use did poorly in school performances. Again, learning anxiety and family income were the important affecting factors of the adolescent's school performance. In addition to that media content was identified as an important factor in adolescent's academic performance.

Summary

Four decades-long research on the nature of the relation between TV viewing habit and academic achievement of students yielded a great amount of data and interesting observations. Several studies proved that television viewing adversely affected the academic achievement including language skills and IQ level of the students under investigation. The media use time was a significant predictor of school performance. The excessive media use, especially television viewing caused the loss of academic growth as they might lead to attention problems among children and adolescents. And low television viewer adolescents performed more scholarly than a heavy television viewer group of adolescents.

Though media viewing was not related to social skills, children who watched inappropriate content had lower social skills. And Television violence was dangerous for moral reasoning capacity of the child. Yet there was no evidence to suggest television viewing was adversely affected on the child's imagination and creativity but their sleeping habits. Visual media use increased sensation seeking, substance use and school problem behavior of the students. In that way, television program, particularly its genre, had an important role in deciding adolescents' behavior pattern. Also, television consumption had a great impact on children's self-esteem.

Expectedly, the higher level of socio-economic status was the best indicator that contributed to the quality of academic achievement of the students. The socio-demographic characteristics like age, gender, race, and household income were related to academic performance. Gender differences were noted in both academic achievement and mathematical reasoning as television viewing was harmfully linked with boys' mathematical reasoning.

Television viewing of Indian middle-class adolescents was largely a family activity and was a relaxing experience that brought the family together with a shared activity helping the family members to avoid the stress of the day. Television

affected the social attitude and behavior of children which in turn depended upon the family environment. Consequently, family conflict negatively and educational media use positively influenced children's reading skills.

In addition, the family environments affected the adolescents' scholastic performance. Parents' education is a contributing factor to the adolescents' education; children from a family with higher parental education were better in their scholastic performance. Children achieved the best result at school when their parents were more involved in their education at home. In other words, children who had a good quality family environment were less influenced by TV viewing habit.

On the contrary, some studies found that there was no evidence to prove the negative impact of television viewing on academic performance. Moreover, television viewing positively influenced the school performance of children. Moderate television viewing was a contributing factor to the children's academic performance and selected cognitive skills. And so home television viewers scored higher than the nation-viewers on Basic English and Basic Mathematics. The media assets influenced the science performance of the students and that the television improved their knowledge level.

In this context, researchers recommended that education for students, teachers, parents, media organization, government and entire society on positive and negative effects TV has on students is a must. And television viewing in homes and schools to develop pupil learning is important. Further, instructional television should be used in teaching to enhance learning and government and non-governmental organizations should equip the schools with instructional media facilities for effective teaching. Keeping the findings of past studies and their recommendations in mind, the present study seeks the relation between instructional television viewing and academic achievement of students in Kerala, the most literate state in India. The methodological approach of the study is detailed in the next chapter.

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CHAPTER III

STUDY OBJECTIVES AND METHODOLOGY

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As mentioned in the introductory chapter the present study seeks to explore the nature of the association between school students' television use and their academic performance. The influence of television on academic performance has been well researched from multiple perspectives, particularly from educational angle and communication standpoints. Be it in educational domain or communication area, the rich body of research shows that there is a significant association between television use and academic performance; some studies found that the television positively contributed to academic performance while others indicated negative influence. A close observation of the trends shows that the relationship is inconsistent and is impacted by various socio-demographic and educational variables. When it comes to Indian scenario, one of the most populated nations in the world which is credited with a media rich society with high penetration of television and a well networked basic education system, the research on the relationship between television use and children's academic performance is scarce, that too when India has launched many televised educational programmes and exclusive television channels both at governmental and non-governmental levels to cater to the educational needs of schools children. More so, television channels, both at private and public sectors dedicate ample time to educational programmes aiming at school children. It is against this background, the present study was conceptualized and conducted. The main objective of the study is to examine how students' exposure to television programmes contributes to their academic performance. Thus, the study is titled as: 'Influence of Television on Academic Achievements of School Students in Kerala'.

STATEMENT OF THE PROBLEM

As the topic indicates the focus of the study is on the relationship between television exposure and students' academic performance. The problem is viewed from different angles identifying different factors that have potential to contribute to or interact with key variables and determine the association between television use and academic performance. Learning experience of a child is defined by various

factors and dimensions of his or her life and the researcher felt that they should be reflected in the very design of the study. Hence, while setting the specific objectives of the study all possible dimensions such as television viewing patterns, use levels, home environment, parental education, socio-economic status of the family and various subject areas including languages and science and social science subjects were included as study variables to make the study comprehensive.

OBJECTIVE OF THE STUDY: BACKGROUND AND RELEVANCE

Media research over decades pointed out the profound impact television has on the cognitive development of the audiences, particularly children, as childhood is characterized by various aspects of social involvement and resultant development of different faculties like language exposure, social experience and group interaction; all leading to the development of their self-awareness and social positions. As evident from research literature on child development and cognitive science also, exposure to media, particularly electronic media influences children's brain development positively and negatively, depending upon the variables of exposure. The studies in this connection most often focus on some specific issues such as displacement of children's creative activities including reading, physical play and exercise due to their overexposure to screen, television commercials' influence on increasing demand for material possession and on increasing tendency for violence in children.

Objectives

General objective of the study was to identify the nature of the association between students' exposure to television and their academic performance. To meet this the following specific objectives were set:

1 To find out the influence of television use on the academic performance of schools students in Kerala

2 To examine how gender interacts with the association between school students' exposure to television and their academic performance

3 To find out how school students' family antecedents interact with the association between

   a) Their level of exposure to television and academic achievement

b) Their parental mediation to television and academic achievement
c) Their television programme choice and academic achievement

4 To find out how parental support influences the relationship between school students'

a) Level of exposure to television and their academic achievement
b) Level of parental mediation and their academic achievement
c) Television programme choice and their academic achievement

Based on the above objectives the researcher proposed the following hypotheses. Hypothesis is viewed mainly as a 'conjectural statement of the relationship between two or more variables' (Kerlinger 1986) and as a 'tentative statement about something, the validity of which is usually unknown' (Black, J.A & Dean, J.C 1976) since the study centres on the association between or among variable identified for quantitative analysis. The hypotheses are the well reflection of the assumed nature of association between or among the variables.

HYPOTHESES

H1 Level of exposure to television will influence the academic performance of school students

H2 School students' gender will influence the interaction between their exposure to television and academic performance

H3 School student's family antecedents will influence the interaction between

a) Their level of exposure to television and academic achievement
b) Their level of parental mediation in television use and academic achievement
c) Their television programme choice and academic achievement

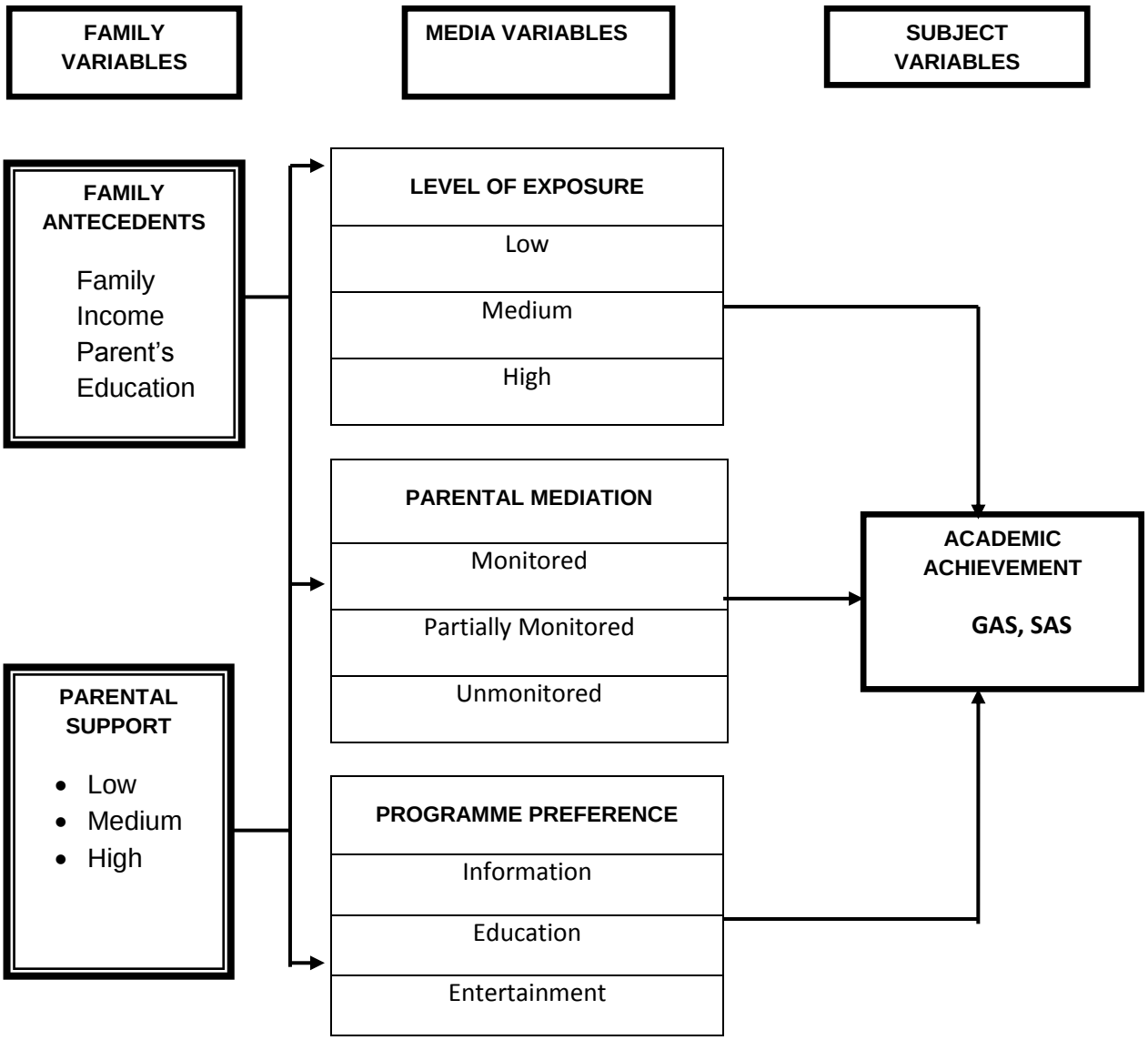
H4 School students' parental support influence the interaction between

a) Their level of exposure to television and academic achievement
b) Their level of parental mediation in television use and academic achievement
c) Their television programme choice and academic achievement

RESEARCH DESIGN

The hypotheses developed for the study are graphically represented in the research design to ensure the better understanding of the entire procedure of this work.

Figure 3.1 Research Design



It is clear from the design that there are three segments of the variables. The first category includes family antecedents and parental support; all of them connected with the familial background of the students. The second category includes media related variables such as level of media exposure, mode of media exposure and

programme preference. The third category includes academic scores at two levels – General Academic Score (GAS) and Subject wise Academic Score (SAS). The design emphasises the exploration into the interaction among three major factors- Family, Media and Subjects of Study- that influence a student's media life and academic life.

DEFINITIONS AND MEASUREMENTS OF VARIABLES

Operational definition of variables helps limit the functional meaning of variables used in the study and conceptualize each with accuracy in their measurement and assessment in relation to other variables in various contexts.

Family Variables

Family variables has two categories: Family antecedents and Parental Support. Many studies in the field show that family background and support from the family, especially from parents predict children overall development, including their academic performance and reasonable use media. (Mimrot B H 2016)

Family Antecedents

Under family antecedents the researcher included family income and parents' education. The monthly income based economic status of the family has been divided in to three: Low (up to 15000), Medium (15001-50000) and High (above 50001).

Parent's education is yet another variable in this category. It is natural that education of the family positively contribute to children's education. Parent's education is categorised as 'up to SSLC', 'Up to Degree' and 'PG and above'. Highest education of mother or father was considered for analysis.

Parental Support

Parental support means any kind of emotional and cognitive backup extended by parents to their wards in educational matters. To measure the parental support, students' responses to four statements given below were collected on a five point Likert scale from 'Strongly Agree to 'Strongly Disagree'. The related statements are:

1. My parents encourage me to secure good marks/ grades

2. My parents love me very much
3. My family members are good at studies
4. My parents give me gifts when l get good marks/grades

Gender

Gender is considered as a distinct variable with two categories: Male and Female. But, the influence of this variable was limited to the level of television use.

Media Variables

Media variables in the study are confined to the context of television use and there are three variables identified for analysis: Level of Exposure, Parental Mediation in Exposure and Programme Choice. Each of them is detailed below.

Level of Exposure

This meant by the nature of the use of television by the students. Level of exposure has been measured based on the time spent for viewing television per week, samples were categorised in to three groups: Low, Medium, and High. Those who watch above 14 hours per week constitute high user category, the students viewing between 7- 14 hours belong to medium user category and those who watch below 7 hours belong to low user category.

Parental Mediation in Exposure

This meant by the nature of the use of television by the students based on varying situations which are controlled by parents/family. There are three possible controlled situations- monitored, partially monitored and unmonitored.

Programme Preferences

Programme preference of the students was determined based on the students responses related to three categories of programmes: Informational, Educational and Entertainment. Informational programmes are those intended to provide information such as news. Educational programmes are those with educational contentaimed to enhance academic skills. Entertainment programmes include those such as movie, song, comedy shows etc.

The rationale behind this categorization and focus on their preferences by students is that type of television programmes were found to have significantly varying effects on the audience as found in the earlier studies (Baydar et al 2008).

Academic achievement

The term academic achievement is defined as performance in academic disciplines in the way of securing scores in examination. There are two categories of academic scores elicited for analysis:

- General academic score (GAS) - Total score of the Examination
- Subject specific academic score (SSAS) - Total score achieved from each subjects- English, Mathematics, Science and Social Science

Academic achievement was measured by Grade Point Average (GPA) in the students' quarterly report cards collected from schools adhering to confidentiality parameters. Scores secured in English, Mathematics, Science, Social Science were subjected for analysis. Scores in languages such as Malayalam, Hindi, and Arabic were excluded considering that schools in various streams do not follow a common pattern in those subjects. In the case of subjects like Science and Social Science, scores of sub subjects were calculated to arrive at their average score. Summated score of English, Mathematics, Science and Social Science was considered as General Score as done in many previous studies. (Shastri,J. &Mohite, P.(1997).) For this study the results of quarterly examinations 2016 in respective schools were used.

METHODOLOGY

The objectives and hypotheses of the study primarily seek to identify the association between or among the variables in varying contexts of their interaction. Hence, the researcher resorted to quantitative research method. After identifying the potential variables and operationalized them based on the previous studies and current literature in the field, the researcher devised a mechanism for measuring them in scientific way. In the case of the variable 'Parental Support' a Likert scale was developed since the concept is abstract in nature. Details of the same has been given earlier. Data for the study was collected from a sample survey

conducted in 2016 and from the grade cards of quarterly examinations in the same year.

Sampling Techniques

The sample of the study was students studying in class VIII and IX in high schools in select schools across the state of Kerala, South India. To arrive at representative student sample that use television, a stratified random sampling procedure was adopted. In the first stage Kerala was categorised in to three regions namely Southern Kerala, Central Kerala and Northern Kerala. This region-wise division of the state is rationalized due to the socio-cultural differences among the people in respective regions. One district from each of these regions was chosen randomly. The chosen districts were: Trivandrum, Eranakulam and Malappuram. From each district, educational districts were randomly chosen, from which educational sub district was selected. Then, the task was to choose schools keeping the representation of all major streams of schools - government, aided and CBSE (Central Board of Secondary Education)- followed in school education system in Kerala. But in the case of CBSE schools, educational sub district criteria was not applied since that stream has no such a division.

In the final stage a sample of 60 students were fixed for each schools – 30 each from VIII and IX classes–with equal representation for boys and girls. Study was conducted among a total sample of 540 high school students, 270 boys and 270 girls, drawn randomly from the selected Aided, CBSE and Government schools of each district. A total of 540 students were surveyed; each district represented by 180 students.

Table 3.1 Stratification Steps

Region	District	Educational district	Educational sub district	Type of schools	Schools	Students sample size
Southern	Trivandrum	Aruvikkara	Nedumangadu	Govt	GHSS Aruvikkara	60
		Trivandrum	Kaniyapuram	Aided	MVHSS Thundathil	60
		-	-	CBSE	Alan Feldman Public School	60
Central	Ernakulam	Ernakulam	Vypin	Aided	Ramavarma Union HS	60
		Aluva	Angamaly	Govt	GHS Chenganamad	60
		-	-	CBSE	SBIOA	60
Northern	Malappuram	Malappuram	Kondotty	Aided	VPKMMHSS Puthur Pallikkal	60
		Tirur	Tirurangadi	Govt	GMHSS CU Campus	60
		-	-	CBSE	Navabharath	60
	Total					540

Data Collection Tools

Data was collected using questionnaire and grade cards made available by the schools concerned. Questionnaire was prepared in tandem with the objectives of the study to elicit data on basic information on schools and their streams and locations, personal variables of students, family antecedents including socio economic status and parental education, mass media use of student, level of exposure to television etc. The tool includes a scale to measure the parental support students get for their academic performance.

The researcher conducted a pilot study to ensure the validity and reliability of the tool as well as the scales used. Based on the outcome of the study appropriate changes were made in the questionnaire. The scales prepared were found to be effective for measuring the variables.

As mentioned, academic score was collected from grade cards quarterly examinations held in 2016 at the schools chosen for the study (See Table 3.1) All the 540 questionnaires administered were get returned perfectly completed since the they were distributed and collected back personally by the research visiting the school and under the supervision of teachers concerned. Prior to the distribution of questionnaire, permission was sought from school administrators and followed all terms and conditions of confidentiality for collecting data from minor students.

Data Analysis

As mentioned the study primarily focuses on getting insights into the nature of association among variables and varying effects at different interactions. To find out the significance of the associations statistical tests like One Way ANOVA and Two Way ANOVA were employed using SPSS.

THEORETICAL FRAMEWORK

As the study focuses on multiple dimensions of the phenomenon of the television effects on academic life of school students, it has been based mainly on four theories: Uses and Gratification Theory, Individual Difference Theory, Cultivation Theory and the Theory of Planned Behaviour. Given below are the short descriptions of each of these theories.

Uses and Gratification Theory

Uses and Gratification emphases on what people do with media rather than what media do with people. This approach contradicts the forerunner hyper needle/ magic bullet theory. This theory states that individuals choose media and its contents for their self-satisfaction. If not satisfied with the content, probability of switching the media to another is more. Thus user gets major role than the media. Based on the theory audience are classified into three groups. First group measure the pleasure received from the media. The second group considers socio economic factors responsible for media getting a prominent place among the people. The third group inquires about satisfying needs of audience. In this study the theory explains how students use media for their need and gratification. Viewing pattern of the student and how it affects their school performance or Academic Achievement are explained.

Individual Difference Theory

Theory proposes that, individuals respond differently to the mass media according to their psychological needs, and consume mass media to satisfy those psychological needs. The psychological needs differ from each other due to many factors. Though media supply only a small piece of information the range or level of interpreting the same piece of information may vary with its level of understanding by receiving individual. The level or degree of understanding of an individual vary from one another due to socio economic factors such as sex, age, income, education, occupation, attitude, beliefs, values, needs etc. Family, friends, acquaintances and other close aids can influence an individual's decisions, thus selectivity of mass media.

Cultivation Analysis

The theory developed by George Gerbner states that television is responsible for major 'cultivating' and 'acculturating' process, according to which people are exposed systematically to a selective view of society on almost every aspect of life, a view which tend to shape their beliefs and values accordingly. People tend to believe what they see in television due to habitual exposure. The real life situations portrayed in television fictions and news information are combined and fear that the world they live is what they watch on the television.

Theory of Planned Behaviour

Planned Behaviour Theory propounded by IcekAjzen is a behaviour theory which is widely applied by media researchers who focus on studies based on television watching and its effects. The theory stands on the attitudes and beliefs of individuals. For any action information received is processed and it will be arranged in a logical order based on the pretended enactment of that individual. The enactment of an individual is influenced by behavioural belief, knowledge, education, attitude and other socio economic factors. Study by Moshki et al (2016) reveals that knowledge level, attitude, subjective norm and intention of parents' mediations based on planned behaviour to monitor their children on television viewing increases the parental control and reduces the television watching hours of their children.

SCOPE AND LIMITATIONS OF THE STUDY

In the western context, many studies exploring the different dimensions of 'television and children' have been carried out. All affirm that television plays a significant role in the lives of children and it influences their academic achievement both positively and negatively. Yet,not many studies on how television viewing influence the academic achievement of school studentscould be found. The number of studies conducted in Kerala context is very scanty. In that sense, the present study will help bridge this research gap. The study covers not only the television exposure pattern and its influence on academic achievement, rather it encompasses various familial situations and factors that may mediate the interaction between television and academic life of students. Inclusion of these variables enhances the scope of the study.

However, the study has few limitations, first of all the sample is drawn from school students of Kerala. So the findings of the study are suitable to Kerala and other student's population similar to Kerala students. Another limitation is that, the sample is drawn from Eight and Ninth standard students only. Also the responses are taken from students only, not the perspectives of parents and teachers are included.

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CHAPTER IV

ANALYSIS AND FINDINGS

CHAPTER 4

ANALYSIS AND FINDINGS

Media has opened up new dimensions in learning and its role in imparting education is on the rise. Among the different mass media, television undoubtedly has the most prominent place in a child's learning and development. Number of researches has been conducted in this regard which bore both positive and negative results. Different from the earlier days, television has begun to enter the classrooms, thereby changing the conventional learning methods. TV gave children a faster start in learning vocabulary and general knowledge of their environment (Valkenberg, 2004).

The analysis and findings represent the central segment of the study. The study seeks to find the influence of television on academic achievements of school students in Kerala. Multi-stage sampling technique was employed to select the study sample, which would represent the entire state of Kerala.

SAMPLE DESCRIPTION

Samples for the study were collected from three districts in Kerala, selected from south, central, and north of the state: Trivandrum, Ernakulam and Malappuram. The study was conducted among a sample of 540 high school students - 270 boys and 270 girls - drawn randomly from the selected aided, CBSE and government schools of each district. A total of 540 students were surveyed - 180 each from Trivandrum, Ernakulam and Malappuram.

The questionnaire included items to elicit data on key sample characteristics such as students' demographic profile, academic profile and media use pattern.

Table 4.1: Demographic Profile

	Category	Frequency	Percentage
Gender	Male	270	50.0
	Female	270	50.0
District	Ernakulam	180	33.3
	Malappuram	180	33.3
	Trivandrum	180	33.3
Parent's Education	Up to SSLC	207	38.3
	Up to Degree	275	50.9
	PG and Above	58	10.7
Occupation of Father	Govt.	77	14.3
	Private	87	16.1
	Business/ self-employed/ farmer	166	30.7
	Coolie	201	37.2
	Pensioner	7	1.3
	Unemployed/ Home maker	2	.4
Occupation of Mother	Govt.	57	10.6
	Private	65	12.0
	Business/ self-employed/ farmer	24	4.4
	Coolie	49	9.1
	Pensioner	4	.7
	Unemployed/ Home maker	341	63.1
Income Status	Up to15000	331	61.3
	15001-50000	176	32.6
	Above Rs 50000	33	6.1

Equal representation of each region was necessary for getting accurate results. Therefore, the districts chosen from each region- Kozhikode from northern Kerala, Ernakulam from central Kerala and Trivandrum from southern Kerala- have identical contribution (33.3 % each) to the final sample (N=540).

Study was conducted among a sample of 540 high school students, 270 boys and 270 girls, drawn randomly from the selected aided, CBSE and government schools of each district. Parents' education, occupation and their income status were the other variables inquired as part of the study.

'Parents' education' was classified into 'Up to SSLC', 'Up to Degree', 'Post-Graduation and above' while Occupation as government, private, business/ self Employed/ Farmer, Coolie, Pensioner, and Unemployed. The economic background of the students was assessed in terms of their monthly family income which ranges 'Up to15000', '15001-50000', and 'Above Rs 50000'.

Table 4.2: Academic Profile

Type of School	Aided	180	33.3
	CBSE	180	33.3
	Government	180	33.3
Stream	VIII standard	270	50.0
	IX standard	270	50.0
Study Time	Less than 1 hour	44	8.1
	1-2 hours	138	25.6
	2-3hours	172	31.9
	3-4 hours	108	20.0
	4 hours and more	78	14.4
Outdoor Play Time	Less than 30 minutes	137	25.4
	½ - 1 hour	114	21.1
	1- 1 ½ hours	65	12.0
	1 ½ - 2 hours	74	13.7
	2 hours and more	150	27.8

Again, the sample is drawn randomly from VIIII and IX standard students (50% each) from the selected aided, CBSE and government schools of respective districts (33.3% each).

Study time of the sampled students shows that majority (31.9%) of them spend 2 to 3 hours while only 8.1 percent of the students spend less than one hour.

From the table it is clear that majority (27.8%) of the students spend 2 hours and more time for playing outdoors. At the same time, about one fourth (25.4%) of the students spend less than 30 minutes for the purpose.

Table 4.3: Media Use Pattern

Type of Media	Very often	Sometimes	Never	Total
Newspaper	318(58.9)	211(39.1)	11(2.0)	540(100)
Radio	73(13.5)	289(53.5)	178(33.0)	540(100)
Internet	105(19.4)	266(49.3)	169(31.3)	540(100)
Books other than text books	356(65.9)	174(32.2)	10(1.9)	540(100)

Tracing of media usage pattern of the sample showed that the students relied mainly on newspaper, radio, internet and books than textbooks for information and education.

More precisely, majority (65.9%) of the students use books than textbooks as the main source of information or knowledge. It is interesting to observe that there are students who use neither internet (31.3%) nor radio (33%). These figures are the highest in ‘never’ category.

Table 4.4: Preference of Information Sources

Source of Information	First Preference	Second Preference	Third Preference
Newspapers	216(40.0)	157(29.1)	80(14.8)
Television	33(6.1)	112(20.7)	146(27.0)
Radio	7(1.3)	27(5.0)	51(9.4)
Internet	82(15.2)	66(12.2)	72(13.3)
Books other than Textbooks	138(25.6)	131(24.3)	100(18.5)
Family/ Friends and Relatives	64(11.9)	47(8.7)	91(16.9)
Total	540(100)	540(100)	540(100)

When comes to the students' preferential order of various information sources, it is notable that majority (40.0%) of the students gave first preference to news paper. Only 6.1 percent of the students chose TV as their primary choice of information. Compared to other sources, radio was the least preferred information source.

Table 4.5: Television Density

Number of TV	Frequency	Percent
0	22	4.1
1	458	84.8
2	53	9.8
3	6	1.1
More than 3	1	.2
Total	540	100

It is remarkable that the large majority (84.8%) of the households have at least one television set at their home. Specifically, 9.8% have two television sets, 1.1% have three and 0.2% have more than three television sets at their homes. On the other hand, 4.8% of the households do not own a television. It could thus be concluded that majority of the households in Kerala have at least one television set.

Table 4.6: Channel Density

Channel Density	Frequency	Percent
1-5	141	26.1
6-10	132	24.4
11-15	69	12.8
More than 15	198	36.7
Total	540	100

With the advent of private players, people are exposed to a large number of channels. Therefore, it was decided to categorise respondents on the basis of the number of channels one watches on a normal day. Channel density is categorised into four; 1-5, 6-10, 11- 15 and more than 15. Among the total respondents majority

(36.7%) watches more than 15 channels on a single day while 12.8% of them watches 11-15 channels, the least in this category. In any case, all the students watch television regularly.

Table 4.7: Place of Watching Television

Place of Watching	Frequency	Percent
Home	518	95.9
Other places	22	4.1
School	0	0
Total	540	100

It is already understood from Table No 4.7 that almost all households in Kerala own television sets. These days many of the educational institutions also have TV sets and students are given opportunity to watch programmes. So, the respondents have chances to watch TV either from home or outside. For the purpose of the study, place of watching was categorised as home, school, and other places.

From the table it is evident that the large majority (95.9%) of the students prefer to watch television from home. On the other hand 4.1% of them prefer to watch television at other places. Interestingly, no one opted to watch TV at schools.

Table 4.8: Watching Behaviour

Watching Behaviour	Frequency	Percent
Alone	147	27.2
With family members	351	65.0
With friends	42	7.8
Total	540	100

The Television watching behaviour is categorised into three; ‘alone’, ‘with family members’ and ‘with friends’. It is apparent from the table that majority (65.0%) of the respondents wished to watch television with their family members. On the contrary, 27.2% of them prefer to watch alone. However, 7.8% of the

respondents like to watch television with their friends. It can be concluded that majority of the school students in Kerala watch television programs with their family members. It may help to clarify their doubt with the programs. At the same time, a number of students need their own privacy as they prefer to watch television alone.

Table 4.9: Perception of Television

Perception of Television	Agree	Disagree	**Total**
Helps my studies	408 (75.6)	132 (24.4)	540 (100.0)
Pass my spare time	474 (87.8)	66(12.2)	540(100.0)
As a matter of habit	157(29.1)	383(70.9)	540(100.0)
Helps Interaction with Others	313(58.0)	227(42.0)	540 (100.0)
Enhances Companionship as others in Family	374(69.3)	166(30.7)	540(100.0)
Helps in Decision making on their life	190(35.2)	350(64.8)	540(100.0)
Helps Forget Worries and Tensions	352(65.2)	188(34.8)	540(100.0)

The students were asked to choose their motive behind watching television. Different perspectives regarding television usage were shown to them. Based on their responses, it is understood that majority (75.6) of the students agree that watching television help with their study while a minority (24.4%) of students disagree with the statement. What is notable is that television watching helps students to forget worries and tensions. Seemingly, majority of the students agreed that television influenced them positively.

TELEVISION USE AND ACADEMIC PERFORMANCE

Television remains the dominant form of media among children and the television usage influences their academic achievements, positively or negatively as validated by different studies over decades in various parts of the world (Shejwal & Purayidathil 2006, Sherif& Sergant2006, Notten & Kraaykamp 2009). To measure the academic performance, most of these studies explored the nature of the association between television use and students' academic scores in general at various grades or in specific subjects. In this study, the researcher also resorted to the same method, exploring the change in scores in general and in specific subjects

due to the influence of television. For materializing this objective, the researcher collected general and subject scores – English, Mathematics, Science and Social Science - secured by sampled students in their quarterly examinations in the year 2016. Detailed below is the analysis of data on the association between three level of television use with General Academic Score (GAS) and Subject-wise Academic Scores (SAS).

Television Use and General Academic Score

As mentioned in Table 4.10 the sampled students were classified into three groups – Low, Medium and High - based on the hours they spent on television. To compare the general academic score in respect to three television usage groups, the data were subjected to One Way ANOVA and the result is given in Table 4.10.

Table 4.10: Television Use and General Academic Score

Group Statistics					ANOVA Results				
Level of Exposure to TV	**N**	**Mean**	**SD**	**Std. Error**	**Between/within group**	**Sum of Squares**	**Df**	**F**	**Sig.**
Low	304	196.58	76.69	4.39	Between Groups	85772.87	2	7.384	.001*
Medium	134	194.70	72.61	6.27	Within Groups	3119042.02	537		
High	102	163.87	79.30	7.85	Total	3204814.90	539		
Total	540	189.93	77.10	3.31					

*p<0.05

The data shows that highest mean score was secured by low level exposure group (M=196.58, SD=76.69, followed by medium (M=194.70, SD=72.61) and high (M=163.87, SD=79.30) level categories respectively. The general idea generated from the data was that the higher the level of exposure to television, the lower the GAS students could score. Also, it was found that the difference between the scores achieved by low and medium users was very slight. However, taking all the three mean scores together, ANOVA result showed that television exposure had a significant influence [F(2,537)=7.384,p = .001] on general academic score of school children.

However, there remains a question unanswered: Which of the exposure condition significantly caused the variation in GAS of school children? From the plot given above, low and medium users remain the same and higher level users are seen having very low score than others in achieving general academic score. To find out this the data was subjected to the Post Hoc test Scheffe and the result is reported in the Table 4.11

Table 4.11: Post Hoc Scheffe in Multiple Comparisons Test for TV Use and General Academic Score

Level of Exposure to TV	N	Subset for alpha = 0.05	
		1	2
High	102	163.87	
Medium	134		194.70
Low	304		196.58
Sig.		1.000	.978

Means for groups in homogeneous subsets are displayed

a Uses Harmonic Mean Sample Size = 145.942.

b The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed

The score (163.87) achieved by the higher level user was found to be significantly different at alpha level 0.05 from that of the lower and medium exposure levels as per the Scheffe test results. In other words, high level of television use causes low academic performance as evidenced by the low general score achieved by the sampled students.

Television Use and Subject Scores

The above result was generated taking the academic scores of all subjects together as general academic score (GAS). Is there any change in the result when subject scores are compared with the three exposure conditions- low, medium and high? For this purpose, four subjects were identified: English, Mathematics, Science and Social Science, and their mean scores were subjected to comparison using One Way ANOVA.

Television Use and Performance in English Language

English is considered as the second language in Malayalam medium schools and first language in English medium schools in Kerala. Given the historical backdrop of British colonialism English is deep-rooted in the education system in India in general and in Kerala in particular. Globalization of Indian education popularized the significance of English, and diverse ways of teaching and learning including multimedia platforms are mushroomed in formal and information streams of education at different levels. How exposure to television influenced academic performance of school children in this global language was one of the objectives of the study. And it assumes significance when television channels use English in a considerable way in their various programmes. As done in the case of GAS, using ANOVA the mean scores in English in three exposure conditions were compared. The result is given in Table 4.12.

Table 4.12: Television Use and Performance in English

Group Statistics					ANOVA Results				
Level of Exposure to TV	**N**	**Mean**	**SD**	**Std. Error**	**Between/within group**	**Sum of Squares**	**df**	**F**	**Sig.**
Low	304	58.86	23.35	1.33	Between Groups	3264.24	2	3.082	*.047
Medium	134	62.75	20.44	1.76	Within Groups	284387.29	537		
High	102	55.31	25.08	2.48	Total	287651.54	539		
Total	540	59.15	23.10	.994					

*p<0.05

The data showed that highest mean score was secured by medium level exposure group (M=62.75, SD=20.44) followed by low (M=58.86,SD=23.35) and high (M=55.31,SD=25.08) level categories respectively. Taking all the mean scores together ANOVA result showed that television exposure had a significant influence [F(2,537)=3.082,p= .047] on English score of school children. Hence, it was essential to find out which of the three exposure condition caused the significant influence and the data was subjected to the Post Hoc test Scheffe.

Table 4.13: Post Hoc Scheffe in Multiple Comparisons Test for TV Use and English Language Score

Level of Exposure to TV	N	Subset for alpha = 0.05	
		1	2
High	102	55.31	
Low	304	58.86	58.86
Medium	134		62.75
Sig.		.421	.353

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 145.942.
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

It is the difference between the scores secured by medium level (62.75) and high level users (55.31) that made the association between television exposure conditions and variations in English scores significant. It is clear from the result that medium level use of television significantly helped students achieve good scores in English. It can also be assumed that those who use television excessively do not choose programmes that help their academic achievement, particularly their performance in English language.

Table 4.14: Television Use and Performance in Mathematics

Group Statistics					ANOVA Results				
Level of Exposure to TV	**N**	**Mean**	**SD**	**Std. Error**	**Between/within group**	**Sum of Squares**	**df**	**F**	**Sig.**
Low	304	48.43	24.60	1.41	Between Groups	5281.87	2	4.428	.012
Medium	134	49.71	23.44	2.02	Within Groups	320247.86	537		
High	102	40.95	25.12	2.48	Total	325529.73	539		
Total	540	47.34	24.57	1.05					

*p<0.05

Mathematics is considered as mother of all sciences. Compared to other science subjects students are relatively afraid of Mathematics since it warrants precision in results/outcomes and high cognitive load to problem analysis. When it comes to

television content in general, the chances of finding Mathematics-related programmes are very difficult, except for some programmes in educational television channels. As ANOVA results showed there were statistically significant difference between mathematics score and the television user category. The data showed that the score (M=49.71,SD=23.44) achieved by medium users found to be different from that of lower and higher users. Here higher level of television use predicts the low mean score (M=40.95, SD=25.12). It indicates that heavy use of television leads to low score in mathematics. ANOVA result showed that television exposure had a significant effect [F(2,537)=4.428, p= .012] on mathematics score of the school students. To find out which exposure level significantly influenced in their variation in mathematics score the data was subjected to the Post Hoc test Scheffe and the result is reported in the Table 4.15.

Table 4.15: Post Hoc Scheffe in Multiple Comparisons Test for TV Use and Mathematics Score

Level of Exposure to TV	N	Subset for alpha = 0.05	
		1	2
High	102	40.95	
Low	304		48.43
Medium	134		49.71
Sig.		1.000	.905

Means for groups in homogeneous subsets are displayed.

a. *Uses Harmonic Mean Sample Size = 145.942*
b. *b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed*

In Mathematics, the score (40.95) achieved by high level user is found to be significantly low at alpha level 0.05 when compared to the lower and medium users as per the Scheffe tests results. High level of television use predicts the low Mathematics score achievement by the students.

Table 4.16: Television Use and Performance in Science

Group Statistics					ANOVA Results				
Level of Exposure to TV	**N**	**Mean**	**SD**	**Std. Error**	**Between/within group**	**Sum of Squares**	**df**	**F**	**Sig.**
Low	304	57.66	21.57	1.23	Between Groups	5528.63	2	5.758	.003
Medium	134	58.97	21.36	1.84	Within Groups	257812.39	537		
High	102	50.00	23.55	2.33	Total	263341.02	539		
Total	540	56.54	22.10	.951					

*p<0.05

Nowadays, specific science-related programmes are broadcast by channels like National Geographic. Also, general channels telecast programmes aiming at science popularization and education. The best example is Doordarshan's science series. In addition to these, educational channels like Victers, Gyandarshan etc telecast science classes intended for school and college students. More so news programmes on science-related subjects like health and hygiene, climate change, global warming, agriculture and farming, environmental protection etc. help students acquire scientific literacy and scientific temper and supplement their curriculum content at schools.

To find out the influence of various levels of exposure to academic achievement in Science, ANOVA was used to compare the mean scores of Science scores with the three television exposure conditions. It was found that medium users were found to have the highest mean score of (M=58.97, SD=21.36) followed by those in low users and high users. What was also found was that the difference was statistically significant [F (2,537) =5.758, p= .003]. It was also found that heavy users had a lowest mean score of (M=50.00, SD=23.55) when the difference between medium users and the low users was very slight. To find out which exposure level significantly caused the variation in Science scores the data was subjected to the post hoc test Scheffe and the result is reported in the Table 4.17.

Table 4.17: Post Hoc Scheffe in Multiple Comparisons Test for TV Use and Science Score

Level of Exposure to TV	N	Subset for alpha = 0.05	
		1	2
High	102	50.009	
Low	304		57.6603
Medium	134		58.9796
Sig.		1.000	.876

Means for groups in homogeneous subsets are displayed

a. *Uses Harmonic Mean Sample Size = 145.942.*
b. *The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed*

The score (50.009) achieved by high level users is found to be significantly different at alpha level 0.05 from lower and medium users as per the Scheffe tests' results. In other words, high level of television use caused the low Science score achievement by the students.

Television Use and Performance in Social Science

In school curricula in Kerala, irrespective of their streams such as CBSE and State, Social Sciences are a major component comprising of Economics, Geography, and Civics etc. Most of the contents in news and entertainment channels have heavy thematic orientation towards these subject areas. It can be said that television channels significantly influence the public in their awareness about political, economic, cultural and social matters of the contemporary society. To find out how different levels of exposure to television influence school children's achievement in Social Science subjects, the mean score in Social Science was compared with three exposure conditions – Low, Medium and High- using ANOVA and the result is given in Table 4.18.

Table 4.18: Television Use and Performance in Social Science

Group Statistics					ANOVA Results				
Level of Exposure to TV	**N**	**Mean**	**SD**	**Std. Error**	**Between/within group**	**Sum of Squares**	**df**	**F**	**Sig.**
Low	304	57.21	24.25	1.39	Between Groups	7848.13	2	6.329	.002
Medium	134	58.25	25.51	2.20	Within Groups	332927.19	537		
High	102	47.85	25.96	2.57	Total	340775.33	539		
Total	540	55.70	25.14	1.08					

*p<0.05

The data showed that medium users had the highest mean score (M=58.25, SD=25.51) followed by high (M=47.85, SD=25.96) and low (M=57.21,SD=24.25) level user categories. And it was found that the difference between low and the medium users in respect of Social Science scores was very slight as seen in the case of other subjects. It was also found that television exposure had a significant influence [F(2,537)=6.329,p= .002)] on school children's performance in Social Sciences. But, which exposure level contributes to this significant influence still remains unclear. Hence, the data was subjected to the Post Hoc test Scheffe and the result is reported in the Table 4.19.

Table 4.19: Post Hoc Scheffe in Multiple Comparisons Test for TV Use and Social Science Score

Level of Exposure to TV	**N**	**Subset for alpha = 0.05**	
		1	**2**
High	102	47.85	
Low	304		57.21
Medium	134		58.25
Sig.		1.000	.937

Means for groups in homogeneous subsets are displayed.

a. *Uses Harmonic Mean Sample Size = 145.942.*
b. *The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.*

The mean score (47.85) achieved by high level users in Social Science was found to be significantly low at alpha level 0.05 from that of lower and medium users as per the Scheffe tests results. It means high level use of television leads to lower scores in Social Science.

Clarifying Research Hypothesis 1

H1 *Level of exposure to television will influence the academic performance of schools students*

Level of television use of students in Kerala is tested for its association with student's academic achievement. The result indicated that high exposure to television leads to low performance of school students in all academic subjects (see tables 4.10 to 4.19). In general, high exposure to television – ie spending 14 hours per week on television, leads to school students' low performance in all academic subjects.

This finding validates the tenability of the hypothesis that the level of exposure to television will significantly influence academic performance of school students.

Theoretically, the phenomenon of medium use of television that leads to higher academic performance can be viewed from the individual difference perspective of media use. The finding prompts to explore the students' personal reasons for varying levels of use and meaningful intervention is required from the part of educators and parents to control the level of use to optimize academic performance. In that sense, the television use pattern of the students is to be planned as envisaged in the theory of planned behaviour.

GENDER, TELEVISION USE AND ACADEMIC PERFORMANCE

The influence of gender on the interaction between television use and students' academic performance was well studied by different scholars over the past few decades. The root of this interaction can be traced to the differential use of television as medium by males and females as well as their cognitive, affective and behavioural interaction with the visual media. Studied showed that in television viewing boys spent more time than girls (Gentle and Walsh 2002, Ozdmir 2006) and social circumstances and domestic environments provide more chances for

boys to spend more time on television. This situation is very much visible in developing nations.

As part of meeting the second objective of the study, the research formulated a hypothesis that the influence of exposure to television on the academic performance of school students would vary among male and female students.

To determine the main effect of the gender and television use on academic performance of girls and boys, mean academic scores of these two gender groups in three use conditions – low, medium and heavy- were found using two way ANOVA. Detailed below is the result of the comparative analysis of General Academic Score (GAS).

Table 4.20: Gender, TV Use and General Academic Score

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Gender	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Male	Low	142	186.45	72.45	Gender	109827.41	1	19.499	.000	.035
	Medium	63	177.71	74.09						
	High	65	147.23	79.99	Level of Exposure to TV	49358.53	2	4.382	.013	.016
	Total	270	174.97	76.13						
Female	Low	162	205.46	79.39	Gender * Level of TV Exposure	14089.57	2	1.251	**.287**	.005
	Medium	71	209.77	68.30						
	High	37	193.10	69.95	Error	3007752.50	534			
	Total	270	204.90	75.28						
Total	Low	304	196.58	76.69	Total	22686136.36	540			
	Medium	134	194.70	72.61						
	High	102	163.87	79.30						
	Total	540	189.93	77.10						

*p<0.05

The research question was whether the interaction of the independent variable gender and level of television use had any significant effect on the dependent variable of general academic score of the sampled students.

Running a Two way factorial ANOVA compared the variability between the groups i.e. how far apart are the mean to the variability within the groups, i.e. how much natural variation exists in the measurement. In this analysis the researcher run a two way factorial ANOVA based on two factors (gender and level of television use each with three levels.) then the Null hypothesis is ; Ho: there is no difference in mean general academic score for varying combination of gender and level of television use by the students.

Descriptive statistics showed that general academic score was high among female students (M= 204.90, SD=75.28) when compared to their male counterparts (M=174.97, SD=76.13). Students from all groups showed the lowest general academic scores when they used TV at higher level. But in the case of boys, the trend of GAS decline was in a progressive pattern when they used television at low, medium and high level respectively unlike the girls whose GAS did not follow such a fixed pattern; they scored highest GAS when used television at medium level. It was also found that this main effect of gender on GAS was significant [F (1,534) = 19.499, p=.000]. In a similar way there was also significant main effect of level of TV use on GAS [F (2,534 =4.382, p=.013]. However, the interaction between the two factors i.e. gender and level of television use had no significant effect on the GAS of the school students [F (2,534) = 1.251, p=.278].

From the analysis it can be deduced that overall academic performance of the sampled students is dependent on their gender and television viewing pattern if they are taken separately. But, the bearing of the interaction between independent variables gender and television use conditions - low, medium and high – on the dependent variable GAS was not seen as significant. Was the same pattern of influence of the interaction between gender and three television use levels followed in the case of subject wise academic scores as well? To find out the pattern of dependence of subject wise scores on gender and television use, Two way ANOVA was run and the result is reported in the following tables.

Gender, Television Use and English Score

Compared to the English mean score of girls (M=63.51, SD=22.09), the same of the boys was abysmally low (M=54.80, SD=23.29). And this difference in English scores secured by two gender groups is highly significant [F(1,534)=23.183 ,p= .000]. It means the academic performance of the sampled students in English language was dependent on their gender.

Table 4.21: Gender, TV Use and English Score

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Gender	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Male	Low	142	56.13	22.05	Gender	11828.10	1	23.183	.000	.042
	Medium	63	57.60	23.41						
	High	65	49.15	25.18	Level of Exposure to TV	1692.02	2	1.658	.191	.006
	Total	270	54.80	23.29						
Female	Low	162	61.25	24.24	Gender * Level of Exposure to TV	2614.67	2	2.562	.078	.010
	Medium	71	67.32	16.22						
	High	37	66.14	21.20	Error	272453.08	534			
	Total	270	63.51	22.09						
Total	Low	304	58.86	23.35	Total	2177582.81	540			
	Medium	134	62.75	20.44						
	High	102	55.31	25.08						
	Total	540	59.15	23.10						

*p<0.05

Mean score in English secured by the sampled students vary according to their television use pattern. While they attain highest score (M=62.75, SD=20.44) when they use television at a medium level they get lower scores when they use television at low (M= 58.86, SD=23.35) and high (M=55.31, SD=25.08) levels. But this different was not found to be statistically significant F (2,534) = 1.658,p= .191].

Whether the nature of the interaction of the independent variables gender and levels of exposure to TV have any statistically significant effect on dependent variable English score of the students? Two way ANOVA result showed that there was no significant interaction effect of independent variables gender and television use levels on the dependent variable mean score in English [F(2,534)=2.562 ,p= .078]. When going through the descriptive data, English mean scores of male (M= 57.60, SD= 23.41) and female (M=67.32, SD=16.22) students were found to be highest when they used television at a moderate level. When high level of use procured the lowest score for boys, it was low level of use that fetched the lowest score in English for girls.

From the overall analysis and subsequent result, it can be concluded that moderate level of use of television help boys and girls secure highest scores in English language.

Gender, Television Use and Mathematics Score:

Descriptive statistics revealed that as in the case of English scores, mean Mathematics score of female students was also high (M=51.38,SD=24.61) when compared to male students (M=43.30,SD=23.90) and the ANOVA result showed that the main effect of the variable gender on the Mathematics score was significant [F(1,534)=.12.998,p=.000]. It means that dependent variable of mean Mathematics score was dependent on the independent variable of gender.

Table 4.22: Gender, TV Use and Mathematics Score

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Gender	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Male	Low	142	45.38	23.46	Gender	7603.15	1	12.998	.000	.024
	Medium	63	45.35	23.98						
	High	65	36.76	23.98	Level of Exposure to TV	3008.009	2	2.571	.077	.010
	Total	270	43.30	23.90						
Female	Low	162	51.11	25.33	Gender * Level of Exposure to TV	641.02	2	.548	.578	.002
	Medium	71	53.58	22.41						
	High	37	48.31	25.69	Error	312358.691	534			
	Total	270	51.38	24.61						
Total	Low	304	48.43	24.60	Total	1535833.650	540			
	Medium	134	49.71	23.44						
	High	102	40.95	25.12						
	Total	540	47.34	24.57						

*p<0.05

The sampled students performed well (M=49.71, SD=25.12) in Mathematics when they used television at a medium level. When they used television intensively, their mean score was at the lowest level (M=40.95, SD=25.12) and when used at low level, score was moderate (M=48.43, SD=24.60). However, it was found that these mean score differences among various television user categories was not significant [F (2,534) =. 2.571,p=.077]. It means the difference now seen is just a matter of chance.

The result showed that high level of television use did not help students to perform well in Mathematics. For males and females medium level use of television yielded high scores in Mathematics. The interaction between gender and user categories had no bearing on the students' mean score in Mathematics [F(2,534)=.548.,p=.578].

Gender, Television Use and Science Score

How did gender influence the Science score of the students when they used TV at various levels? The data shows that highest mean score in Science was secured by female students (M=61.74,SD=21.15) when compared to male students (M=51.34,SD=21.84) and the influence of gender on the academic performance of students in Science subjects was significant [F(2,534)=. 2.854p=..000].

Table 4.23: Gender, TV Use and Science Score

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Gender	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Male	Low	142	53.80	21.04	Gender	13582.54	1	29.740	.000	.053
	Medium	63	53.02	21.90						
	High	65	44.34	22.32	Level of Exposure to TV	2607.15	2	2.854	.058	.011
	Total	270	51.34	21.84						
Female	Low	162	61.04	21.54	Gender * Level of Exposure to TV	1365.05	2	1.494	.225	.006
	Medium	71	64.26	19.53						
	High	37	59.96	22.59	Error	243881.409	534			
	Total	270	61.74	21.15						
Total	Low	304	57.66	21.57	Total	1989753.745	540			
	Medium	134	58.97	21.36						
	High	102	50.00	23.55						
	Total	540	56.54	22.10						

*p<0.05

The main effect of television exposure level was not found to be significant F(1,534)=. 29.740.,p=.058]. As in all other previously mentioned cases, the highest mean score (M=58.97, SD =21.36) was secured by those students who used television at medium level and the lowest score (M=50.00, SD =23.55) by those used at high level. But, as in the previous subjects, in Science too, variance in the use of television did not significantly influence the differences in academic scores of boys and girls [F(2,534)=1.494,p=.225].

In short, for girls and boys medium level use of television was helpful to perform well in Science subjects.

Gender, Television Use and Social Science Score

Two way ANOVA was employed to find out the nature of the influence of the independent variables, gender and level of television use on the dependent variable of mean score in Social Science.

Table 4.24: Gender, TV Use and Social Science Score

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Gender	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Male	Low	142	53.57	23.62	Gender	15480.64	1	26.061	.000	.047
	Medium	63	51.04	25.89						
	High	65	42.06	24.84	Level of Exposure to TV	4095.50	2	3.447	.033	.013
	Total	270	50.21	24.82						
Female	Low	162	60.40	24.41	Gender * Level of Exposure to TV	2029.62	2	1.708	.182	.006
	Medium	71	64.65	23.56						
	High	37	58.02	25.03	Error	317209.05	534			
	Total	270	61.19	24.29						
Total	Low	304	57.21	24.25	Total	2016370.59	540			
	Medium	134	58.25	25.51						
	High	102	47.85	25.96						
	Total	540	55.70	25.14						

*p<0.05

The data shows that highest mean score was secured by female students (M=61.19, SD=24.29) when compared to male students (M=50.21,SD=24.82) and this difference was found to be significant [F(1,534)= 26.061 ,p=.000] as in the earlier cases. However the difference of mean score in Social Sciences secured by the sampled students was also found to be significant [F(2,534)= 3.447,p=.033.]. In the case of Social Science also, medium use of television helped students to get better scores (M=58.25, SD=25.51) and high use of television adversely affected their performance (M=47.85, SD=25.96).

The interaction between gender and television exposure had no significant bearing [F(2,534)=1.708,p=.182] on Social Science score of the students. Both males and females performed badly when they used television highly. In this case deviating from earlier instances, low level of television use helped boys to secure higher scores (M=53.57, SD=23.62) in Social Sciences. In short, high level of television use always leads to low level of academic score in all subjects and in general academic score as well.

Clarifying Research Hypothesis 2

H2 School students' gender will influence the interaction between their exposure to television and academic performance

The result revealed that moderate level of use of television help boys and girls to secure highest scores in English, Mathematics, and Science while in Social science low level use was contributing to high performance. Taking all subjects together, low academic performance was visible among both the girls and boys who spent on television 14 hours or more on average per week. Among them, the performance is poorer among the boys, though this difference among the genders is not statistically significant (see tables 4.20 to 4.24). Thus the result indicates that the hypothesis that the gender will influence the interaction between their exposure to television and academic performance is not tenable.

Theoretically speaking, the finding that there is no gender disparity in general academic performance and that there is gender difference when it comes to subject wise academic performance stresses that the individual difference theory has critical bearing on the television use of school children. In-depth analysis of the interconnection between use pattern and motivational factors in terms of television use by children will give clear understanding. Based on the data from this analaysis, the television use behaviour of students can be planned both for short and long terms.

INCOME, TELEVISION USE AND ACADEMIC PERFORMANCE

In previous studies, researchers found that socioeconomic status (SES) is a contributor to the academic achievement of students (Jeynes 2002,Eamon,M.K 2005,Singh.P.,& Choudhari.G 2015). Given this research context, this study also

sought to find out the nature of the association between SES and the academic performance of the sampled students in a condition where they use television.

The economic background of the students was assessed in term of their monthly family income. Monthly family income was classified into three groups: up to Rs 15000, Rs 15001-50000, and Above Rs 50000.Detailed below is the analysis of data on the interaction of monthly family income and three levels of television use on General Academic Score (GAS) and Subject-wise Academic Scores (SAS).

To compare the general academic score in respect of monthly family income and television usage groups the data were subjected in to Two-way ANOVA and the results are given in Table 4.25

Table 4.25: Income, TV Use and General Academic Score

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Low	176	173.51	71.54	Income	355412.66	2	35.211	.000	.117
	Medium	83	173.17	70.45						
	High	72	143.17	70.96	Level of Exposure to TV	5801.15	2	.575	.563	.002
	Total	331	166.83	72.02						
Rs 15001-50000	Low	102	225.69	71.16	Income * Level of Exposure to TV	7000.47	4	.347	.846	.003
	Medium	48	228.09	63.74						
	High	26	208.35	72.34	Error	2679930.59	531			
	Total	176	223.78	69.31						
Above Rs 50000	Low	26	238.51	77.30	Total	22686136.36	540			
	Medium	3	255.86	6.217						
	High	4	247.30	110.73						
	Total	33	241.16	76.49						
Total	Low	304	196.58	76.69						
	Medium	134	194.70	72.61						
	High	102	163.87	79.30						
	Total	540	189.93	77.10						

*p<0.05

Group statistics shows that mean GAS were high in medium (M=223.78, SD=69.31) and higher (M= 241.16, SD=76.49) income groups when compared to lower income group (M=166.83, SD= 72.02) and this difference was found to be highly significant at a p level of 0.00.

The nature of this interaction suggests that the students from all income groups had a dwindling GAS when they use TV at higher level. However the interaction between the two factors i.e., monthly family income and level of television use had no significant influence [F (4,531)=.347,p=.846] on GAS.

Income, TV Use and English Score

To compare the subject-wise academic score in respect of monthly family income and television usage groups the data were subjected in to Two way ANOVA and the results are given in Table 4.26

Table 4.26: Income, TV Use and English Score

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Low	176	51.48	23.17	Income	38752.36	2	43.136	.000	.140
	Medium	83	56.54	20.17						
	High	72	47.90	23.08	Level of Exposure to TV	2029.04	2	2.259	.106	.008
	Total	331	51.97	22.57						
Rs 15001-50000	Low	102	68.66	18.91	Income * Level of Exposure to TV	1963.31	4	1.093	.359	.008
	Medium	48	71.73	16.42						
	High	26	72.24	21.10	Error	238519.76	531			
	Total	176	70.02	18.57						
Above Rs 50000	Low	26	70.37	22.16	Total	2177582.81	540			
	Medium	3	91.00	5.19						
	High	4	78.70	18.55						
	Total	33	73.26	21.39						
Total	Low	304	58.86	23.35						
	Medium	134	62.75	20.44						
	High	102	55.31	25.08						
	Total	540	59.15	23.10						

*p<0.05

The data present how family income influences English score of the students when they use TV at varying levels. From the descriptive statistics it is clear that English scores are high in medium (M=70.02, SD=18.57) and higher (M=73.26, SD=21.39) groups when compared to low income group(M=51.97,SD= 22.57). And, this difference was found to be statistically significant with a probability value of 0.00.

The result also showed that the interaction between income status and level of exposure to television did not influence the students' performance in English language acquisition in a significant way [F(4,531)=1.093,p=.359]. The nature of this interaction suggested that students from all income groups except middle income group show a steep decline in their English score when they use TV at a higher level. The interaction between the two factors i.e. monthly family income and level of television use had no significant influence [F (4,531)=.347,p=.846] on academic performance of students in English.

Income, TV Use and Mathematics Score

Group statistics shows that Mathematics score was high in medium (M=57.32, SD=23.76) and higher (M=65.09, SD=26.26) income groups when compared to lower income group (M=40.26, SD=22.02). And, this difference among different income groups was found to be statistically significant with a p value of 0.00. At the same time, there are no statically significant differences among the Mathematical scores of Low, Medium and High users of television though the medium and low users showed higher performance when compared to the high user category.

Table 4.27: Income, TV Use and Mathematics Score

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Low	176	41.54	22.49	Income	38879.11	2	37.49	.000	.124
	Medium	83	43.09	21.05						
	High	72	33.86	20.98	Level of Exposure to TV	1718.81	2	1.65	.192	.006
	Total	331	40.26	22.02						
Rs 15001-50000	Low	102	56.91	23.72	Income * Level of Exposure to TV	2434.40	4	1.17	.321	.009
	Medium	48	58.96	23.13						
	High	26	55.91	25.78	Error	275277.90	531			
	Total	176	57.32	23.76						
Above Rs 50000	Low	26	61.84	26.56	Total	1535833.65	540			
	Medium	3	84.96	7.78						
	High	4	71.31	30.02						
	Total	33	65.09	26.26						
Total	Low	304	48.43	24.60						
	Medium	134	49.71	23.44						
	High	102	40.95	25.12						
	Total	540	47.34	24.57						

*p<0.05

The interaction between these two variables did not make any significant influence on the students' performance in Mathematics [F(4,531) =1.174, p=.321].

Income, TV Use and Science Score

Data in the below table show the influence of family monthly income on Science score of the students when they use TV at varying levels. Group statistics indicated that mean scores in Science were high in medium (M=65.19, SD=20.38) and higher (M=70.85, SD=23.01) income groups than the lower income group (M=50.51, SD=20.72). This difference in mean scores acquired by students belonging to the three income groups is statistically significant [F (2,531) = .30.636

p=.0.00].However, the varying level of exposure to television has no significant influence [F(2,531)=.768p=.465] on the mean score in Science subjects, secured by the students though medium and low television exposure contribute to highest (M=58.97, SD=21.36) and second highest (M57.66, SD=21.57) scores respectively.

Table 4.28: Income, TV Use and Science Score

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Low	176	51.86	20.22	Income	26167.32	2	30.636	.000	.103
	Medium	83	53.20	20.51						
	High	72	44.10	21.14	Level of Exposure to TV	655.73	2	.768	.465	.003
	Total	331	50.51	20.72						
Rs 15001-50000	Low	102	64.58	20.27	Income * Level of Exposure to TV	893.04	4	.523	.719	.004
	Medium	48	67.72	19.84						
	High	26	62.93	22.07	Error	226773.17	531			
	Total	176	65.19	20.38						
Above Rs 50000	Low	26	69.70	23.16	Total	1989753.74	540			
	Medium	3	78.90	2.76						
	High	4	72.29	33.01						
	Total	33	70.85	23.01						
Total	Low	304	57.66	21.57						
	Medium	134	58.97	21.36						
	High	102	50.00	23.55						
	Total	540	56.54	22.10						

*p<0.05

In this case also, high exposure led to lowest mean score (M= 50.00 SD= 23.55. Same is the case of the influence of the interaction of these two variables: Income status and level of television exposure on the academic performance in Science subjects. No significant association between the interaction effect and the mean score in Science was reported [F(4,531)=. .523 p=.719].

Income, TV Use and Social Science Score

In Social Science scores also, similar result was yielded by ANOVA. Significant association was between income status and academic achievement, but no significant influence of television exposure on academic scores was reported. Social Science mean scores increases as the level of income increases. While the low income group reported low scores (M=48.57, SD=24.09), medium and high income groups had medium (M=66.37, SD=22.40) and high scores (M=70.28, SD=23.33) in Social Science. And, with a p-value of 0.00, this association was found to be significant.

Table 4.29: Income, TV Use and Social Science Score

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Low	176	50.55	23.65	Income	37143.87	2	33.994	.000	.114
	Medium	83	51.20	24.69						
	High	72	40.70	23.12	Level of Exposure to TV	588.75	2	.539	.584	.002
	Total	331	48.57	24.09						
Rs15001-50000	Low	102	65.83	21.52	Income * Level of Exposure to TV	1693.40	4	.775	.542	.006
	Medium	48	69.19	23.13						
	High	26	63.30	24.69	Error	290102.46	531			
	Total	176	66.37	22.40						
Above Rs 50000	Low	26	68.44	24.40	Total	2016370.59	540			
	Medium	3	78.43	13.21						
	High	4	76.07	24.25						
	Total	33	70.28	23.33						
Total	Low	304	57.21	24.25						
	Medium	134	58.25	25.51						
	High	102	47.85	25.96						
	Total	540	55.70	25.14						

*p<0.05

Medium exposure to television is a recommendable one in this case of Social Science performance too. While Medium and Low user categories achieved highest (M=58.25, SD =25.51) and second highest (M=57.21, SD =24.25) means scores, the High user category reported a dwindling mean score (M= 47.85, SD= 25.96). However, the differences among the mean scores secured by different user groups are not significantly different denoting that the use pattern has no influence on academic achievement [F (2,531)=.584p=.584].

Analysis of variance shows that the interaction between these two variables had no significant effect on the academic performance [F(4,531)= .775 p=.542].

Clarifying Research Hypothesis 3

H3 School student's family antecedents will influence the interaction between

a) Their level of exposure to television and academic achievement

b) Their level of parental mediation in television use and academic achievement

c) Their television programme choice and academic achievement

Family antecedents of the students (income and parents education) in Kerala are tested for its association with student's academic achievement.

H3.a. *School student's family antecedents (family income) will influence the interaction between their level of exposure to television and academic achievement.*

From the results it is found that irrespective of income levels of their family, students who use television extensively shows perform poorer in all academic subjects as uniform result was yielded and no statistically significant bearing was found in between academic scores of the sampled students and the interaction between their income levels and television use levels (see tables 4.25 to 4.29). Thus the study negate the validity of the hypothesis that nature of the influence of television on the academic achievement of students will vary according to the financial status of their families

PARENT'S EDUCATION, TELEVISION USE AND ACADEMIC PERFORMANCE

Parent's education had an important role in the academic achievement of the school students. In previous studies researchers have found the relationship between parents' education and academic achievement (Notten & Krayykamp 2009, Farooq et al 2011). Parents' education was operationalized as the highest education of mother or father of the students after classifying the same intro three: up to SSLC, Up to Degree and PG and above.

To compare the general academic score in respect of parent's education and television usage groups the data were subjected to Two way ANOVA and the results are given in Table 4.30.

Table 4.30: mean score of General by Parent's Education and Level of Exposure to TV

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Low	123	162.46	68.22	Parent's Education	359934.75	2	36.131	.000	.120
	Medium	42	171.44	69.41						
	High	42	118.87	65.97	Level of Exposure	6659.96	2	.669	.513	.003
	Total	207	155.44	70.26						
Up to Degree	Low	147	215.99	74.59	Parent's Education * Level of Exposure	40901.58	4	2.053	.086	.015
	Medium	73	197.88	75.07						
	High	55	189.18	70.73	Error	2644914.33	531			
	Total	275	205.82	74.56						
PG and Above	Low	34	236.11	67.50	Total	22686136.36	540			
	Medium	19	233.88	50.17						
	High	5	263.41	64.87						
	Total	58	237.73	61.58						
Total	Low	304	196.58	76.69						
	Medium	134	194.70	72.61						
	High	102	163.87	79.30						
	Total	540	189.93	77.10						

*p<0.05

The purpose is to find out the bearing of the interaction between parents' education and students' television use level on their academic performance. From the descriptive statistics it can be seen that academic scores were higher among the children of parents having higher educational levels – PG and above (M=237.73, SD=61.58), up to Degree (M=205.82, SD=74.56) and up to SSLC (M=155.44, SD=61.58). And, these differences were found to be significant at p value of .00. This is natural since educated parents can contribute to the academic performance of their wards in multiple ways. But it was found that the level of exposure to television of students was not at all significantly associated with their parents' education.(p= .513).After that we studied whether the interaction between parents' education and students' exposure to television has any bearing on their academic performance. ANOVA result [F(4,531)=2.053,p=.086] categorically negates any statistical significance. From this analysis, it can be concluded that since parents' educational level has no role in defining the level of use of television by students and hence, the academic performance of students is not significantly determined by the interaction between parents education and students television use. What was interesting is that children of parents having PG and above education were found to have higher scores when they are exposed to television in an intensive fashion though this bearing was not found to be significant.

To compare the subject-wise academic score in respect of Parent's Education and television usage groups the data were subjected to Two way ANOVA and the results are given in Table.4.31

Parent's Education, Television Use and English Score

Table analyses how parents' education influences the English score of the students when they watch TV at varying levels. Group statistics shows that English scores are high in up to degree (M= 64.70, SD=20.55) and PG and above (M=76.49, SD=15.35) groups when compared to up to SSLC group (M=46.94, SD=22.21).

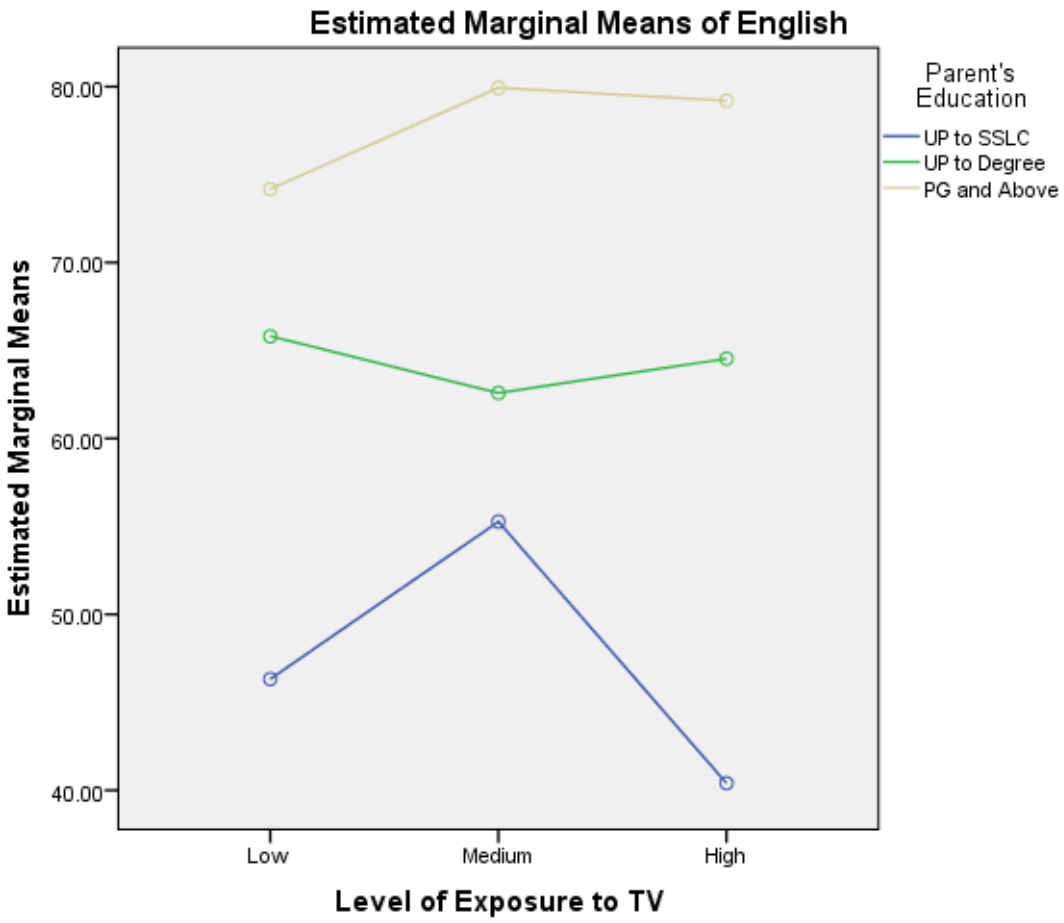
Table 4.31: Mean Score of English by Parent's Education and Level of Exposure to TV

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Low	123	46.32	21.57	Parent's Education	39769.59	2	46.895	.000	.150
	Medium	42	55.27	21.55						
	High	42	40.40	22.68	Level of Exposure	1111.26	2	1.310	.271	.005
	Total	207	46.94	22.21						
Up to Degree	Low	147	65.81	20.96	Parent's Education * Level of Exposure	4471.55	4	2.636	.033	.019
	Medium	73	62.58	19.18						
	High	55	64.53	21.32	Error	225159.31	531			
	Total	275	64.70	20.55						
PG and Above	Low	34	74.17	17.30	Total	2177582.81	540			
	Medium	19	79.93	10.69						
	High	5	79.20	16.19						
	Total	58	76.49	15.35						
Total	Low	304	58.86	23.35						
	Medium	134	62.75	20.44						
	High	102	55.31	25.08						
	Total	540	59.15	23.10						

*p<0.05

ANOVA revealed that there was a significant interaction between the two factors i.e., this parents' education and level of television use [F(4,531)=2.636, P=033]. The nature of interaction suggests that higher level of television use is helpful for students from PG and above groups to increase their English score (M=79.20,SD=16.19) while higher level of television use decreases the English score of up to SSLC (M=40.40, SD=22.68) and up to Degree (M=64.53, SD=21.32) groups. Overall parents' education and level of television use had a significant influence on English score of the school students. This has been plotted (See Chart No.4.1) to get a clearer understanding.

Figure 4.1: Estimated Marginal Means of English



However, there remains a question unanswered: which category of parents' education significantly caused the variation in English score of school children? To find out this the data was subjected to the Post Hoc test Tukey(See Tables - Post hoc Tukey Multiple Comparison Test for Parents' Education and English Score and Table - Post hoc Tukey Multiple Comparison Test Television Use and English Score).

Post hoc comparisons using the Tukey test indicates PG and above group with a score of (76.49) was significantly different from the groups of parents with 'up to SSLC' and 'Up to Degree' levels of education. The difference between the mean scores of high users (55.31) and low users (62.75) is found to be significant while the mean score of medium users (58.86) stands in between.

In other words, the interaction between the independent variables Parents' Education and Level of Television Use significantly contributes to the differential performance of students in English language.

Table 4.32: Post hoc Tukey Multiple Comparison Test for Parent's Education and English Score

(I)Parent's Education	(J) Parent's Education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Up to SSLC	Up to Degree	-17.7597*	1.89	.000	-22.2131	-13.3063
	PG and Above	-29.5566*	3.05	.000	-36.7469	-22.3663
Up to Degree	Up to SSLC	17.7597*	1.89	.000	13.3063	22.2131
	PG and Above	-11.7969*	2.97	.000	-18.7899	-4.8039
PG and Above	Up to SSLC	29.5566*	3.05	.000	22.3663	36.7469
	Up to Degree	11.7969*	2.97	.000	4.8039	18.7899

Post Hoc HSD result : Parent's Education and English Score

Parent's Education	N	Subset		
		1	2	3
Up to SSLC	207	46.9408		
Up to Degree	275		64.7005	
PG and Above	58			76.4974
Sig.		1.000	1.000	1.000

Post hoc comparisons using the Tukey test indicates the scores achieved by each group of parents with different education level are significantly different from one another stating that parents' education had a significant influence on English scores of the sampled students. The score (62.7556) achieved by the medium level user was found to be significantly different from that of the higher and lower exposure levels as per the Tukey test. From this result it can be concluded that the interaction between Parents' Education and Level of Television Use significantly

influences English scores of school children due to the contribution of both the independent variables in varying weights.

Table 4.33: Post hoc Tukey Multiple Comparison Test for Television Use and English Score

(I)User level	(J)User level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Low	Medium	-3.8921	2.13	.163	-8.9106	1.1263
	High	3.5449	2.35	.290	-1.9931	9.0828
Medium	Low	3.8921	2.13	.163	-1.1263	8.9106
	High	7.4370*	2.70	.017	1.0774	13.7965
High	Low	-3.5449	2.35	.290	-9.0828	1.9931
	Medium	-7.4370*	2.70	.017	-13.7965	-1.0774

Post Hoc HSD result :Level of Television Use and English Score

User level	N	Subset	
		1	2
High	102	55.31	
Low	304	58.86	58.86
Medium	134		62.75
Sig.		.306	.240

The score (62.75) achieved by the medium level user was found to be significantly different from that of the higher and lower exposure levels as per the Tukey test. From this result it can be concluded the interaction between Parents' Education and Level of Television Use significantly influences English scores of school children due to the contribution of both the independent variables in varying weights.

Parent's Education, Television Use and Mathematics Score

Table shows how parents' education influences Mathematics score of the students when they use TV at varying levels. The descriptive statistics shows that mathematics score are high in up to degree (M=51.60, SD= 24.52) and above PG

(M= 64.63,SD=23.44) groups when compared to up to SSLC group(M=36.83, SD=20.22). ANOVA revealed that p value is .142 the interaction was not statistically significant.

Table 4.34: Mean score of Mathematics by Parent's Education and Level of Exposure to TV

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Low	123	37.76	19.41	Parent's Education	34280.27	2	33.302	.000	.111
	Medium	42	41.58	18.97						
	High	42	29.32	22.12	Level of Exposure	452.95	2	.440	.644	.002
	Total	207	36.83	20.22						
Up to Degree	Low	147	54.38	25.52	Parent's Education * Level of Exposure	3560.79	4	1.730	.142	.013
	Medium	73	49.50	23.04						
	High	55	46.98	23.06	Error	273296.82	531			
	Total	275	51.60	24.52						
PG and Above	Low	34	61.32	23.00	Total	1535833.65	540			
	Medium	19	68.52	24.23						
	High	5	72.33	24.14						
	Total	58	64.63	23.44						
Total	Low	304	48.43	24.60						
	Medium	134	49.71	23.44						
	High	102	40.95	25.12						
	Total	540	47.34	24.57						

*p<0.05

However the parents' education with probability value .000 was found to be statistically significant and level of television use with probability value is .644 was not significant. Result indicates that parents' education and level of television use had no significant influence [F(4,531)=1.730,p=.142] on Mathematics score of the school students. The nature of interaction suggested that students from all categories except PG and above shows steep decline in their Mathematics score

when they use TV at higher level. The interaction between parents' education and Mathematics score makes no significant change in the general pattern.

Parent's Education, Television Use and Science Score

Two way ANOVA was employed to find out whether the interaction of the parents education and level of television use have any statistically significant effect on the Science score of the students. Group statistics shows that Science score are high in up to degree (M= 59.88, SD=21.33) and PG and above (M=70.98, SD=18.04) groups when compared to up to SSLC group (M=48.05, SD=20.90). ANOVA revealed that there was a significant interaction between the two factors i.e., parents' education and level of television use (F(4,531=2.827:P=.024).

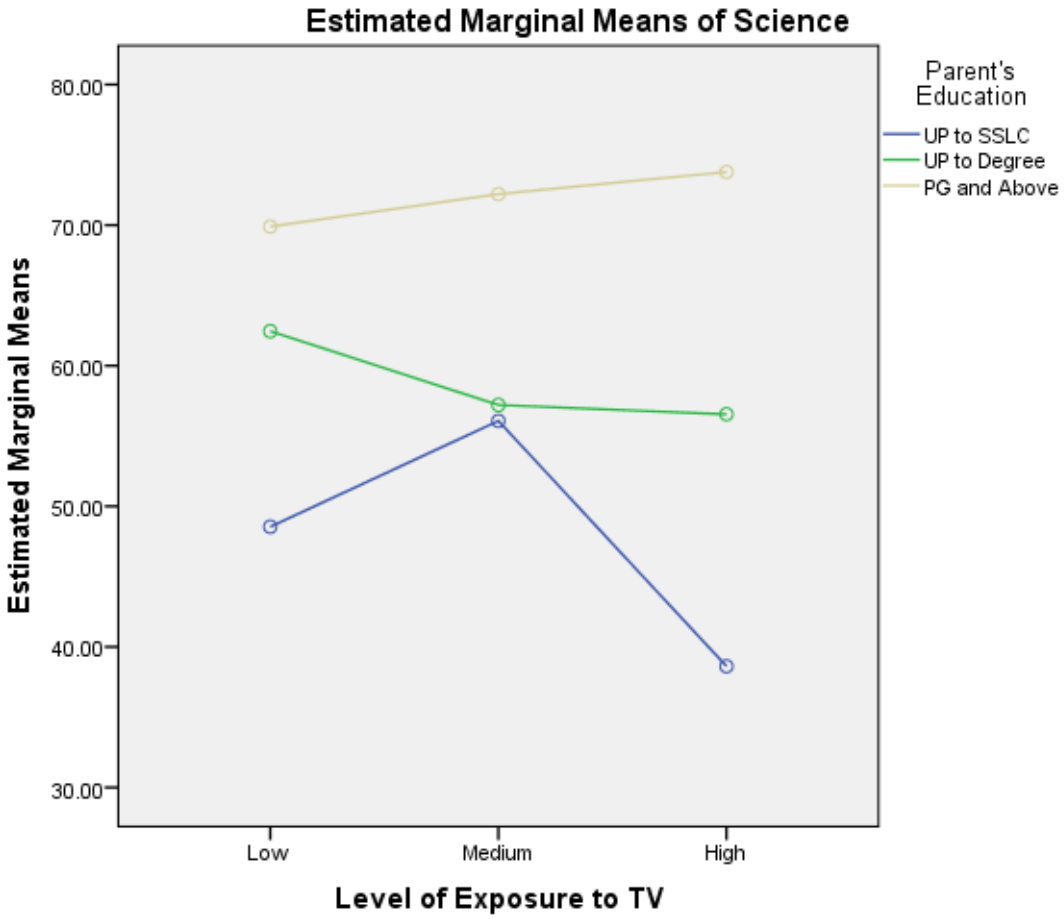
Table 4.35: Mean score of Science by Parent's Education and Level of Exposure to TV

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Low	123	48.54	19.45	Parent's Education	20791.85	2	24.580	.000	.085
	Medium	42	56.07	20.35						
	High	42	38.61	22.31	Level of Exposure	823.68	2	.974	.378	.004
	Total	207	48.05	20.90						
Up to Degree	Low	147	62.45	20.99	Parent's Education * Level of Exposure	4782.54	4	2.827	.024	.021
	Medium	73	57.20	21.92						
	High	55	56.54	20.90	Error	224583.00	531			
	Total	275	59.88	21.33						
PG and Above	Low	34	69.89	18.96	Total	1989753.74	540			
	Medium	19	72.20	16.98						
	High	5	73.78	18.64						
	Total	58	70.98	18.04						
Total	Low	304	57.66	21.57						
	Medium	134	58.97	21.36						
	High	102	50.00	23.55						
	Total	540	56.54	22.10						

*p<0.05

The nature of interaction suggested that higher level of television use was helpful for students from PG and above groups to increase their Science score (M=73.78,SD=18.04) while higher level of television use decreases the Science score of up to SSLC (M=38.61, SD=22.31) and up to Degree (M=56.54, SD=20.90) groups. Overall the interaction between parents' education and the level of television use of the students was statistically significant. This has been plotted (See Chart No.4.2) to get a clearer understanding.

Figure 4.2: Estimated Marginal Means of Science



To find out which category of parents' education significantly defines the variation in Science score, the data was subjected to the Post Hoc test Tukey and the result is reported in the Table 4.36 and 4.37.

Table 4.36: Post hoc Tukey Multiple Comparison Test for Parent's Education and Science Score

(I) Parent's Education	(J) Parent's Education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Up to SSLC	Up to Degree	-11.8237*	1.89240	.000	-16.2714	-7.3759
	PG and Above	-22.9308*	3.05538	.000	-30.1119	-15.7498
Up to Degree	Up to SSLC	11.8237*	1.89240	.000	7.3759	16.2714
	PG and Above	-11.1072*	2.97155	.001	-18.0912	-4.1231
PG and Above	Up to SSLC	22.9308*	3.05538	.000	15.7498	30.1119
	Up to Degree	11.1072*	2.97155	.001	4.1231	18.0912

Post Hoc HSD result :Parents' Education and Science Score

Parent's Education	N	Subset		
		1	2	3
Up to SSLC	207	48.0583		
Up to Degree	275		59.8820	
PG and Above	58			70.9891
Sig.		1.000	1.000	1.000

Post hoc comparisons using the Tukey test indicates the scores achieved by each group of parents with different education level are significantly different from one another stating that parents' education had a significant influence on Science score of the sampled students. The score (50.00) achieved by the higher level user was found to be significantly different from that of the medium and lower exposure levels as per the Tukey test. From this result it can be concluded that the interaction between Parents' Education and Level of Television Use significantly influences Science scores of school children due to the contribution of both the independent variables in varying weights.

Table 4.37: Post hoc Tukey Multiple Comparison Test for Television Use and Science Score

(I)User level	(J)User level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Low	Medium	-1.3193	2.13250	.810	-6.3313	3.6927
	High	7.6505*	2.35325	.003	2.1196	13.1813
Medium	Low	1.3193	2.13250	.810	-3.6927	6.3313
	High	8.9697*	2.70237	.003	2.6184	15.3211
High	Low	-7.6505*	2.35325	.003	-13.1813	-2.1196
	Medium	-8.9697*	2.70237	.003	-15.3211	-2.6184

Post Hoc HSD result : Television Use Level and Science Score

User level	N	Subset	
		1	2
High	102	50.009	
Low	304		57.66
Medium	134		58.97
Sig.		1.000	.848

Post hoc comparisons using the Tukey test indicated that the score (50.00) achieved by the higher level user was found to be significantly different from that of the medium and lower exposure levels as per the Tukey test. In other words parents' education and television exposure had a significant influence on Science score of the sampled students.

Table 4.38: Mean score of Social Science by Parent's Education and Level of Exposure to TV

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Low	123	46.91	21.94	Parent's Education	37375.99	2	34.778	.000	.116
	Medium	42	48.35	26.14						
	High	42	34.10	21.32	Level of Exposure	1125.84	2	1.048	.352	.004
	Total	207	44.60	23.24						
Up to Degree	Low	147	63.08	23.55	Parent's Education * Level of Exposure	2689.96	4	1.252	.288	.009
	Medium	73	59.52	24.60						
	High	55	55.99	24.28	Error	285331.60	531			
	Total	275	60.72	24.06						
PG and Above	Low	34	69.05	21.70	Total	2016370.59	540			
	Medium	19	75.27	17.06						
	High	5	73.82	25.50						
	Total	58	71.50	20.47						
Total	Low	304	57.21	24.25						
	Medium	134	58.25	25.51						
	High	102	47.85	25.96						
	Total	540	55.70	25.14						

*p<0.05

Table 4.38 analyses how parents' education influences the Social Science score of the students when they watch television at varying levels. Group statistics shows that Social Science scores are high among up to degree (M=60.72, SD=24.06) and PG and above (M=71.50, SD=20.47) groups when compared to up to SSLC group (M=44.60, SD=23.24). From the ANOVA result it is seen that p value is .288 that categorically negates any statistically significant interaction. However parents' education with a probability value .000 found to be statistically significant and level of television use with probability value is .089 statistically not significant. ANOVA revealed that parents' education and level of television use had

no significant influence [F(4,531)=1.252,p=.288] on Social Science score of the sampled students.

It concludes that students from all groups except PG and above group shows steep declining in their Social Science score when they watch TV at higher level. However the interaction between parents' education and level of television use was not statistically significant.

Clarifying Research Hypothesis 3

H3 School student's family antecedents will influence the interaction between

a) Their level of exposure to television and academic achievement
b) The level of parental mediation in television use and academic achievement
c) Their television programme choice and academic achievement

Family antecedents of the students (income and parents education) in Kerala are tested for its association with student's academic achievement

H3.a.*School student's family antecedents (parent's education) will influence the interaction between their level of exposure to television and academic achievement.*

The study revealed that irrespective of education of their parents, students who use television widely shows perform poorer in all academic subjects except English and science (see tables 4.30 to 4.38). Remarkably, the interaction between independent variables of parent's education and level of exposure to television is a predictor of academic performance in English and science subjects. In this way, the tenability of hypothesis is partially valid.

PARENTAL MEDIATION AND TELEVISION EFFECT ON ACADEMIC ACHIEVEMENT

There is a rich body of research literature on the parental mediation of media effects even though the concept of parental mediation has been defined differently in different contexts and settings. The primary motivation for such studies was the "concern over the negative effects of television viewing on children. Children who watch more television are at a greater risk of experiencing a host of negative outcomes compared to children who watch less television. The good news

is that parents can modify or even prevent television-related effects by engaging in a variety of practices known as "mediation." (Parental-mediation-media-effects)

Parental motivation is the interaction of parents in connection with their children's exposure to television and this interaction may take various forms. Nathanson, A I (1999) identified three forms: active mediation, restrictive mediation, and co-viewing. Active mediation refers to the conversations that parents can have with their children about television. Restrictive Mediation means the rules and regulations that parents institute regarding the television viewing of their children. Co-viewing occurs when parents watch television with their children and discuss the television content with them (Nathanson, A. I. 1999).

There are conflicting results from the studies on parental control over children's exposure to television (Bower, Robert R.1973).While some scholars found that parents do not exercise much control on their wards television use, other studies indicated that parental control was beneficial for children, especially in their academic performance. (Lyle, J. &Hoffman, H.R.1972.)

It was also found that the children whose exposure to television was controlled by their parents tended to prefer more educational content than entertainment texts. (Niven, H. 1960.) Sometimes children with special needs, particularly mentally retarded ones, require parental support in choosing television content. Studies also found that children's violent behaviour induced by television exposure could be lessened with strategic intervention of parents in children's use of television (Atkin et al 1979).

Mediation

Parents can alter or even prevent television-related effects by holding in a multiplicity of practices identified as "mediation." At the same time parental monitoring in television viewing is also an important factor in academic achievements of school students. Many of the parents give some instructions for television viewing to their children, like in what time to watch TV, how much time they might spend in front of the television, which type of programmes can they watch etc. Parental monitoring is assessed in terms of parental mediation. Here the parental mediation was classified in to three groups – fully monitored, partially monitored and unmonitored.

This meant by the nature of the use of television by the students based on varying situations which are controlled by the family. There are three possible controlled situations- monitored, partially monitored and unmonitored. Those who obey the instructions very often constitutes monitored category, samples obey the instructions sometimes belong to partially monitored category and those who never obey the instructions belong to unmonitored category. Parental mediation has measured as following instructions such as:

I. No TV before home work or during a particular time which affect study
II. Remote control used by adults only
III. Regularly check on what you are watching
IV. Don't sit too close to the TV
V. Watch only news/ educational programmes
VI. Don't eat while watching television
VII. Takes notes while watching educational / News programs

The analysis of data detailed in the forthcoming sessions will answer the following questions:

- How does parental mediation effect children's television use and its influence on their academic achievement?
- How is parental mediation defined by parent's education?
- What is the nature of the interaction between parental education and type of parental mediation in television use of children influences their academic achievement?

Detailed below is the analysis of data on the association between parents' education, parental mediation, general academic score (GAS) and Subject-wise academic score (SAS).

Table 4.39: General Mean score by Parent's Education and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Parental Mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Unmonitored	79	165.32	76.53	Parent's Education	407148.82	2	40.019	.000	.131
	Partially Monitored	45	152.79	66.69						
	Fully Monitored	83	147.47	65.43	Parental Mediation	3805.24	2	.374	.688	.001
	Total	207	155.44	70.26						
Up to Degree	Unmonitored	101	214.45	78.68	Parent's Education * Parental Mediation	36500.03	4	1.794	.129	.013
	Partially Monitored	58	185.54	68.75						
	Fully Monitored	116	208.45	72.39	Error	2701193.50	531			
	Total	275	205.82	74.56						
PG and Above	Unmonitored	33	226.70	61.45	Total	22686136.36	540			
	Partially Monitored	15	248.28	56.93						
	Fully Monitored	10	258.33	66.68						
	Total	58	237.73	61.58						
Total	Unmonitored	213	198.12	79.37						
	Partially Monitored	118	181.02	72.53						
	Fully Monitored	209	186.62	76.82						
	Total	540	189.93	77.10						

*p<0.05

How parents' education influences the General score of the students when their exposure is monitored or unmonitored. Descriptive statistics shows that general score are high in up to Degree (M=205.82, SD=74.56) and PG and above (M=237.73,SD=61.58) groups when compared to up to SSLC group(M=155.44,SD= 70.26).

ANOVA revealed that p value is .129 that categorically negates any statistical interaction. However, the parents' education with probability value is .000, and found to be statistically significant, and Parental Mediation with probability value .688 was not statistically significant. The result revealed that parents' education and Parental Mediation had no significant influence [F(4,531)=1.974, p=.129] on GAS of the school students.

Result concludes that Students from all groups except PG and above shows steep declining in their General score when their exposure is fully monitored. In other words the nature of this interaction suggested that highly monitored exposure is helpful to student belonging to PG and above group increase their general academic score (M=258.33, SD=66.68). However the interaction between parents' education and Parental Mediation was not statistically significant.

Table 4.40: Mean score of English by Parent's Education and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Parental Mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Unmonitored	79	48.03	22.09	Parent's Education	49667.18	2	57.821	.000	.179
	Partially Monitored	45	45.79	24.40						
	Fully Monitored	83	46.52	21.31	Parental Mediation	461.88	2	.538	.584	.002
	Total	207	46.94	22.21						
Up to Degree	Unmonitored	101	68.35	21.06	Parent's Education * Parental Mediation	1122.06	4	.653	.625	.005
	Partially Monitored	58	60.26	19.32						
	Fully Monitored	116	63.74	20.31	Error	228058.48	531			
	Total	275	64.70	20.55						
PG and Above	Unmonitored	33	75.75	16.08	Total	2177582.81	540			
	Partially Monitored	15	77.77	14.26						
	Fully Monitored	10	77.05	15.84						
	Total	58	76.49	15.35						
Total	Unmonitored	213	61.96	23.43						
	Partially Monitored	118	56.96	23.21						
	Fully Monitored	209	57.53	22.50						
	Total	540	59.15	23.10						

*p<0.05

The table showed that the how parents' education influences the English score when their exposure is monitored or unmonitored. The result reported that English score are high in up to Degree (M=64.70, SD=20.55) and PG and above (M=76.49,SD=15.35) groups when compared to up to SSLC group (M=46.94,SD=22.21).

ANOVA revealed that p value is .625 that categorically negates any statistical interaction. However the parents' education with probability value .000 found to be statistically significant and Parental Mediation with probability value .584 was not significant. In other words interaction between parent's education and Parental Mediation had no significant influence [F(4,531)=.653,p=.625]on English score of the school students.

The result shows that Students from all groups except PG and above group shows steep declining in their English score when their exposure is fully monitored. However the interaction between parents' education and Parental Mediation was not statistically significant.

Table 4.41: Mean score of Mathematics by Parent's Education and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Parental Mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**Df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Unmonitored	79	39.20	22.36	Parent's Education	37139.87	2	35.902	.000	.119
	Partially Monitored	45	36.57	19.15						
	Fully Monitored	83	34.70	18.56	Parental Mediation	1594.61	2	1.541	.215	.006
	Total	207	36.83	20.22						
Up to Degree	Unmonitored	101	56.64	26.75	Parent's Education * Parental Mediation	1662.34	4	.803	.523	.006
	Partially Monitored	58	45.80	20.40						
	Fully Monitored	116	50.12	23.70	Error	274651.13	531			
	Total	275	51.60	24.52						
PG and Above	Unmonitored	33	64.91	24.72	Total	1535833.65	540			
	Partially Monitored	15	65.47	21.74						
	Fully Monitored	10	62.42	23.76						
	Total	58	64.63	23.44						
Total	Unmonitored	213	51.45	26.66						
	Partially Monitored	118	44.78	21.87						
	Fully Monitored	209	44.59	23.28						
	Total	540	47.34	24.57						

*p<0.05

The data showed that how parents' education influences the Mathematics score of the students when their exposure is monitored or unmonitored. Descriptive

statistics shows that mathematics score are high in up to Degree (M=51.60, SD=24.52) and PG and above (M=64.63,SD=23.44) groups when compared to low up to SSLC group(M=36.83,SD=20.22).

From the ANOVA it can be seen that p value is .523 that categorically negates any statistical interaction. However the parents' education with probability value .000, found to be statistically significant and Parental Mediation with probability value .215 was not significant. ANOVA revealed that the interaction between parents' education and Parental Mediation had no significant influence [F(4,531)=.803,p=.523] on Mathematics score of the school students.

Students from all groups shows steep declining in their Mathematics score when their exposure is fully monitored. However the interaction between parents' education and Parental Mediation was not statistically significant.

Table 4.42: Mean score of Science by Parent's Education and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Parental Mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Unmonitored	79	50.01	22.67	Parent's Education	25092.87	2	29.141	.000	.099
	Partially Monitored	45	48.77	18.78						
	Fully Monitored	83	45.80	20.25	Parental Mediation	564.65	2	.656	.519	.002
	Total	207	48.05	20.90						
Up to Degree	Unmonitored	101	63.60	23.07	Parent's Education * Parental Mediation	2450.18	4	1.423	.225	.011
	Partially Monitored	58	53.44	19.20						
	Fully Monitored	116	59.85	20.13	Error	228615.15	531			
	Total	275	59.88	21.33						
PG and Above	Unmonitored	33	69.89	18.08	Total	1989753.74	540			
	Partially Monitored	15	71.97	17.87						
	Fully Monitored	10	73.11	19.76						
	Total	58	70.98	18.04						
Total	Unmonitored	213	59.54	23.40						
	Partially Monitored	118	54.02	20.06						
	Fully Monitored	209	54.90	21.57						
	Total	540	56.54	22.10						

*p<0.05

Two way ANOVA was employed to find out the interaction of the parents' education and levels of Parental Mediation have any statistically significant effect on the Science score of the students. Group statistics shows Science score are high in PG and above group (M= 70.98, SD=18.04) when compared to Up to Degree (M=59.88, SD=21.33) and Up to SSLC group (M=48.05, SD=20.90). From the ANOVA result it can be seen that p value .225 that categorically negates any statistical interaction. However the parents' education with probability value .000 was found to be statistically significant and parents' education with probability value .519 was not significant. In other words parents' education and Parental Mediation had no significant influence [F(4,531)=1.423,p=.225] on Science score of the school students.

The nature of the interaction suggested that students from all group except PG and above group show steep decline in their Science score when they are fully monitored. At the same time fully monitored exposure is helpful to students belonging to PG and Above group, increasing their Science score (M=73.11,SD=19.76). Overall the interaction between the parents' education and levels of parental mediation was not statistically significant.

Table 4.43: Mean score of Social Science by Parent's Education and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**parental mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Unmonitored	79	47.80	25.90	Parent's Education	40402.54	2	37.448	.000	.124
	Partially Monitored	45	45.01	21.27						
	Fully Monitored	83	41.33	21.34	parental mediation	1536.07	2	1.424	.242	.005
	Total	207	44.60	23.24						
Up to Degree	Unmonitored	101	66.63	25.73	Parent's Education * parental mediation	1834.23	4	.850	.494	.006
	Partially Monitored	58	56.55	21.20						
	Fully Monitored	116	57.66	23.06	Error	286444.56	531			
	Total	275	60.72	24.06						
PG and Above	Unmonitored	33	71.12	21.09	Total	2016370.59	540			
	Partially Monitored	15	70.52	24.68						
	Fully Monitored	10	74.24	10.71						
	Total	58	71.50	20.47						
Total	Unmonitored	213	60.34	26.86						
	Partially Monitored	118	53.92	23.05						
	Fully Monitored	209	51.97	23.78						
	Total	540	55.70	25.14						

*p<0.05

Two way ANOVA was employed to find out how parents' education influences Social Science score of the students when they are monitored or unmonitored. Group statistics shows Social Science score are high in Up to Degree (M=60.72, SD=24.06) PG and Above group (M= 71.50, SD=20.47) when compared to Up to SSLC group (M=44.60, SD=23.24). From the ANOVA result it can be seen that p value .494 that categorically negates any statistical interaction. However the parents' education with probability value .000 was found to be statistically significant and parents' education with probability value .242 was not significant. In other words the interaction between parents' education and parental mediation had no significant influence [F(4,531)=.850,p=.494] on Social Science score of the school students.

The nature of the interaction suggested that students from all group except PG and Above group show steep decline in their Social Science score when they are fully monitored. At the same time fully monitored exposure is helpful to students belonging to PG and Above group, increasing their Social Science score (M=74.24. SD=10.71) Overall the interaction between the parents' education and parental mediation was not statistically significant.

Clarifying Research Hypothesis 3

H3.b. *School student's family antecedents (parent's education) will influence the interaction between their level of parental mediation in television use and academic achievement*

The present study proved that irrespective of the education of their parents, students who were mediated extensively by their parents shows poor performance in all academic subjects since no statistically bearing was found in between academic scores of the sampled students and the interaction between their parents education and level of parental mediation(see tables 4.39 to 4.43).To be specific, the level of parental control over students' watching television is not at all predictor of students' academic score, be it in general academic score or subject scores. To conclude, this finding with proven statistical result negates the validity of the hypothesis that level of parental mediation on the academic achievement of students will vary according to the education to their parents.

INCOME, PARENTAL MEDIATION AND ACADEMIC ACHIEVEMENT

Parental monitoring has a significant role in children's television consumption. Previous researches argue at different dimensions of monitoring television watching like when and how much time children can watch television, parental co-viewing, and type of programme. Many parents follow these types of instructions for television watching at homes. They often worry about overuse and content watched by their children. Many parents have arrived at a decision that their children access television mainly as a study aid. Television content and watching habit can influence academic achievement of the school students. Hence they try to monitor television viewing of their children. Parental monitoring is assessed in terms of Parental Mediation. Here the levels of parental mediation were classified in to three groups- fully monitored, partially monitored and unmonitored.

The economic background (monthly family income) also influences the academic achievement of the school students. The economic background of the students was assessed in terms of their monthly family income. Monthly Income was classified into three groups- up to 15000, Rs 15001-50000, above 50000. Here the remaining question is how family income and mode of exposure to television is related to academic achievement of the school students. Detailed below is the analysis of data on the association between monthly family income, mode of exposure to television and General Academic score (GAS) and Subject wise Academic Score (SAS).

Table 4.44: General Mean Score by Income and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Parental Mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**Df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Unmonitored	121	172.3819	78.17844	Income	426546.698	2	41.683	.000	.136
	Partially Monitored	71	158.0669	66.51946						
	Fully Monitored	139	166.4807	69.13192	Parental Mediation	1334.371	2	.130	.878	.000
	Total	331	166.8332	72.02471						
Rs 15001-50000	Unmonitored	75	230.3145	66.60141	Income * Parental Mediation	7141.416	4	.349	.845	.003
	Partially Monitored	43	210.8851	65.69182						
	Fully Monitored	58	224.9119	75.02259	Error	2716910.196	531			
	Total	176	223.7872	69.31245						
Above Rs 50000	Unmonitored	17	239.3724	73.81613	Total	22686136.362	540			
	Partially Monitored	4	267.6650	78.99162						
	Fully Monitored	12	234.8600	84.20943						
	Total	33	241.1609	76.49435						
Total	Unmonitored	213	198.1274	79.37472						
	Partially Monitored	118	181.0294	72.53018						
	Fully Monitored	209	186.6222	76.82711						
	Total	540	189.9382	77.10936						

*p<0.05

ANOVA results showed that the higher the income level of the family, the higher the general academic scores secured by students. While the lower incomes group secured a mean score of (M=166.83, SD= 72.02) the highest income groups achieved (M=241.16, SD=76.49). The corresponding p-value revealed that the association between the two variables – economic status of the family and academic achievement of the students- are significantly related each other [F (2,531) = 41.683, p=.000].

However, when the mean GAS of the students with level of parental mediation- unmonitored, partially monitored and fully monitored, it was found that

there was no significant difference among them [F(2,531)= .130,p=.878]. And what was interesting is that the unmonitored group had highest mean score (M=198.12, SD=79.37) while the partially monitored group secured the lowest (M=181.02, SD=72.53).

After analysis of the status of these two main effects, the ANOVA revealed that the influence of the interaction between economic status of the family and the level of parental mediation on the students' general academic score was not significant [F (4,531) = .349, p=.845].

From the above results it can be concluded that the general academic score of students are independent of the existing mode of parental control over students' television viewing at home and this condition is applicable for all economic strata of the sample.

Table 4.45: Mean score of English by Income and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Parental Mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs15000	Unmonitored	121	53.35	23.27	Income	38985.777	2	42.921	.000	.139
	Partially Monitored	71	49.42	22.87						
	Fully Monitored	139	52.07	21.84	Parental Mediation	1504.724	2	1.657	.192	.006
	Total	331	51.97	22.57						
Rs 15001-50000	Unmonitored	75	72.29	18.26	Income * Parental Mediation	540.916	4	.298	.879	.002
	Partially Monitored	43	68.52	18.647						
	Fully Monitored	58	68.21	18.92	Error	241155.257	531			
	Total	176	70.02	18.57						
Above Rs 50000	Unmonitored	17	77.66	18.76	Total	2177582.818	540			
	Partially Monitored	4	66.62	23.54						
	Fully Monitored	12	69.23	24.59						
	Total	33	73.26	21.39						
Total	Unmonitored	213	61.96	23.43						
	Partially Monitored	118	56.96	23.21						
	Fully Monitored	209	57.53	22.50						
	Total	540	59.15	23.10						

*p<0.05

Comparative analysis showed that the mean scores in English secured by the three income categories followed the same pattern of the general academic score – better academic performance in higher income groups. The highest income group reported an average of 73.26 score in English (SD= 21.39). While the lowest income group had a mean score of 51.97 with an SD of 22.57, the ANOVA confirmed that the level of students' academic performance in English is dependent on their families' economic status [F (2,531) =42.921, p=.000].

In the case of parental mediation also, their performance in English reflected the similar pattern seen in general academic scores. While unmonitored group had better performance the (M=61.96, SD=23.43) partially monitored group had the lowest mean score (M=56.96, SD = 23.21). Though there are differences among the means scores in English in the three television monitoring conditions, p value showed no significant difference [F (2,531) =1.657, p=.192.] among them.

What about the influence of the interaction between these two main effects on academic performance in English? The result showed that the differences in mean scores among the income categories at three television watching monitoring conditions was not significant [F (4,531) =V, p=.879].

From this it is concluded that academic performance of students in English language taught in schools is independent of the parental control over their television viewing irrespective of their family economic status.

Table 4.46: Mean score of Mathematics by Income and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Parental Mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Unmonitored	121	41.55	23.50	Income	36173.386	2	34.946	.000	.116
	Partially Monitored	71	38.00	19.30						
	Fully Monitored	139	40.29	22.06	Parental Mediation	3543.757	2	3.424	.033	.013
	Total	331	40.26	22.02						
Rs 15001-50000	Unmonitored	75	63.100	24.79	Income * Parental Mediation	2490.541	4	1.203	.308	.009
	Partially Monitored	43	54.61	22.35						
	Fully Monitored	58	51.87	22.06	Error	274821.427	531			
	Total	176	57.32	23.76						
Above Rs 50000	Unmonitored	17	70.60	25.84	Total	1535833.650	540			
	Partially Monitored	4	59.37	14.63						
	Fully Monitored	12	59.20	29.67						
	Total	33	65.09	26.26						
Total	Unmonitored	213	51.45	26.66						
	Partially Monitored	118	44.78	21.87						
	Fully Monitored	209	44.59	23.28						
	Total	540	47.34	24.57						

*p<0.05

In similar way, significant difference was reported in the mean scores in Mathematics in three monitoring conditions.

While the lowest income group reported as securing lowest mean score in Mathematics (M=40.26, SD=22.02), the highest income group reported highest mean score (M=65.09, SD=26.26). ANOVA showed that there was significant difference in mean scores in Mathematics among the three income groups F (2,531) =34.946, p=.000.].

When unmonitored group reported high mean score in Mathematics (M=51.45, SD=26.66), the fully monitored group achieved the lowest mean score (M=44.59, SD=23.28). However, unlike the earlier two cases - GAS and English - the academic performance of students in Mathematics was found to be dependent on parental control over their television watching as per the p value F (2,531) =3.424, p=.033.]. However, the students' performance in Mathematics is independent of the interaction between these two main effects F (4,531) =1.203, p=.308].

Table 4.47: Mean score of Science by Income and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Parental Mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Unmonitored	121	51.93	22.21	Income	27346.549	2	31.726	.000	.107
	Partially Monitored	71	48.10	18.37						
	Fully Monitored	139	50.50	20.53	Parental Mediation	913.482	2	1.060	.347	.004
	Total	331	50.51	20.72						
Rs 15001-50000	Unmonitored	75	68.86	20.86	Income * Parental Mediation	534.101	4	.310	.871	.002
	Partially Monitored	43	62.35	19.40						
	Fully Monitored	58	62.56	20.05	Error	228850.600	531			
	Total	176	65.19	20.38						
Above Rs 50000	Unmonitored	17	72.57	22.81	Total	1989753.745	540			
	Partially Monitored	4	69.41	20.40						
	Fully Monitored	12	68.90	25.69						
	Total	33	70.85	23.01						
Total	Unmonitored	213	59.54	23.40						
	Partially Monitored	118	54.02	20.06						
	Fully Monitored	209	54.90	21.57						
	Total	540	56.54	22.10						

*p<0.05

From the descriptive statistics it is seen that the higher the economic status of the family, the higher the students' academic performance in Science. When highest income group reported highest scores (M=70.85, SD =23.01), the lowest

income group had the score (M=50.51, SD=20.72). And, p value showed that this difference is not just a matter of chance, but due to the significant influence of economic status on academic performance in Science [F (2,531)= 31.726 , p=.000].

As in the previous instances, unmonitored condition yielded better performance in Science subjects (M=59.54, SD =23.40). The differences in scores among the various levels of parental control was just because of chance since the p value generated from ANOVA [F(2,531)= 1.060, p=.347]. The interaction between these two main effects has no significant influence on the academic mean score in Science subjects as evidenced by p value F (4,531) =.310, p=.871].

In short it is established that students' performance in Science subjects is not dependent on the parental control of television at home irrespective of their financial status.

Table 4.48: Mean score of Social Science by Income and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Parental Mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Unmonitored	121	51.23	26.95	Income	35954.163	2	32.833	.000	.110
	Partially Monitored	71	47.94	20.64						
	Fully Monitored	139	46.58	23.02	Parental Mediation	2659.597	2	2.429	.089	.009
	Total	331	48.57	24.09						
Rs 15001-50000	Unmonitored	75	72.15	20.99	Income * Parental Mediation	1054.301	4	.481	.749	.004
	Partially Monitored	43	62.22	23.68						
	Fully Monitored	58	61.98	21.87	Error	290742.677	531			
	Total	176	66.37	22.40						
Above Rs 50000	Unmonitored	17	73.11	24.90	Total	2016370.593	540			
	Partially Monitored	4	71.00	26.55						
	Fully Monitored	12	66.02	21.37						
	Total	33	70.28	23.33						
Total	Unmonitored	213	60.34	26.86						
	Partially Monitored	118	53.92	23.05						
	Fully Monitored	209	51.97	23.78						
	Total	540	55.70	25.14						

*p<0.05

In Social Science scores also, income was found to be a decisive factor and performance of students is enhanced when they belong to the group with a family income of Rs 50000 per month (SD=70.28, M=23.33) group. And, in this case also, the relationship between economic status and academic performance was found to be significant [F(2,531)= 31.726 , p=.000].

But similar kind of significant association was not seen between parental control over students' television watching and their academic performance [F(2,531)= .429, p=.089.]. As in previous cases, students scored better scores when their television watching was not monitored (M=60.34, SD=23.05).

The interaction between the two independent variables mentioned above – Income and Parental Mediation - had no significant bearing on the students' means scores in Social Science [F(2,531)= .481., p=.749.].

Clarifying Research Hypothesis 3

H3.b. *School student's family antecedents (family income) will influence the interaction between their level of parental mediation in television use and academic achievement*

The analysis revealed that irrespective of income levels of their family, students who were mediated extensively by their parents perform poorer in all academic subjects. And no statistically significant bearing was found in between academic scores of the sampled students and its interaction between their income levels and level of parental mediation (see tables 4.44 to 4.48).In other words, the level of parental control over students' watching television is not at all predictor of students' academic score, be it in general academic score or subject scores. Therefore the result negate the validity of the hypothesis that level of parental mediation on the academic achievement of students will vary according to the financial status of their families

TELEVISION PROGRAMMES AND ACADEMIC ACHIEVEMENT

Nowadays we have television channels for handling different genres of programmes. Varied programmes offered on these channels meet different purposes. The main aim of television is to provide information, entertainment and

education. Some programmes are used to inform the public, some to entertain masses and others for educating the community.

Amidst all sorts of new mediated engagements, teenagers still rely upon television for their needs. And invariably the television viewing can influence the academic achievements of the school students. Previous researches highlighted the evidences that television has a positive effect on students' learning and TV programmes help in improving their English language (Rathore 2013). The question here is how these different types of television programmes can make an impact on academic scores of the students. For the purpose, television programmes were classified into three categories- informational, educational and entertainment. Based on their viewing habit sampled students were classified into three groups- those who watching sometimes, always and those who never watch.

Tables below is the detailed analysis of data showing the association between these three categories of television programmes (Information, Education and Entertainment), Family income and General academic score (GAS)and subject wise academic score (SAS).

Income, Information Programme Choice and GAS

The informational programme is to provide information related news and current affairs, documentaries, sports, environmental programmes etc. to viewers. Now school students are exposed more to informational programmes through television. Previous researches found informational programmes can help students to improve better opportunity in increasing their knowledge and skills (Memory 1992).These programmes also help students to improve their academic performance. Based on the viewing of informational programmes, sampled students were classified in to three- never, sometimes and always.

Academic achievement was also influenced by socio-economic status (Machebe, C.H. et al 2017). The economic background of the students was assessed in term of the monthly family income. Monthly family income was classified into three groups- up to Rs 15000, Rs 15001-50000, and Above Rs 50000. Detailed below is the analysis of data showing the association between family income, information programme choice and general academic score (GAS) and subject wise academic score (SAS).

General Mean score by Income and Informational Programme Choice

To compare the general academic score in respect of family income and information programme choice, the data were subjected to Two Way ANOVA and the result is given in Table 4.49

Table 4.49: General Mean score by Income and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Informational programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	18	169.35	66.97	Income	237284.224	2	23.346	.000	.081
	Sometimes	260	171.71	72.76						
	Always	53	142.00	65.83	Informational Programmes	4884.643	2	.481	.619	.002
	Total	331	166.83	72.02						
Rs 15001-50000	Never	18	217.72	45.28	Income * Information	11038.471	4	.543	.704	.004
	Sometimes	128	225.919	73.88						
	Always	30	218.32	61.70	Error	2698515.212	531			
	Total	176	223.78	69.31						
Above Rs 50000	Never	5	235.00	91.84	Total	22686136.362	540			
	Sometimes	22	241.90	72.58						
	Always	6	243.58	92.33						
	Total	33	241.160	76.49						
Total	Never	41	198.59	65.85						
	Sometimes	410	192.40	77.93						
	Always	89	174.57	76.91						
	Total	540	189.93	77.10						

*p<0.05

The research question is whether there exist a difference in mean general academic score and the difference in family income and the information programme choice by the students. From the ANOVA result it can be seen that the higher the income level of family, the higher the general academic scores secured by students. While the lower incomes group secured a mean score of (M=166.83, SD=72.02) the highest income group secured (M=241.16, SD=76.49). The p value revealed that the association between the two variable socio-economic status of the family and General Academic score of the students was statistically significant [F(2,531)=23.346,p=.000]. In the case of mean GAS of the students with difference in information programme choice such never, sometimes, and always, it was found

that there was no significant difference between them [F(2,531)=.481,p=.619]. While students who never watch had highest mean score (M=198.59,SD=65.85) those who always watch had the lowest mean score(M=174.57,SD=76.91). Over all the analysis showed that interaction between family income and information programme choice had no significant influence [F(4,531)=.543,p=.704] on GAS of the school students.

Income, Informational Programme choice and Subject wise Academic Score

To compare the subject-wise academic score in respect of family income and information programme choice the data were subjected to Two way ANOVA and the results are given in Table 4.50

Table 4.50: Mean score of English by Income and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Informational programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	18	51.99	19.72	Income	25073.196	2	27.589	.000	.094
	Sometimes	260	52.83	22.16						
	Always	53	47.77	25.25	Informational Programmes	382.215	2	.421	.657	.002
	Total	331	51.97	22.57						
Rs 15001-50000	Never	18	74.86	12.78	Income * Informational programmes	1203.998	4	.662	.618	.005
	Sometimes	128	69.04	18.71						
	Always	30	71.31	20.79	Error	241286.761	531			
	Total	176	70.02	18.57						
Above Rs 50000	Never	5	72.42	18.17	Total	2177582.818	540			
	Sometimes	22	74.84	23.22						
	Always	6	68.16	18.91						
	Total	33	73.26	21.39						
Total	Never	41	64.52	19.86						
	Sometimes	410	59.07	22.73						
	Always	89	57.08	25.87						
	Total	540	59.15	23.10						

*p<0.05

Descriptive statistics shows that among the three income groups, higher income group secured better mean score (M=73.26, SD=21.39) in English while the low income group had a mean score of 51.97 with an SD of 22.57. The ANOVA reported that main effect of the variable income on the English score was significant [F(2,531)=27.589,p=.000].

In the case of informational programme, students who never watch achieved highest mean score (M=64.52, SD=19.86) and those who always watch had the lowest mean score (M=57.08,SD=25.87). It was found that there was no significant difference among them [F(2,531)=.421,p=.657]. After the analysis it can be seen that the influence of interaction between economic status of the family information programme choice on the student's English score was not significant [F(4,531)=.662,p=.618]. Result concludes that students from all income groups except lower income group shows increase their English score when they watch information programme sometimes.

Table 4.51: Mean score of Mathematics by Income and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Informational programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	18	39.57	21.33	Income	28725.680	2	27.471	.000	.094
	Sometimes	260	41.54	22.21						
	Always	53	34.21	20.68	Informational Programmes	578.949	2	.554	.575	.002
	Total	331	40.26	22.02						
Rs 15001-50000	Never	18	62.58	20.72	Income * Informational programmes	2089.327	4	.999	.408	.007
	Sometimes	128	56.15	24.63						
	Always	30	59.19	21.67	Error	277624.696	531			
	Total	176	57.32	23.76						
Above Rs 50000	Never	5	70.52	24.99	Total	1535833.650	540			
	Sometimes	22	64.77	26.81						
	Always	6	61.75	29.18						
	Total	33	65.09	26.26						
Total	Never	41	53.45	24.47						
	Sometimes	410	47.35	24.49						
	Always	89	44.49	24.76						
	Total	540	47.34	24.57						

*p<0.05

The data showed that highest mean score was secured by higher income group (M=65.09,SD=26.26) followed by low (M=40.26,SD= 22.02) and middle (M=59.19, SD=23.76) income group respectively. ANOVA revealed that the main effect of the variable income on the mathematics score was significant [F(2,531)=27.471, p=.000].

The highest mean score (53.45) was achieved by those students who never watch information programme and lowest score (M=44.49, SD=24.76) by those who always watch. The main effect of information programme choice was not found to be significant [F(2,531)=.554,p=.575]. Hence information programmes helps to improve Mathematics score of students when they watch it sometimes.

After the analysis ANOVA revealed that the difference in mean score among the income categories at three level of information programme choice was not significant.[F(4,531)=.999,p=.408]. Results conclude that Mathematics score was independent of the interaction between economic status of the family and information programme choice.

Table 4.52: Mean score of Science by Income and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Informational programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	18	51.65	21.65	Income	17175.234	2	19.942	.000	.070
	Sometimes	260	51.66	21.01						
	Always	53	44.47	18.13	Informational Programmes	381.577	2	.443	.642	.002
	Total	331	50.51	20.72						
Rs 15001-50000	Never	18	66.50	17.72	Income * Informational programmes	1553.447	4	.902	.463	.007
	Sometimes	128	64.67	21.31						
	Always	30	66.62	18.14	Error	228662.563	531			
	Total	176	65.19	20.38						
Above Rs 50000	Never	5	65.26	27.38	Total	1989753.745	540			
	Sometimes	22	72.81	22.75						
	Always	6	68.33	23.61						
	Total	33	70.85	23.01						
Total	Never	41	59.83	21.48						
	Sometimes	410	56.86	22.29						
	Always	89	53.55	21.38						
	Total	540	56.54	22.10						

*p<0.05

From the descriptive statistics it can be seen that significant differences were reported in the mean score in Science in three levels of income groups. The highest income group reported highest mean score in Science score (M=70.85,SD=23.01] and lowest income group reported the lowest score(M=50.51, SD=20.72). ANOVA revealed that variable income had a significant influence on [F(2,531)=19.942,p=.000] Science score of the school students. In the case of information programme choice, students who never watch yielded better score in Science (M=59.83, SD=21.48). However from the result it can be said that students from all income group shows increase in their Science score when they watch information programmes sometimes. Significant association was not seen between information programme choice and their Science performance [F(2,531)=.443, p=.642]. Results conclude that the interaction income with information programme choice had no significant influence [F(4,531)=.902,p=.463] on Science score of the students.

Table 4.53: Mean score of Social Science by Income and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Informational programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	18	53.48	25.55	Income	20190.508	2	18.289	.000	.064
	Sometimes	260	49.69	24.24						
	Always	53	41.43	21.87	Informational Programmes	942.202	2	.853	.427	.003
	Total	331	48.57	24.09						
Rs 15001-50000	Never	18	67.48	16.02	Income * Informational programmes	1346.411	4	.610	.656	.005
	Sometimes	128	66.29	22.93						
	Always	30	66.06	23.97	Error	293101.680	531			
	Total	176	66.37	22.40						
Above Rs 50000	Never	5	67.34	21.89	Total	2016370.593	540			
	Sometimes	22	72.38	25.01						
	Always	6	65.00	20.29						
	Total	33	70.28	23.33						
Total	Never	41	61.32	21.99						
	Sometimes	410	56.09	25.30						
	Always	89	51.32	25.32						
	Total	540	55.70	25.14						

*p<0.05

The significant difference was reported in the mean score in Social Science in three income levels. It shows that lowest income group yielded the lowest mean score in Social Science (M=48.57, SD= 24.09), the highest income group yield highest mean score (M=70.28, SD=23.33). ANOVA revealed that income had a significant influence [F(2,531)=18.289,p=.000] on Social Science score of the school students.

However, when the mean Social Science score of the students with informational programme choice found that there was no significant difference among them [F(2,531)=.853,p=.427], the result of the interaction between these two main effect on Social Science score showed that the differences in mean score among three income categories at three level of informational programme choice was not significant[F(4,531)=.610,p=.656].

Income, Educational Programmes and GAS

Television is the most effective medium for education. Previous researchers found that educational media positively influences the children's reading skills (Wandewater & Bickam 2004). Television can be an excellent educational tool and teacher too. Victers, Gyandarshan, etc. are the important educational channels and programmes telecast through these channels are examples of educational programmes. Entire educational community including teachers, students and parents are the target groups of educational channels. They offer educational programmes like, class room based programmes, curriculum based programmes, subject oriented programmes, and exam oriented programmes etc. These types of programmes help students in improving their academic performance.

On grounds of watching educational programmes, sampled students were classified into there- never, sometimes and always watching.

Previous researchers found that Academic achievement is influenced by socio-economic status (Jeynes, 2002, Singh, P., & Choudhari. G 2015). The economic background of the students was assessed in terms of the monthly family income. Monthly family income was classified in to three groups- up to Rs 15000, Rs 15001-50000, and Above Rs 50000. Below is the analysis of data denoting the association between family income, educational programme choice and general academic score (GAS) and subject wise academic score (SAS).

General Mean score by Income and Educational Programme Choice

To compare the general academic score in respect of family income and educational programme choice, the data were subjected to Two Way ANOVA and the result is given in Table

Table 4.54: General Mean score by Income and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Educational Programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	27	165.02	56.82	Income	184736.844	2	18.216	.000	.064
	Sometimes	237	166.69	73.34						
	Always	67	168.06	73.66	Educational Programmes	32121.805	2	3.167	.043	.012
	Total	331	166.83	72.02						
Rs 15001-50000	Never	14	192.91	64.44	Income *Educational Programmes	28395.924	4	1.400	.233	.010
	Sometimes	119	232.81	68.15						
	Always	43	208.85	70.04	Error	2692492.440	531			
	Total	176	223.78	69.31						
Above Rs 50000	Never	7	214.34	87.80	Total	22686136.362	540			
	Sometimes	16	262.39	68.23						
	Always	10	225.96	79.30						
	Total	33	241.16	76.49						
Total	Never	48	180.34	65.36						
	Sometimes	372	191.95	79.02						
	Always	120	187.50	75.62						
	Total	540	189.938	77.109						

*p<0.05

ANOVA revealed that significant difference was reported in the mean score in General Score in three incomes level. While the higher income group achieved a mean score of (M=241.1609, SD=76.494) the lowest income groups achieved (M=166.83,SD=72.02). The p value revealed that the association between economic status of the family and General academic score of the students are significantly related each other [F(2,531)=18.216,p=.000].

In the case of educational programme choice, students who watch sometimes, secured highest mean score (M=191.95,SD=79.02) while the students who never watch secured the lowest score(M=180.34,SD=65.36). It was found that academic performance of students in General score was dependent on educational programme watching as per the p value [f(2,531)=3.167,p=.043].However the interaction between the two main effect-economic status of the family and educational programs choice had no significant influence [F(4,531)=1.400,p=.233] on GAS of the school students. Result suggests that students from all incomes group show that educational programmes are helpful for students to increase their general academic score when they watch it sometimes.

Table 4.55: Mean score of English by Income and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Educational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	27	56.56	23.00	Income	17404.081	2	19.311	.000	.068
	Sometimes	237	50.45	23.27						
	Always	67	55.50	19.33	Educational Programmes	547.518	2	.607	.545	.002
	Total	331	51.97	22.57						
Rs 15001-50000	Never	14	71.57	15.66	Income *Educational Programmes	3649.943	4	2.025	.090	.015
	Sometimes	119	70.64	18.25						
	Always	43	67.81	20.46	Error	239287.078	531			
	Total	176	70.02	18.57						
Above Rs 50000	Never	7	63.14	17.82	Total	2177582.818	540			
	Sometimes	16	80.33	18.69						
	Always	10	69.03	25.40						
	Total	33	73.26	21.39						
Total	Never	48	61.90	21.11						
	Sometimes	372	58.19	23.95						
	Always	120	61.04	21.04						
	Total	540	59.15	23.10						

*p<0.05

When going through the descriptive data, it can be seen that students from higher income group secured highest mean score (M=73.26, SD=21.39) and lower income group achieved lowest score (M=51.97,SD=22.57). ANOVA revealed that

the association between family income and English score of the students are significantly related each other [F(2,531)=19.311, .000].

In the case of educational programme choice, students who watch always reported high score in English but students who never watch achieved the mean score of 61.90 with an SD of 21.11. ANOVA revealed that the level of students' performance in English is independent of their educational programme watching [F(2,531)=.607,p=.545].

Whether the nature of the interaction of the independent variables family income and educational programme choice have any statistically significant on dependent variable English score of the students? ANOVA reported that there was no significant interaction effect of independent variable family income and educational programme choice on the dependent variable mean score in English [F(4,531)=2.025,p=.090]. The result concludes that educational programmes helped the students who watched them sometimes to improve their English score.

Table 4.56: Mean score of Mathematics by Income and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Educational Programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	27	41.59	21.63	Income	18376.472	2	17.684	.000	.062
	Sometimes	237	39.81	21.69						
	Always	67	41.32	23.59	Educational Programmes	3683.123	2	3.544	.030	.013
	Total	331	40.26	22.02						
Rs 15001-50000	Never	14	53.55	25.35	Income *Educational Programmes	4243.395	4	2.042	.087	.015
	Sometimes	119	59.48	22.85						
	Always	43	52.58	25.39	Error	275891.415	531			
	Total	176	57.32	23.76						
Above Rs50000	Never	7	54.89	26.43						
	Sometimes	16	75.25	20.36						
	Always	10	55.99	30.64						
	Total	33	65.09	26.26						
Total	Never	48	47.02	23.76		1535833.650	540			
	Sometimes	372	47.62	24.47						
	Always	120	46.58	25.36	Total					
	Total	540	47.34	24.57						

*p<0.05

The main effect of income showed that there is a significant influence on Mathematics score of the school students [F(2,531)=17.684,p=.000]. Descriptive statistics showed that the highest income group secured highest mean score (M=65.09,SD=26.26 while the lowest income group achieved the lowest score (M=40.26, SD=22.02).

When students who never watch achieved highest mean score in Mathematics (M=47.02,SD=23.76), students who watch it continually reported the lowest mean score (M=46.58,SD=25.36). However the main effect of educational programme had a significant influence [F(2,531)=3.544,p=.030] on Mathematics score of the school students. The result concludes that the interaction between these two main effects has no significant influence [F(4,531)=2.042p=.087] on Mathematics score of the school students. The nature of this interaction suggested that medium level of educational programme watching is helpful for the students to increase their mathematics score.

Table 4.57: Mean score of Science by Income and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Educational Programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	27	48.96	19.42	Income	13596.520	2	15.823	.000	.056
	Sometimes	237	50.39	21.23						
	Always	67	51.55	19.59	Educational Programmes	2455.356	2	2.857	.058	.011
	Total	331	50.51	20.72						
Rs 15001-50000	Never	14	57.70	23.18	Income *Educational Programmes	2047.813	4	1.192	.313	.009
	Sometimes	119	67.16	19.57						
	Always	43	62.19	21.19	Error	228146.255	531			
	Total	176	65.19	20.38						
Above Rs 50000	Never	7	64.59	22.62	Total	1989753.745	540			
	Sometimes	16	77.68	22.52						
	Always	10	64.31	23.12						
	Total	33	70.85	23.01						
Total	Never	48	53.79	21.40						
	Sometimes	372	56.93	22.55						
	Always	120	56.42	21.03						
	Total	540	56.54	22.10						

*p<0.05

In Science, Income was found to be significant factor and students' performance is increased when they belong to higher income group (M=70.85, SD= 23.01). ANOVA reported that there was a significant mean score in Science among the three income groups [F(2,531)=15.823,p=.000].

In the case of educational programme choice, those who watch always yielded better performance in Science score (M=56.42,SD=21.03), students who never watch secured lowest mean score(M=53.79,SD=21.40). However significant association not seen between educational programme choice on Science score of the school students [F(2,531)=2.857,p=.058]. After analysis ANOVA revealed that the influence of interaction between family income and educational programme choice on Science score was not significant [F(4,531)=1.192,p=.313]. Result concludes that Science score is independent on educational programme mode irrespective of their economic status.

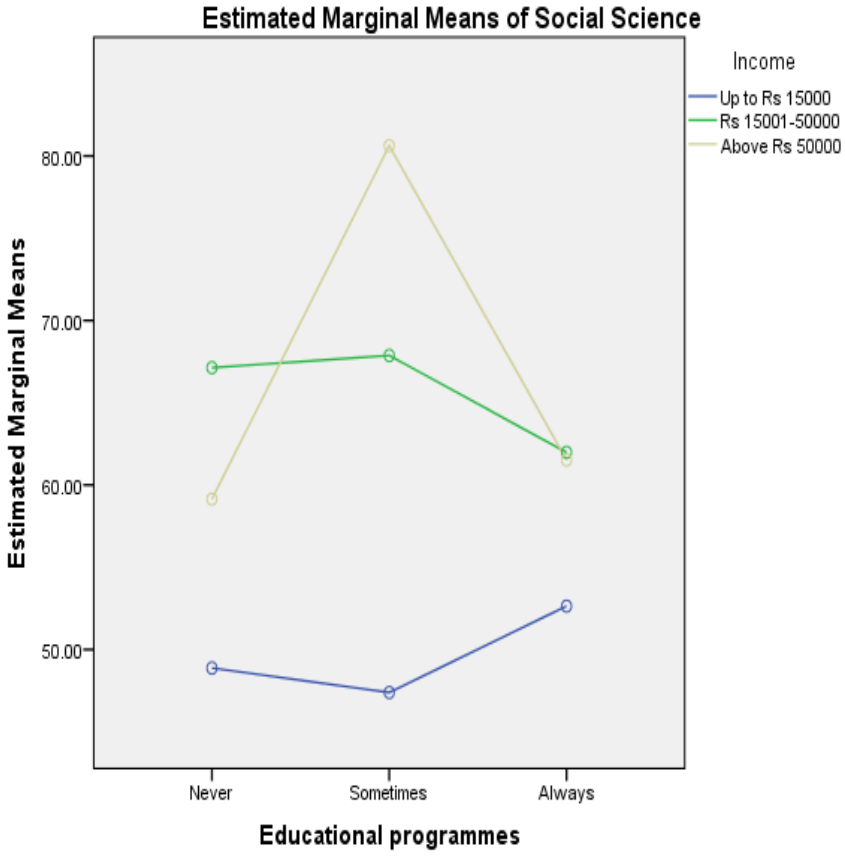
Table 4.58: Mean score of Social Science by Income and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Educational Programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	27	48.87	23.21	Income	18186.917	2	16.593	.000	.059
	Sometimes	237	47.39	24.15						
	Always	67	52.64	24.13	Educational Programmes	2459.710	2	2.244	.107	.008
	Total	331	48.57	24.09						
Rs 15001-50000	Never	14	67.13	19.75	Income *Educational Programmes	5806.534	4	2.649	.033	.020
	Sometimes	119	67.87	21.82						
	Always	43	61.98	24.62	Error	291007.596	531			
	Total	176	66.37	22.40						
Above Rs 50000	Never	7	59.14	29.05	Total	2016370.593	540			
	Sometimes	16	80.62	19.46						
	Always	10	61.52	19.23						
	Total	33	70.28	23.33						
Total	Never	48	55.69	24.11						
	Sometimes	372	55.37	25.61						
	Always	120	56.73	24.21						
	Total	540	55.70	25.14						

*p<0.05

ANOVA result showed that students from highest income family secured higher mean score (M=70.28, SD=23.33) in Social Science. While lower incomes group achieved the lowest score (M=48.57, SD=24.09). The p value revealed that the interaction between economic status of the family and Social Science score of the students are significantly related each other [F(2,531)=16.593,p=.000]. However when the mean Social Science with different mode of educational programme viewing such as never, sometimes and always , it was found that there was no significant difference among them [F(2,531)=2.244,p=.107]. While the students who watch it constantly achieved the highest score (M=56.7312, SD=24.216), those who never watch had the lowest mean score (M=55.69, SD=21.11). After the analysis it was found that the interaction between the two main effects- economic status and mode of educational programme viewing- had a significant influence [F(4,531)=2.64,P=.033] on Social Science score of the school students. Overall the interaction between income and educational programme viewing was statistically significant. This has been plotted (See Chart No.4.3) to get a clear understanding.

Figure:4.3: Estimated Marginal Score of Social Science



However, there remains a question unanswered; which category of income group significantly caused the variation in Social Science score of school students. To find out this the data was subjected to post hoc test Tukey and the result is reported in the table 4.59 and 4.60.

Table 4.59: Post hoc Tukey Multiple Comparison Test for Income and Social Science score

Multiple Comparisons						
Dependent Variable: Social Science Tukey HSD						
(I) Income	(J) Income	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Up to Rs 15000	Rs 15001-50000	-17.8006*	2.18393	.000	-22.9335	-12.6677
	Above Rs 50000	-21.7042*	4.27351	.000	-31.7482	-11.6601
Rs 15001-50000	Up to Rs 15000	17.8006*	2.18393	.000	12.6677	22.9335
	Above Rs 50000	-3.9036	4.44084	.654	-14.3409	6.5337
Above Rs 50000	Up to Rs 15000	21.7042*	4.27351	.000	11.6601	31.7482
	Rs 15001-50000	3.9036	4.44084	.654	-6.5337	14.3409

Social Science			
Tukey HSD			
Income	N	**Subset**	
		1	2
Up to Rs 15000	331	48.57	
Rs 15001-50000	176		66.37
Above Rs 50000	33		70.28
Sig.		1.000	.556

Post hoc comparisons using the Tukey test indicated that the score (48.57) achieved by the students from low family income is significantly different from medium and higher income groups. In other words family income had a significant influence on Social Science score of the sampled students.

Table 4.60: Post hoc Tukey Multiple Comparison Test for Educational Programmes and Social Science score

Multiple Comparisons						
Dependent Variable: Social Science Tukey HSD						
(I)Educational programmes	(J)Educational Programmes	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never	Sometimes	.3254	3.59036	.995	-8.1130	8.7639
	Always	-1.0323	3.99805	.964	-10.4289	8.3643
Sometimes	Never	-.3254	3.59036	.995	-8.7639	8.1130
	Always	-1.3577	2.45768	.845	-7.1340	4.4186
Always	Never	1.0323	3.99805	.964	-8.3643	10.4289
	Sometimes	1.3577	2.45768	.845	-4.4186	7.1340

Social Science		
Tukey HSD		
Educational Programmes	N	Subset
		1
Sometimes	372	55.37
Never	48	55.69
Always	120	56.73
Sig.		.916

The score (56.73) achieved by the higher user of educational programme was found to be significantly different from that of the Sometime and Never watching groups as per the Tukey test. In other words, educational programmes help to increase Social Science score of the school students.

Income, Entertainment Programme and GAS

Apart from the informational and educational programmes, entertainment holds a major part of the television broadcasting. Entertainment programmes involve music programmes, soap opera, chat shows, reality shows, movie etc. Generally we believe that entertainment programme would hurt the academic achievement of the students. In a study by pool et al (2003) found soap operas can be a hindrance for the school performance. Here the research question is how the

entertainment programmes effect the academic achievement of the school students.

Centred on watching entertainment programmes, sampled students were classified into there- never, sometimes and always watching groups.

Family income influences the school performance of the students (Ferguson 2011). Here the researcher tries to find out how family income influences the academic performance of the school students. Monthly family income was classified in to three groups- up to Rs 15000, Rs 15001-50000, and Above Rs 50000. The analysis of data on the association between family income, entertainment programme choice and General Academic score (GAS) and Subject-wise Academic Score (SAS) is shown in the table below.

Table 4.61: General Mean score by Income and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Entertainment Programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	7	184.48	84.46	Income	91169.073	2	9.043	.000	.033
	Sometimes	91	184.07	73.88						
	Always	233	159.56	69.98	Entertainment Programmes	23172.955	2	2.299	.101	.009
	Total	331	166.83	72.02						
Rs 15001-50000	Never	4	186.25	51.25	Income *Entertainment Programmes	23782.232	4	1.179	.319	.009
	Sometimes	59	228.60	66.67						
	Always	113	222.59	71.20	Error	2676706.051	531			
	Total	176	223.78	69.31						
Above Rs 50000	Never	2	296.16	30.87	Total	22686136.362	540			
	Sometimes	8	264.87	70.37						
	Always	23	228.13	78.96						
	Total	33	241.16	76.49						
Total	Never	13	202.21	77.73						
	Sometimes	158	204.79	75.09						
	Always	369	183.14	77.19						
	Total	540	189.93	77.109						

*p<0.05

From the descriptive statistics it can be seen that general academic scores are high among higher income group (M=241.16, SD=76.49) when compared to middle (M=223.78, SD=69.31) and lower income group (M=166.83, SD=72.02). The p value revealed that the association between economic status of the family and general academic score of the students are significantly related each other [F(2,531)=9.043,p=.000].

When the mean GAS of the students with different mode of entertainment programme viewing was tested there was no significant difference among them [F(4,531)=1.179,p=.319]. Students who always watch had the lowest score (M=183.14,SD=77.19) whereas those who watch it sometimes secured the highest score(M=204.79,SD=75.09). ANOVA revealed that the interaction between economic status of the family and watching mode of entertainment programme on students' general academic score was not significant [F(4,531)=1.179,p=.319]. It is concluded that students' general academic score is not dependent on the entertainment programme viewing irrespective of their economic status.

Income, Entertainment Programme Choice and Subject wise Academic Score

To compare the subject wise academic score to in respect of family income and entertainment programme choice the data were subjected to Two way ANOVA and the results are given in Table 4.62

Table 4.62: Mean score of English by Income and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Entertainment Programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	7	53.53	25.10	Income	7910.423	2	8.718	.000	.032
	Sometimes	91	53.11	22.41						
	Always	233	51.48	22.64	Entertainment Programmes	2109.146	2	2.324	.099	.009
	Total	331	51.97	22.57						
Rs 15001-50000	Never	4	62.00	26.11	Income *Entertainment Programmes	1396.313	4	.769	.545	.006
	Sometimes	59	71.91	20.12						
	Always	113	69.32	17.50	Error	240919.539	531			
	Total	176	70.027	18.57						
Above Rs 50000	Never	2	69.50	.7071	Total	2177582.818	540			
	Sometimes	8	85.52	24.42						
	Always	23	69.32	20.09						
	Total	33	73.26	21.39						
Total	Never	13	58.59	22.89						
	Sometimes	158	61.77	23.97						
	Always	369	58.06	22.69						
	Total	540	59.15	23.10						

*p<0.05

Mean score in English secured by the sampled students differ according to their economic status of the family. Descriptive statistics showed that better performance was done in higher income groups. The highest income group reported an average of score 73.26 in English (SD=21.39) whereas the lowest income group had a mean score of 51.97, with an SD of 22.57. The ANOVA revealed that level of students' academic performance in English is dependent on their economic status of the family [F(2,531)=8.718,p= .000]. In the case of entertainment programme, the sampled students performed poor in English when they always watch (M=58.06, SD=22.69), those who watch it sometimes had the highest mean score (M=61.77,SD=23.97). However there are differences among the mean score in English in the three mode of watching groups, P value showed no significant difference [F(2,531)=2.324,p=.099] among them. The analysis

conclude that the interaction between economic status and entertainment programme choice had no significant influence [F(4,531)=.769,p=.545] on English score of the school students. The result suggests that students from all income groups shows entertainment programme did not help to improve the English score of the school students.

Table 4.63: Mean score of Mathematics by Income and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Entertainment Programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**Df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	7	42.53	23.37	Income	8811.820	2	8.541	.000	.031
	Sometimes	91	44.77	23.51						
	Always	233	38.43	21.21	Entertainment Programmes	775.890	2	2.787	.063	.010
	Total	331	40.26	22.02						
Rs15001-50000	Never	4	46.00	23.49	Income *Entertainment Programmes	775.890	4	.376	.826	.003
	Sometimes	59	63.68	23.98						
	Always	113	54.41	23.12	Error	273927.834	531			
	Total	176	57.32	23.76						
Above Rs 50000	Never	2	70.50	7.77	Total	1535833.650	540			
	Sometimes	8	71.34	23.62						
	Always	23	62.45	28.26						
	Total	33	65.09	26.26						
Total	Never	13	47.90	22.78						
	Sometimes	158	53.18	25.56						
	Always	369	44.82	23.82						
	Total	540	47.34	24.57						

*p<0.05

Descriptive statistics shows that the higher the economic status of the family the higher the students' academic performance in mathematics. Highest income group reported highest mean score (M=65.09, SD= 26.26), the lowest income group had (M=40.26,SD=22.02). Taking all the mean scores together ANOVA

revealed that family income had a significant influence [F(2,531)=8.541,p=.000] on Mathematics score of the sampled students.

Significant association was not seen between entertainment programme and Mathematics scores of the students [F(2,531)=2.787,p=.063]. Students secured better score when they watch it sometimes (M=53.18,SD=25.56) .

The interaction between these two main effects- economic status of the family and entertainment programme had no significant bearing on the students' mean score in Mathematics [F(4,531)=376,p=.826].

Table 4.64: Mean score of Science by Income and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Entertainment Programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	7	56.66	25.51	Income	5925.939	2	6.948	.001	.026
	Sometimes	91	53.94	20.03						
	Always	233	48.98	20.74	Entertainment Programmes	2421.650	2	2.839	.059	.011
	Total	331	50.51	20.72						
Rs 15001-50000	Never	4	54.00	14.23	Income *Entertainment Programmes	1144.144	4	.671	.612	.005
	Sometimes	59	69.70	19.43						
	Always	113	63.24	20.71	Error	226442.916	531			
	Total	176	65.19	20.38						
Above Rs 50000	Never	2	80.66	17.44	Total	1989753.745	540			
	Sometimes	8	78.34	25.14						
	Always	23	67.39	22.66						
	Total	33	70.85	23.01						
Total	Never	13	59.53	22.15						
	Sometimes	158	61.06	21.69						
	Always	369	54.50	22.03						
	Total	540	56.54	22.10						

*p<0.05

Two way ANOVA was employed to find out whether interaction of the economic status of the family and entertainment programme choice have any statistically significant effect on the Science score of the sampled students. From the descriptive it can be seen that highest income group achieved the highest mean

score (M=70.85,SD=23.01), the lowest income group had (M=50.51, SD=20.72). ANOVA showed that the main effect of income was found to be significant [F(2,531)=6.948,p=.000].

The main effect of entertainment programme choice was not found to be significant [F(4,531)=.671,p=.612]. Highest mean score (M=61.06,SD=21.69) was secured by those students who watch sometimes and the lowest score (M=54.50,SD=22.03) by those who watch always. However the interaction between economic status of the family and entertainment programme choice had no significant influence [F(4,531)=.671,p=.612] on Science score of the school students.

The nature of this interaction suggested that medium level of entertainment programme watching is helpful for the students to increase their Science score.

Table 4.65: Mean score of Social Science by Income and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Income	**Entertainment Programmes**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to Rs 15000	Never	7	62.32	31.69	Income	5335.475	2	4.943	.007	.018
	Sometimes	91	55.07	23.04						
	Always	233	45.62	23.72	Entertainment Programmes	2519.302	2	4.873	.008	.018
	Total	331	48.57	24.09						
Rs 15001-50000	Never	4	59.00	22.77	Income *Entertainment Programmes	2519.302	4	1.167	.324	.009
	Sometimes	59	69.34	23.73						
	Always	113	65.08	21.69	Error	286581.360	531			
	Total	176	66.37	22.40						
Above Rs 50000	Never	2	74.50	6.36	Total	2016370.593	540			
	Sometimes	8	84.15	18.07						
	Always	23	65.08	24.21						
	Total	33	70.28	23.33						
Total	Never	13	63.17	25.74						
	Sometimes	158	61.87	24.49						
	Always	369	52.79	24.93						
	Total	540	55.70	25.14						

*p<0.05

The data shows that significant difference was reported in the mean scores in Social Science score in three income levels. While the highest income group achieved the highest mean score in Social Science ((M= 70.28, SD=23.33), the lowest income group reported lowest mean score (M=48.57, SD=24.09). ANOVA revealed that the main effect of family income had a significant influence on Social Science score of the students [F(2,531)=4.943,p=.007]. It means the academic achievement of sampled students in Social Science score was dependent on their family income.

When students who never watch entertainment programme secured highest score in Social Science (M=63.17,SD=25.74), those who watch always achieved the lowest score (M=52.79,SD=24.93). It was found that academic performance in Social Science was dependent on entertainment programme viewing as per the p value [F(2,531)=4.873,p=.008]. After the analysis it was found that the students' performance in Social Science is independent of the interaction between the economic status of the family and entertainment programme choice [F(4,531)=1.167, p=.324].

Clarifying Research Hypothesis 3

H3.c. *School student's family antecedents (income) will influence the interact between their television programme choice and academic achievement*

From the analysis, it is found that television programmes especially educational programmes leads to school students' high performance in all academic subjects irrespective of their family income. However, there is no statistically significant bearing in between academic scores of the sampled students and the interaction between their family income and programme choice (see tables4.49 to 4.65). Thus the results negate the validity of the hypothesis that the school students' family income will influence the interaction between their television programme choice and academic achievement.

TELEVISION PROGRAMME CHOICE AND ACADEMIC ACHIEVEMENT

Many researchers found that television programme choice influences the academic achievement of the students. Programme preference of the students was determined based on the responses collected from students on three categories of

programme: informational, educational and entertainment. Informational programmes are those intended to provide information such as news. Educational programmes are those with educational content aimed to enhance academic skills. Entertainment programmes include those such as movie, song, comedy shows etc.

Parent's Education, Informational Programmes and GAS

Parents' education has a special importance for the academic success of their children. Many researchers have found that parents' education is a good predictor of academic achievement of the school students (Grismer et al 1994,Okantey 2008) and research found that students from parents with higher education perform well than students from parents with lower education (Baker et al 2017). On the other hand a study found parents' education did not significantly influence the students' academic performance (Koskei& Ngeno2015).

In this study researcher also tries to find out the association between parents' education and academic achievement. Parents' education was classified into three- up to SSLC, up to Degree and PG and above.

The researcher also tries to find out the relationship between informational programmes and academic achievement. Many researchers found that informational programmes influence the academic achievement of the students. Based on the hours they spend with informational programmes students were classified in to three groups - Never, Sometimes and Always.

Here the research question is how parents' education and informational programmes are related to academic achievement of the school students and change in score in general and in specific subject due to their its influence. Detailed below is the analysis of the data on the association between parents' education, mode of informational programme watching and General Academic Score (GAS) and Subject wise Academic Score (SAS).

Table 4.66: General Mean Score by Parent's Education and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Informational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	13	178.77	74.11	Parent's Education	161231.24	2	15.781	.000	.056
	Sometimes	162	158.87	69.68						
	Always	32	128.60	66.54	Informational Programme	17827.01	2	1.745	.176	.007
	Total	207	155.44	70.26						
Up to Degree	Never	23	205.27	65.15	Parent's Education * Informational Programme	12933.61	4	.633	.639	.005
	Sometimes	206	208.74	75.96						
	Always	46	192.99	72.65	Error	2712474.67	531			
	Total	275	205.82	74.56						
PG and Above	Never	5	219.44	38.19	Total	22686136.36	540			
	Sometimes	42	241.60	66.33						
	Always	11	231.29	52.15						
	Total	58	237.73	61.58						
Total	Never	41	198.59	65.85						
	Sometimes	410	192.40	77.93						
	Always	89	174.57	76.91						
	Total	540	189.93	77.10						

*p<0.05

ANOVA result showed that significant difference was reported in the mean score in GAS in three education categories. While the students from parents with higher education reported to secure highest score in GAS (M=237.73, SD=61.58), the parents with lower education reported lowest mean score (M=155.44,SD=70.26). The corresponding p value reported that the interaction between parents education and students' academic achievement are significantly related each other [F(2,531)=15.751,p=.000].

However when the mean GAS of the students with different modes of informational programmes -always, sometimes and never- was tested, it was found that there was no significant difference among them [F(2,531)=1.745,p=.176]. Students who never watch had the highest mean score (M=198.59,SD=65.85) while

the students who watch always secured the lowest (M=174.57,SD=76.91). At the same time information programmes help students to increase their GAS when they watch it sometimes. Results showed the status of these two main effects, the ANOVA revealed that influence of interaction between the parents' education and information programme choice on students, general academic score was not significant[F(4,531)=.633,p=.639].

Table 4.67: Mean score of English by Parent's Education and informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Informational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	13	54.09	22.65	Parent's Education	22990.90	2	26.683	.000	.091
	Sometimes	162	47.49	22.19						
	Always	32	41.24	21.59	Informational Programme	644.11	2	.748	.474	.003
	Total	207	46.94	22.21						
Up to Degree	Never	23	68.15	17.76	Parent's Education * Informational Programme	788.24	4	.457	.767	.003
	Sometimes	206	64.56	19.79						
	Always	46	63.57	24.99	Error	228759.65	531			
	Total	275	64.70	20.55						
PG and Above	Never	5	74.96	10.12	Total	2177582.81	540			
	Sometimes	42	76.80	16.05						
	Always	11	76.00	15.59						
	Total	58	76.49	15.35						
Total	Never	41	64.52	19.86						
	Sometimes	410	59.07	22.73						
	Always	89	57.08	25.87						
	Total	540	59.15	23.10						

*p<0.05

Comparative statistics showed that mean score in English secured by the three education categories followed same pattern of the general academic score – better academic performance in higher education categories. Students from parents with highest education reported an average of 76.49 score in English (SD=15.35) while the lowest education group had a mean score of 46.94 with an SD of 22.21,

the ANOVA revealed that the level of academic performance in English was dependent on their families education status [F(2,531)=26.683,p=.000].

In the case of information programme, students who watch it never secured highest score in English (M=64.52,SD=19.86) while those who watch always secured lowest score(M=57.08,SD=25.87). However there are differences among the mean score in English in the three mode of watching. P value showed no significant difference [F(2,531)=.748,p=.474] among them.

Whether the nature of the interaction between parents' education and information programme choice have any statistically significant on English score of the students? ANOVA result showed that there was no significant interaction effect of parents' education and information programme choice on mean score in English[F(4,531)=.457,p=.767].

Table 4.68: Mean score of Mathematics by Parent's Education and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Informational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	13	45.33	21.46	Parent's Education	18804.18	2	18.061	.000.	.064
	Sometimes	162	37.70	20.23						
	Always	32	28.93	17.68	Informational Programme	648.51	2	.623	.537	.002
	Total	207	36.83	20.22						
Up to Degree	Never	23	56.52	25.92	Parent's Education * Informational Programme	1823.74	4	.876	.478	.007
	Sometimes	206	51.42	24.63						
	Always	46	49.97	23.51	Error	276427.85	531			
	Total	275	51.60	24.52						
PG and Above	Never	5	60.42	24.11	Total	1535833.65	540			
	Sometimes	42	64.55	24.23						
	Always	11	66.82	21.86						
	Total	58	64.63	23.44						
Total	Never	41	53.45	24.47						
	Sometimes	410	47.35	24.49						
	Always	89	44.49	24.76						
	Total	540	47.34	24.57						

*p<0.05

Significant difference was reported in the Mathematics score in three parents' education categories. Descriptive statistics shows that highest education group secured highest mean score in Mathematics (M=64.63,SD=23.44) the lowest education group reported lowest mean score(M=36.83,SD=20.22). ANOVA revealed that there was significant difference in mean score in Mathematics among the three education categories [F(2,531)=18.061,p=.000].

When students who watch informational programme never reported high mean score in Mathematics (M=53.45,SD=24.47) those who watch always scored the lowest mean score(M=44.49,SD=24.76). Though there are differences among the mean score in Mathematics in three education categories, p value indicated no significant differences [F(2,531)=.623,p=.537] among them. However, the students' performance in Mathematics is independent of the interaction between parents education and informational programme choice [F(4,531)=.876,p=.478].

Table 4.69: Mean score of Science by Parent's Education and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Informational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	13	54.40	23.51	Parent's Education	11214.76	2	12.877	.000	.046
	Sometimes	162	48.55	21.13						
	Always	32	42.97	18.06	Informational Programme	543.24	2	.624	.536	.002
	Total	207	48.05	20.90						
Up to Degree	Never	23	61.15	21.58	Parent's Education * Informational Programme	643.90	4	.370	.830	.003
	Sometimes	206	60.46	21.39						
	Always	46	56.62	21.06	Error	231230.50	531			
	Total	275	59.88	21.33						
PG and Above	Never	5	67.86	14.42	Total	1989753.74	540			
	Sometimes	42	71.23	19.16						
	Always	11	71.46	16.15						
	Total	58	70.98	18.04						
Total	Never	41	59.83	21.48						
	Sometimes	410	56.86	22.29						
	Always	89	53.55	21.38						
	Total	540	56.54	22.10						

*p<0.05

In Science, parents' education was found to be significant factor and performance of students who belonging to PG and Above had the highest mean score (M=70.98, SD=18.04). The lowest education group achieved the lowest score (M=48.05, SD= 20.90). Here the relationship between the parents' education and academic performance was found to be significant [F(2,531)=12.877,p=.000]. However significant association not seen between informational programme watching and academic achievement [F(2,531)=.624,p=.536]. In this case students who never watch informational programme secured the highest mean score (M=59.83,SD=21.48). The interaction between the parents' education and informational programmes had no significant influence [F(4,531)=.370,p=.830] on Science score of the school students.

Table 4.70: Mean score of Social Science by Parent's Education and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Informational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	13	49.96	27.56	Parent's Education	20015.18	2	18.316	.000	.065
	Sometimes	162	45.60	23.35						
	Always	32	37.39	19.83	Informational Programme	1571.71	2	1.438	.238	.005
	Total	207	44.60	23.24						
Up to Degree	Never	23	66.05	17.27	Parent's Education * Informational Programme	603.87	4	.276	.893	.002
	Sometimes	206	61.03	24.50						
	Always	46	56.68	24.74	Error	290135.33	531			
	Total	275	60.72	24.06						
PG and Above	Never	5	69.08	17.16	Total	2016370.59	540			
	Sometimes	42	72.32	20.41						
	Always	11	69.46	23.52						
	Total	58	71.50	20.47						
Total	Never	41	61.32	21.99						
	Sometimes	410	56.09	25.30						
	Always	89	51.32	25.32						
	Total	540	55.70	25.14						

*p<0.05

In Social Science too parents' education was found to be significant factor and performance of students is higher when they belong to the parents' education of PG and above group (M=71.50, SD=20.47). And the relationship between parents' education and Social Science score was found to be significant [F(2,531)=18.316,p=.000]. However the significant association was not seen between informational programme choice and their academic score [F(2,531)=1.438,p=238]. Descriptive statistics showed that students who never watch informational programme had the highest score in Social Science (M=61.32,SD=21.99).

The interaction between the two main effects- parents' education and informational programme choice had no significant influence [F(4,531)=.276,p=.893] on Social Science score of the school students.

Parent's Education, Educational Programmes and GAS

Parental education is considered as an important factor in academic outcome of the children. Previous research described that students with higher parental education level tend to have higher score (Compbell et al 1999,). Through this result we can understand that educated parents can create an environment that facilitates learning.

Here the researcher attempts to find out how parental education and academic achievement are related with each other. Parental education was classified in three- up to SSLC, up to Degree, and PG and above.

Another attempt is here to the relationship between educational programmes and academic achievement. Educational programmes play a significant role in the academic achievement of the school students. Educational channels like Victers, Gyandarshan etc telecast programmes related to language, Social Science etc. and they are more effective for school students. Educational programmes help the students to improve their academic growth.

Based on the educational programme watching, students were classified in to three- Never, Sometime and Always.

Here the research question is how parents' education and educational programmes are related to academic achievement of the school students. Detailed

below is the analysis of the data on the association between parents' education, mode of educational programme watching and General Academic Score (GAS) and Subject wise Academic Score (SAS).

Table 4.71: General Mean score by Parent's Education and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Educational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	17	165.24	63.28	Parent's Education	185534.85	2	18.061	.000	.064
	Sometimes	142	155.38	74.06						
	Always	48	152.15	61.40	Educational Programme	7949.78	2	.774	.462	.003
	Total	207	155.44	70.26						
Up to Degree	Never	23	175.49	55.52	Parent's Education * Educational Programme	19078.98	4	.929	.447	.007
	Sometimes	193	208.90	74.15						
	Always	59	207.56	80.58	Error	2727321.00	531			
	Total	275	205.82	74.56						
PG and Above	Never	8	226.40	82.40	Total	22686136.362	540			
	Sometimes	37	243.95	62.81						
	Always	13	227.01	43.47						
	Total	58	237.73	61.58						
Total	Never	48	180.34	65.36						
	Sometimes	372	191.95	79.02						
	Always	120	187.50	75.62						
	Total	540	189.93	77.10						

*p<0.05

The research question is whether there exists a difference in mean general academic score on parents' education and educational programme choice by the students. Descriptive statistics shows that general scores are high in up to Degree (M= 205.82, SD= 74.56) and PG and above (M= 237.73, SD=61.58) group when compared to up to SSLC group (M=155.44, SD=70.26). ANOVA revealed that there

was significant difference in mean score in General Academic score among the three education categories [F(2,531)=18.061,p=.000].

However when the GAS of the students with different mode of educational programme watching, it was found that there was no significant difference among them [F(2,531)=.774,p=.462]. Students who watch educational programme sometimes had the highest mean score (M=191.95,SD=79.02) while students who watch it never secured lowest (M=180.348,SD=65.369). After the analysis ANOVA revealed that the influence of interaction between parents' education and mode of educational programme watching on the students GAS was not significant [F(4,531)=.929,p=.447]. It is concluded that the GAS of students are independent of the present mode of educational programme watching and this condition is applicable for parents' education of the sample.

Table 4.72: Mean score of English by Parent's Education and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Educational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	17	50.14	21.24	Parent's Education	26160.79	2	30.373	.000	.103
	Sometimes	142	44.80	23.07						
	Always	48	52.11	19.19	Educational Programme	316.61	2	.368	.693	.001
	Total	207	46.94	22.21						
Up to Degree	Never	23	65.59	18.70	Parent's Education * Educational Programme	1209.36	4	.702	.591	.005
	Sometimes	193	64.44	20.91						
	Always	59	65.19	20.34	Error	228683.49	531			
	Total	275	64.70	20.55						
PG and Above	Never	8	76.26	15.63	Total	2177582.81	540			
	Sometimes	37	77.02	14.65						
	Always	13	75.15	18.16						
	Total	58	76.49	15.35						
Total	Never	48	61.90	21.11						
	Sometimes	372	58.19	23.95						
	Always	120	61.04	21.04						
	Total	540	59.15	23.10						

*p<0.05

In English, descriptive statistics showed that better academic performance in students belongs to PG and above group. The higher level of education group reported an average of 76.49 score in English (SD=15.35) while the up to SSLC group had a mean score of 46.94 with an SD of 22.21. The ANOVA showed that the level of students' performance in English is dependent on their parents education [F(2,531)=30.37,p=.000]. In the case of mode of educational programme watching, students who always watch reported the mean score of (M=61.04, SD=21.04), students who never watch group had the mean score of (M=61.90, SD=21.11). P value showed no significant differences[F(2,531)=.368,p=.693] among them. After the analysis the status of these two main effects, the ANOVA revealed that the influence of the interaction between parents' education and the mode of educational programme watching on students' English score was not significant [F(4,531)=.702,p=.591].

Table 4.73: Mean score of Mathematics by Parent's Education and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Educational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	17	38.82	18.85	Parent's Education	22592.10	2	21.480	.000	.075
	Sometimes	142	37.07	20.97						
	Always	48	35.40	18.63	Educational Programme	355.12	2	.338	.714	.001
	Total	207	36.83	20.22						
Up to Degree	Never	23	47.15	22.83	Parent's Education * Educational Programme	869.23	4	.413	.799	.003
	Sometimes	193	51.81	24.05						
	Always	59	52.66	26.80	Error	279247.90	531			
	Total	275	51.60	24.52						
PG and Above	Never	8	64.06	29.08	Total	1535833.65	540			
	Sometimes	37	66.30	21.78						
	Always	13	60.21	25.77						
	Total	58	64.63	23.44						
Total	Never	48	47.02	23.76						
	Sometimes	372	47.62	24.47						
	Always	120	46.58	25.36						
	Total	540	47.34	24.57						

*p<0.05

Mean score in Mathematics secured by the sampled students vary according to their parents' education level. While they achieve highest score (M=64.63,SD=23.44) when they belong to PG and above group, they get lowest score (M=36.83, SD=20.22) when they belong to up to SSLC group. ANOVA revealed that the difference is found to be statistically significant [F(2,531)=21.480, p=.000].

The sampled students performed well (M=47.62,SD=24.47)in Mathematics when they watched educational programmes sometimes. At the same time students who never watch had the mean score (M=47.02,SD=23.76). However the interaction between mode of educational programme watching and Mathematics score was not statistically significant [F(2,531)=.338,p=.714]. The result concluded that students' performance in Mathematics is independent of the interaction between these two main effects [F(4,531)=.413,p=.799].

Table 4.74: Mean score of Science by Parent's Education and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Educational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	17	46.43	17.55	Parent's Education	16632.77	2	19.035	.000	.067
	Sometimes	142	48.56	22.40						
	Always	48	47.14	17.36	Educational Programme	412.68	2	.472	.624	.002
	Total	207	48.05	20.90						
Up to Degree	Never	23	53.44	19.84	Parent's Education * Educational Programme	516.69	4	.296	.881	.002
	Sometimes	193	60.24	21.29						
	Always	59	61.19	21.91	Error	231995.38	531			
	Total	275	59.88	21.33						
PG and Above	Never	8	70.45	26.15	Total	1989753.74	540			
	Sometimes	37	71.77	17.16						
	Always	13	69.09	16.04						
	Total	58	70.98	18.04						
Total	Never	48	53.79	21.40						
	Sometimes	372	56.93	22.55						
	Always	120	56.42	21.03						
	Total	540	56.54	22.10						

*p<0.05

The table analyses whether the interaction between parents' education and educational programme choice have any statistical significance on Science score of the students. Descriptive statistics shows that the Science score are high in PG and above (M=70.98, SD= 18.04) group while the lowest score (M=48.05,SD=20.90) was in up to SSLC group . And the influence of parents' education on the academic performance of students in Science subject was significant [F(2,531)=19.035, p=.000].

The main effect of mode of educational programme watching was not found to be significant [F(2,531)=.472,p=.624]. The highest mean score (M=56.93, SD=22.55) was secured by those students who watch educational programme sometimes and the lowest score (M=53.79,SD=21.40) by those who never watched it.

The interaction between parents' education with mode of educational programme watching had no significant bearing [F(4,531)=.296,p=.881] on Science score of the school students.

Table 4.75: Mean score of Social Science by Parent's Education and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Educational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	17	46.41	22.48	Parent's Education	20414.37	2	18.636	.000	.066
	Sometimes	142	42.82	23.75						
	Always	48	49.23	21.69	Educational Programme	40.01	2	.037	.964	.000
	Total	207	44.60	23.24						
Up to Degree	Never	23	55.73	20.59	Parent's Education * Educational Programme	2740.31	4	1.251	.288	.009
	Sometimes	193	61.19	24.07						
	Always	59	61.13	25.39	Error	290839.04	531			
	Total	275	60.72	24.06						
PG and Above	Never	8	75.32	27.64	Total	2016370.59	540			
	Sometimes	37	73.16	18.28						
	Always	13	64.43	21.68						
	Total	58	71.50	20.47						
Total	Never	48	55.69	24.11						
	Sometimes	372	55.37	25.61						
	Always	120	56.73	24.21						
	Total	540	55.70	25.14						

*p<0.05

From the descriptive statistics it can be seen that highest score (M=71.50, SD=20.47) was achieved by the student who belongs to PG and above groups when compared to up to Degree (M=60.72,SD=24.06)and up to SSLC group(M=44.60,SD= 23.24). ANOVA showed that there was significant difference in mean score in Social Science among three education categories [F(2,531)=18.636, p=.000]. In the case of educational programme watching, students who always watch achieved the highest score in Social Science (M=56.73,SD=24.21) those who never watch achieved the lowest score (M=55.69,SD=24.11). However the effect of educational programme watching on Social Science score was not found to be significant [F(2,531)=.037,p=.964]. The interaction between these two main effects has no significant influence [F(4,531)=1.251,p=.288] on the academic score in Social Science..

Parent's Education, Entertainment Programmes and GAS

Khan et al.(2015) pointed out that parents' educational attainment influences their children's academic achievement. Educated parents can better communicate with their children regarding the school work, activities and the information being taught at school (Mutoddi et al 2014). Here the researcher focuses how parents' education relates with the academic performance of the students. Based on the educational qualification, parents' education was classified in to three- up to SSLC, up to Degree and PG and above.

The researcher also tries to find out the relationship between entertainment programme and academic achievement. Based on hours spent on entertainment programme students were categorized in to three groups – Never, Sometimes and Always.

Here the research question is how parents' education and entertainment programmes is related to academic achievement of the school students. Detailed below is the analysis of the data on the association between parents' education, mode of entertainment programme watching and General Academic Score (GAS) and Subject wise Academic Score (SAS).

Table 4.76: General Mean score by Parent's Education and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Entertainment Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	6	170.06	82.55	Parent's Education	84884.37	2	8.332	.000	.030
	Sometimes	52	173.09	69.98						
	Always	149	148.69	69.20	Entertainment Programme	13450.65	2	1.320	.268	.005
	Total	207	155.44	70.26						
Up to Degree	Never	5	236.06	33.91	Parent's Education * Entertainment Programme	9921.44	4	.487	.745	.004
	Sometimes	92	217.71	75.18						
	Always	178	198.82	74.34	Error	2704856.27	531			
	Total	275	205.82	74.56						
PG and Above	Never	2	214.00	147.07	Total	22686136.36	540			
	Sometimes	14	237.69	54.33						
	Always	42	238.88	61.49						
	Total	58	237.73	61.58						
Total	Never	13	202.21	77.73						
	Sometimes	158	204.79	75.09						
	Always	369	183.14	77.19						
	Total	540	189.93	77.10						

*p<0.05

The research question is whether there exists a difference in mean general academic score on the difference in parents' education and entertainment programme choice by the students. Descriptive statistics shows that the highest score (M= 237.73, SD=61.58) was achieved by the students belonging to PG and above group when compared to up to Degree (M= 205.82, SD= 74.56) and up to SSLC group (M=155.44, SD=70.26). The corresponding p value showed that the association between the two variables- parents' education and academic achievement of the students are significantly each other [F(2,531)=8.332,p=.000].

When the mean GAS of the students with different mode of entertainment programme watching such as Always, Sometimes and Never, it was found that there was no significant difference among them [F(2,531)=1.320,p=.268].and students who watch it sometimes had highest mean score(M=204.79,SD=75.09)

while the students who watch it always secured the lowest (M=183.14,SD=77.19). ANOVA revealed that the influence of the interaction between parents' education and mode of entertainment watching on the students' General academic score was not significant [F(4,531)=.487,p=.745]. After analysis it was concluded that the GAS of the students are independent of the existing mode of entertainment programme watching and dependent of the parents' education.

Table 4.77: Mean score of English by Parent's Education and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Entertainment Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	6	47.45	21.11	Parent's Education	11716.24	2	13.686	.000	.049
	Sometimes	52	47.39	22.97						
	Always	149	46.76	22.13	Entertainment Programme	570.83	2	.667	.514	.003
	Total	207	46.94	22.21						
Up to Degree	Never	5	76.20	12.85	Parent's Education * Entertainment Programme	2768.80	4	1.617	.169	.012
	Sometimes	92	67.41	21.64						
	Always	178	62.97	19.96	Error	227295.88	531			
	Total	275	64.70	20.55						
PG and Above	Never	2	48.00	29.69	Total	2177582.81	540			
	Sometimes	14	78.10	15.96						
	Always	42	77.31	13.56						
	Total	58	76.49	15.35						
Total	Never	13	58.59	22.89						
	Sometimes	158	61.77	23.97						
	Always	369	58.06	22.69						
	Total	540	59.15	23.10						

*p<0.05

ANOVA indicated that the higher the education level of the parents, the higher the English score secured by the students. While the lower education group secured a mean score of (M=46.94,SD=22.21) higher level of education groups achieved (M=76.49, SD=15.35). The p value revealed that the association between parents' education and English score of the students are significantly related each other [F(2,531)=13.686,p=.000].

Mean score in English secured by the sampled students vary according to their mode of entertainment programme watching. While they achieved highest score (M=61.77,SD=23.97) when they watch it sometimes and students who watch it never secured the lowest (M=58.59,SD=22.89). But this difference was not found to be statistically significant [F(2,531)=.667,p=.514].

After the analysis, ANOVA showed that there was no significant interaction effect of parents' education and mode of entertainment programme watching on the mean score in English [F(4,531)=1.617,p=.169].

Table 4.78: Mean score of Mathematics by Parent's Education and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Entertainment Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	6	34.62	11.39	Parent's Education	10552.62	2	10.317	.000	.037
	Sometimes	52	41.60	21.21						
	Always	149	35.25	19.97	Entertainment Programme	2050.59	2	2.005	.136	.007
	Total	207	36.83	20.22						
Up to Degree	Never	5	63.80	20.57	Parent's Education * Entertainment Programme	2304.05	4	1.126	.343	.008
	Sometimes	92	57.84	26.67						
	Always	178	48.04	22.76	Error	271575.94	531			
	Total	275	51.60	24.52						
PG and Above	Never	2	48.00	39.59	Total	1535833.65	540			
	Sometimes	14	65.57	17.05						
	Always	42	65.10	24.89						
	Total	58	64.63	23.44						
Total	Never	13	47.90	22.78						
	Sometimes	158	53.18	25.56						
	Always	369	44.82	23.82						
	Total	540	47.34	24.57						

*p<0.05

Significant difference was reported in the mean score in Mathematics in three education categories. While the lowest education group was reported to secure lowest mean score in Mathematics (M=36.83, SD=20.22) the highest education group was reported with the highest mean score (M=64.63,SD=23.44). ANOVA indicated that there was significant difference in mean score in Mathematics among the three education categories [F(2,531)=10.317,p=.000].

When students who sometimes watch entertainment programme reported high mean score in Mathematics (M=53.18,SD=25.56), the students who always watch achieved the lowest score (M=44.82,SD=23.82). However the academic performance in mathematics was found to be independent on their mode of entertainment programme watching as per the p value [F(2,531)= 2.005,p=.136]. However the students' performance in Mathematics is independent of the interaction between these two main effects [F(4,531)=1.126,p=.343].

Table 4.79: Mean score of Science by Parent's Education and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Entertainment Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	6	51.10	22.84	Parent's Education	6186.181	2	7.196	.001	.026
	Sometimes	52	51.22	19.37						
	Always	149	46.83	21.35	Entertainment Programme	1370.901	2	1.595	.204	.006
	Total	207	48.05	20.90						
Up to Degree	Never	5	68.06	13.41	Parent's Education * Entertainment Programme	922.485	4	.537	.709	.004
	Sometimes	92	64.91	21.65						
	Always	178	57.04	20.88	Error	228235.825	531			
	Total	275	59.88	21.33						
PG and Above	Never	2	63.50	41.71	Total	1989753.745	540			
	Sometimes	14	72.28	17.33						
	Always	42	70.91	17.65						
	Total	58	70.98	18.04						
Total	Never	13	59.53	22.15						
	Sometimes	158	61.06	21.69						
	Always	369	54.50	22.03						
	Total	540	56.54	22.10						

*p<0.05

Descriptive statistics revealed that students who belong to higher educated parents achieved the highest score (M=70.98, SD= 18.04) in Science while low level education group scored the lowest (M=48.05,SD=20.90). P value showed that the association between parents education and Science score of the students are significantly related each other [F(2,531)=7.196,p=.001].

However when the relationship between the mean Science score of the students with different mode of entertainment programme watching was explored, it was found that there was no significant difference among them [F(2,531)=1.595, p=.204]. Students who watch entertainment programme sometimes had highest mean score (M=61.06, SD=21.69) while those who watch always secured lowest(M=54.50, SD=22.03]. ANOVA revealed that influence of the interaction between parents' education and mode of entertainment programme watching on the Science score was not significant [F(4,531)= .537,p=.709].

Table 4.80: Mean score of Social Science by Parent's Education and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parent's Education	**Entertainment Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Up to SSLC	Never	6	57.70	32.03	Parent's Education	6987.882	2	6.560	.002	.024
	Sometimes	52	48.38	22.76						
	Always	149	42.75	22.88	Entertainment Programme	2860.201	2	2.685	.069	.010
	Total	207	44.60	23.24						
Up to Degree	Never	5	74.00	10.29	Parent's Education * Entertainment Programme	2755.34	4	1.293	.271	.010
	Sometimes	92	67.56	23.37						
	Always	178	56.81	23.83	Error	282821.85	531			
	Total	275	60.72	24.06						
PG and Above	Never	2	52.50	37.47	Total	2016370.59	540			
	Sometimes	14	74.58	16.06						
	Always	42	71.38	21.11						
	Total	58	71.50	20.47						
Total	Never	13	63.17	25.74						
	Sometimes	158	61.87	24.49						
	Always	369	52.79	24.93						
	Total	540	55.70	25.14						

*p<0.05

In Social Science score also, parents' education was found to be a significant factor and performance of students is improved when they belong to the group with higher education of PG and above ((M=71.50,SD=20.47). And the relationship between parents' education and academic performance was found to be significant [F(2,531)=6.560,p=.002].

In the case of mode of entertainment programme watching, students who never watch achieved highest mean score (M=63.17,SD=25.74) while the students who watch it always secured lowest(M=52.79,SD=24.93). Significant association was not seen between entertainment programme watching and academic achievement [F(2,531)=2.685,p=.069].

After the analysis ANOVA revealed that influence of the interaction between parents education and mode of entertainment programme watching on the students' Social Science score was not significant [(4,531)=1.293,p=.271]. The nature of interaction suggests that students from all groups show steep decline in their Social Science score when they always watch entertainment programme.

Clarifying Research Hypothesis 3

H3.c. *School student's family antecedents (parents education) will influence the interact between their television programme choice and academic achievement*

The study concludes that students who watch educational programme shows perform well in academic subjects and the informational and entertainment programmes found no significant influence on academic subjects irrespective of parents' education. Also, no statistically significant bearing was found in between academic scores of the sampled students and the interaction between their parents' education and programme choice. (see tables 4.66 to 4.80) .These findings with proven statistical result negate the validity of the hypothesis that nature of the influence of television programme choice on the academic achievement of students will vary according to the income of their family.

PARENTAL SUPPORT AND ACADEMIC ACHIEVEMENT

Parents are an essential part of the life of a student. So their support is very influential in academic matters of the students. Parental support means any kind of emotional and cognitive backup extended by parents to their wards in educational

matters. Previous studies in the field revealed that parental support is the most influencing factor in the academic achievement of students.

Parental Support, Level of exposure to TV , GAS and SAS

Studies proved that home environment was significantly related to the academic achievement of the school students (Mimrot, B.H 2016). Here the researcher attempts to find out how parental support and academic achievement are related to each other. Parental support is categorized into three – low support, medium support and high support groups.

Table 4.81: General Mean Score by Parental Support and level of Exposure to TV

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Low	53	198.72	80.14	Parental Support	55351.463	2	4.894	.008	.018
	Medium	24	212.45	73.25						
	High	17	141.25	84.35	Level of Exposure to TV	97986.693	2	8.663	.000	.032
	Total	94	191.84	82.14						
Medium	Low	199	188.47	73.22	Parental Support * Level of Exposure to TV	29435.858	4	1.301	.268	.010
	Medium	90	182.04	71.45						
	High	71	166.42	82.16	Error	3002942.156	531			
	Total	360	182.51	74.90						
High	Low	52	225.43	80.47	Total	22686136.362	540			
	Medium	20	230.33	63.25						
	High	14	178.40	53.20						
	Total	86	218.91	74.42						
Total	Low	304	196.58	76.69						
	Medium	134	194.70	72.61						
	High	102	163.87	79.30						
	Total	540	189.93	77.10						

*p < 0.05

The research question is whether there exists any difference in mean general academic score in accordance with parental support and the level of television use by the students. In this analysis the researcher based on two factors - parental support and level of television use each with three levels.

A Two way factorial ANOVA revealed that parental support is a significant influencing factor on GAS of students (F(2,531)= 4.894,p=.008). Further, the higher the support of parents, the higher was the students' GAS (M=218.91, SD=74.42).

Similarly, level of TV use has significant effect on GAS (F(2,531)=8.663; p=.000). To be specific, high use of television by the students resulted in low GAS (M=163.87,SD=79.30). However, the interaction between the two factors i.e., parental support and level of television use was not significant on GAS (F(4,531= 1.301,p=.268). Though the support of parents and level of television use got significant effect on the performance of students in GAS, the interaction between these two factors on GAS was not statistically significant.

Table 4.82: Mean score of English by Parental Support and Level of Exposure to TV

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Low	53	61.94	23.39	Parental Support	10509.86	2	10.342	.000	.037
	Medium	24	69.61	15.67						
	High	17	48.58	29.31	Level of Exposure to TV	3102.96	2	3.053	.048	.011
	Total	94	61.48	23.71						
Medium	Low	199	55.90	22.95	Parental Support * Level of Exposure to TV	2825.48	4	1.390	.236	.010
	Medium	90	58.84	21.17						
	High	71	53.74	24.57	Error	269819.39	531			
	Total	360	56.21	22.85						
High	Low	52	67.02	22.90	Total	2177582.81	540			
	Medium	20	72.12	17.37						
	High	14	71.47	15.08						
	Total	86	68.93	20.56						
Total	Low	304	58.86	23.35						
	Medium	134	62.75	20.44						
	High	102	55.31	25.08						
	Total	540	59.15	23.10						

*p<0.05

Descriptive statistics showed that mean score in English secured by the three parental support groups followed the same pattern as that of the GAS - the higher the support of the parents, the higher the performance of the students. The highest support group reported the highest average of 68.93 score in English (SD=20.56) while the low support group recorded the lowest mean score of 56.21 with an SD of 22.85. And it is proved that the level of academic performance in English is dependent on their parent's support [F(2,531)=10.342.p=.000].

Interestingly, data showed that medium users had the highest mean score in English (M=62.75,SD=20.44) followed by high (M=55.31, SD=25.08) and low (M=58.86,SD=23.35) level user categories. And it was found that television exposure had a significant influence on English score of the students [F(2,531)= 3.053.p=.048].

However, the influence of the interaction between parents support and level of television exposure on the students' English score was not significant [F(4,531= 1.390, p=.236].

Table 4.83: Mean score of Mathematics by Parental Support and Level of Exposure to TV

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Low	53	50.73	25.75	Parental Support	5334.11	2	4.551	.011	.017
	Medium	24	58.27	24.36						
	High	17	40.23	30.51	Level of Exposure to TV	4742.88	2	4.047	.018	.015
	Total	94	50.76	26.69						
Medium	Low	199	45.77	22.92	Parental Support * Level of Exposure to TV	1322.29	4	.564	.689	.004
	Medium	90	46.16	22.86						
	High	71	39.93	24.69	Error	311188.05	531			
	Total	360	44.71	23.32						
High	Low	52	56.30	27.99	Total	1535833.65	540			
	Medium	20	55.44	22.18						
	High	14	47.00	20.67						
	Total	86	54.59	25.63						
Total	Low	304	48.43	24.60						
	Medium	134	49.71	23.44						
	High	102	40.95	25.12						
	Total	540	47.34	24.57						

*p<0.05

ANOVA result showed there was no specific pattern among students' Mathematics score in terms of the level of support of parents. While the medium support group secured lowest mean score of (M=44.71, SD=23.32) the high support group achieved the highest mean score (M=54.59,SD=25.63). And the interaction between parents' support and Mathematics score of the students is statistically significant [F(2,531)=4.551,p=.011].

Likewise, level of exposure to television had significant effect on the mean Mathematics score of the students [F(2,531)=4.047,p=.018]. It was found that medium users had the highest mean score (M=49.71,SD=23.44) whereas the heavy users had the lowest mean score (M=40.95,SD=25.12).

Still, the academic performance of students in Mathematics is independent of the interaction between the level of television viewing and parents' support [F(4,531)=.564,p=.689].

Table 4.84: Mean score of Science by Parental Support and Level of Exposure to TV

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Low	53	58.35	22.42	Parental Support	5802.58	2	6.189	.002	.023
	Medium	24	63.80	22.49						
	High	17	44.24	26.65	Level of Exposure to TV	5546.54	2	5.916	.003	.022
	Total	94	57.19	23.90						
Medium	Low	199	55.56	20.66	Parental Support * Level of Exposure to TV	1638.95	4	.874	.479	.007
	Medium	90	55.46	21.03						
	High	71	49.75	22.89	Error	248915.98	531			
	Total	360	54.39	21.27						
High	Low	52	64.97	22.89	Total	1989753.74	540			
	Medium	20	69.01	17.72						
	High	14	58.28	22.26						
	Total	86	64.82	21.71						
Total	Low	304	57.66	21.57						
	Medium	134	58.97	21.36						
	High	102	50.00	23.55						
	Total	540	56.54	22.10						

*p<0.05

There was no specific pattern in the relation between parent support and students' mean score in Science. When high support group reported highest mean score in Science (M=64.82, SD= 21.7), the medium support group scored the lowest (M=54.39,SD=21.27). However, the corresponding p value showed that the association between parents' support and academic performance in Science score is statistically significant [F(2,531)=6.189,p=.002].

In the case of level of television exposure, data showed that medium users had the highest score (M=58.97,SD=21.36) and heavy users had the lowest mean score (M=50.00,SD=23.55). ANOVA revealed that the academic performance of the students in Science was found to be dependent on the level of television exposure as per the p value [F(2,531)=5.916,p=.003].

On the other hand, students' performance in Science is independent of the interaction between parental support and level of television exposure [F(4,531)=.874, p=.479].

Table 4.85: Mean Score of Social Science by Parental Support and Level of Exposure to TV

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Level of Exposure to TV**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Low	53	59.35	26.15	Parental Support	8061.45	2	6.611	.001	.024
	Medium	24	63.12	23.74						
	High	17	45.68	29.20	Level of Exposure to TV	4436.07	2	3.638	.027	.014
	Total	94	57.84	26.53						
Medium	Low	199	55.17	23.18	Parental Support * Level of Exposure to TV	1434.73	4	.588	.671	.004
	Medium	90	54.94	26.26						
	High	71	45.57	25.52	Error	323736.18	531			
	Total	360	53.22	24.67						
High	Low	52	62.83	25.64	Total	2016370.59	540			
	Medium	20	67.33	21.82						
	High	14	62.06	20.62						
	Total	86	63.75	23.87						
Total	Low	304	57.21	24.25						
	Medium	134	58.25	25.51						
	High	102	47.85	25.96						
	Total	540	55.70	25.14						

*p<0.05

Considering the mean score in Social Science, students who had high parental support reported the highest mean score (M=63.75,SD=23.87) while students with medium parental support registered the lowest score (M=53.22,SD= 24.67). And the association between parental support and Social Science was statistically significant [F(2,531)=6.611,p=.001].

As seen in the case of parental support, when students having medium level of exposure to television reported high mean score in Social Science (M=58.259, SD=25.518), the heavy viewers recorded the lowest mean score (M=47.85, SD=25.96). Again, the academic performance of the students in Social Science was found to be dependent on the level of television exposure [F(2,531)=3.638, p=.027].

However, students' performance in Social Science is independent of the interaction between parental support and level of television exposure [F(4,531)=.588,p=.671].

Clarifying Research Hypothesis 4

H4: a School students' parental support influence the interaction between their level of exposure to television and academic achievement

The results indicated that students, irrespective of parental support, who use television extensively shows poor performance in all academic subjects. And no statistically significant bearing was found in between academic scores of the sampled students and the interaction between their parental support and television use levels (see tables 4.81 to 4.85).This finding with proven statistical results negate the validity of the hypothesis that nature of the influence of television exposure on the academic achievement of students will vary according to the support of parents.

PARENTAL SUPPORT, PARENTAL MEDIATION AND ACADEMIC ACHIEVEMENT

The influence of parental support on the interaction between parental support, parental mediation in television use of children and academic achievement were well studied by different researchers over past few decades across the world.

The analysis of data detailed in the coming sessions will answer the following questions: how parental mediation effects children's television use and its influence on their academic achievement, how parental mediation is defined by parental support, what is the nature of the interaction among parental support, type of parental mediation in television use of children and its influence on academic achievement.

Detailed below are the analyses of data on the associations between parental support, level of parental mediation and general academic score (GAS) and subject wise academic scores (SAS).

Table 4.86: General Mean score by Parental Support and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Parental Mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Unmonitored	48	182.46	78.55	Parental Support	77594.04	2	6.801	.001	.025
	Partially Monitored	16	178.81	83.15						
	Fully Monitored	30	213.78	85.57	Parental Mediation	12676.89	2	1.111	.330	.004
	Total	94	191.84	82.14						
Medium	Unmonitored	134	198.70	80.43	Parental Support * Parental Mediation	57437.96	4	2.517	.041	.019
	Partially Monitored	84	176.17	70.17						
	Fully Monitored	142	171.00	69.83	Error	3029361.24	531			
	Total	360	182.51	74.90						
High	Unmonitored	31	219.89	72.73	Total	22686136.36	540			
	Partially Monitored	18	205.65	72.80						
	Fully Monitored	37	224.55	77.76						
	Total	86	218.91	74.42						
Total	Unmonitored	213	198.12	79.37						
	Partially Monitored	118	181.02	72.53						
	Fully Monitored	209	186.62	76.82						
	Total	540	189.93	77.10						

*p<0.05

The results showed that the students having high parental support secured the highest general score (M=218.91,SD=74.42) while the medium support group reported the lowest (M=182.51,SD=74.90). The ANOVA revealed that the

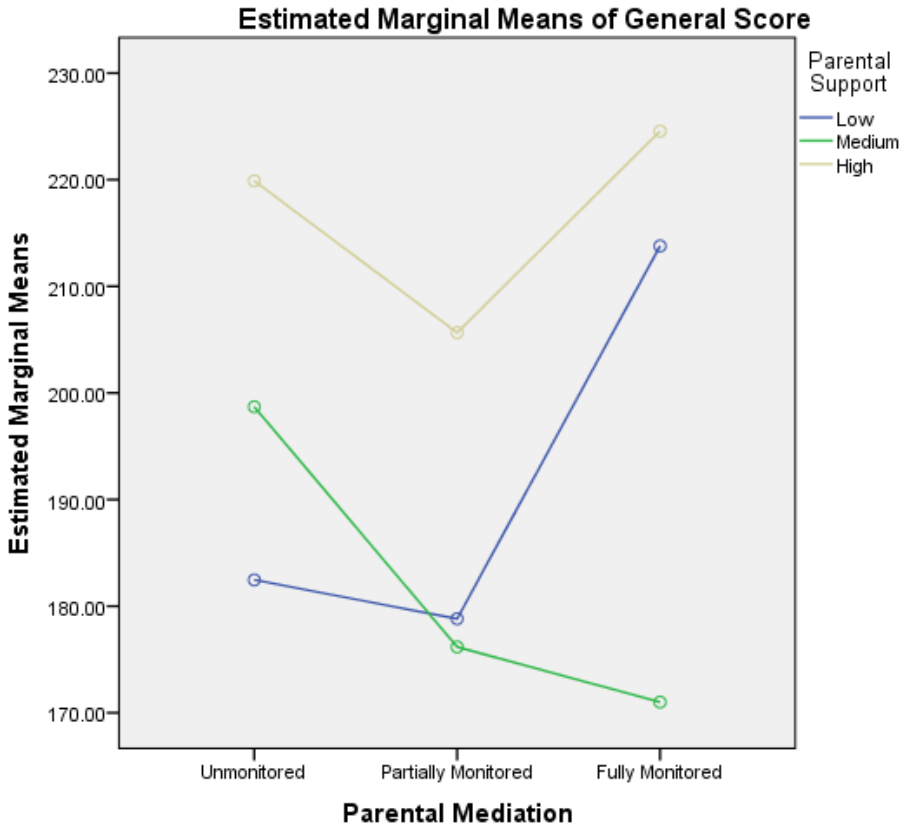
association between parental support and academic achievement of the students is statistically significant [F(2,531)= 6.801.p=.001].

On the contrary, there was no significant association between parental mediation and students' general score [F(2,531)= 6.801,p=.330]. However, unmonitored group reported highest general score (M=198.12,SD=79.37) and partially monitored group recorded the lowest general score (M=181.02,SD=72.53).

Despite the difference of results mentioned above, ANOVA revealed that the interaction between parental support and level of parental mediation on the student's general academic score was statistically significant [F(4,531=2.517, p=.041].

Overall the interaction between parental support and parental mediation was statistically significant. This has been plotted (See Chart No.4.4) to get a clear understanding.

Figure 4.4: Estimated Marginal Means of General Score



However, there remains a question unanswered: which of the factors significantly caused the variation in GAS of school children? To find out this, the data was subjected to the Post Hoc test Tukey and the result is reported in the Table 4.87 and 4.88.

Table 4.87: Post hoc Tukey Multiple Comparison Test for parental support and General Academic score

Multiple Comparisons						
Dependent Variable: Total Tukey HSD						
(I) Parental Support	(J) Parental Support	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Low	Medium	9.3217	8.74865	.536	-11.2403	29.8836
	High	-27.0794*	11.27071	.044	-53.5690	-.5898
Medium	Low	-9.3217	8.74865	.536	-29.8836	11.2403
	High	-36.4011*	9.06557	.000	-57.7079	-15.0943
High	Low	27.0794*	11.27071	.044	.5898	53.5690
	Medium	36.4011*	9.06557	.000	15.0943	57.7079

GAS			
Tukey HSD			
Parental support	N	**Subset**	
		1	2
Medium	360	182.5183	
Low	94	191.8400	
High	86		218.9194
Sig.		.606	1.000

Post hoc comparisons using the Tukey test indicated that the score of the students having high parental support (218.9194) is significantly different from medium and lower parental support groups. In other words, parents' support had a significant influence on general academic score of the sampled students.

Table 4.88: Post hoc Tukey Multiple Comparison Test for Parental Mediation and General Academic score

Multiple Comparisons						
Dependent Variable: GAS Tukey HSD						
(I) **Parental Mediation**	(J) **Parental Mediation**	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Lower Bound
Unmonitored	Partially Monitored	17.0980	8.66785	.120	-3.2741	37.4700
	Fully Monitored	11.5052	7.35396	.262	-5.7788	28.7893
Partially Monitored	Unmonitored	-17.0980	8.66785	.120	-37.4700	3.2741
	Fully Monitored	-5.5927	8.69737	.796	-26.0342	14.8487
Fully Monitored	Unmonitored	-11.5052	7.35396	.262	-28.7893	5.7788
	Partially Monitored	5.5927	8.69737	.796	-14.8487	26.0342

GAS		
Tukey HSD		
Mode of exposure	N	Subset
		1
Partially Monitored	118	181.02
Fully Monitored	209	186.62
Unmonitored	213	198.12
Sig.		.097

The score achieved by unmonitored group (198.12) was seemingly different from that of the partially monitored and fully monitored groups as per the Tukey test. But there was no significant difference among the levels of parental mediation unlike parental support.

Table 4.89: Mean Score of English by Parental Support and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**parental mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Unmonitored	48	61.95	24.30	Parental Support	10971.39	2	10.841	.000	.039
	Partially Monitored	16	53.42	26.51						
	Fully Monitored	30	65.05	20.80	parental mediation	566.49	2	.560	.572	.002
	Total	94	61.48	23.71						
Medium	Unmonitored	134	61.05	22.97	Parental Support * parental mediation	4485.16	4	2.216	.066	.016
	Partially Monitored	84	54.65	23.01						
	Fully Monitored	142	52.57	21.98	Error	268704.89	531			
	Total	360	56.21	22.85						
High	Unmonitored	31	65.91	24.41	Total	2177582.81	540			
	Partially Monitored	18	70.93	16.05						
	Fully Monitored	37	70.49	19.17						
	Total	86	68.93	20.56						
Total	Unmonitored	213	61.96	23.43						
	Partially Monitored	118	56.96	23.21						
	Fully Monitored	209	57.53	22.50						
	Total	540	59.15	23.10						

*p<0.05

Descriptive statistics showed that the students with high support of parents achieved highest score in English (M=68.93, SD= 20.56) while medium support group scored the lowest (M=56.21,SD=22.85). The ANOVA confirmed that students' performance in English is dependent on their parental support [F(2,531)=10.841,p=.000].

In the case of parental mediation, unmonitored group scored the most in English (M=61.96, SD=23.43) while the partially monitored group had the lowest score (M=56.96,SD=23.21). The corresponding p value showed that the difference in the English mean score among the parental mediation categories is not statistically significant [F(2,531)=.560,p=.572].

However, the students' performance in English is independent of the interaction between parental support and parental mediation [F(4,531)=2.216, p=.066].

Table 4.90: Mean Score of Mathematics by Parental Support and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Parental mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Unmonitored	48	50.07	27.91	Parental Support	7492.46	2	6.429	.002	.024
	Partially Monitored	16	47.13	25.246						
	Fully Monitored	30	53.78	25.99	Parental mediation	2379.80	2	2.042	.131	.008
	Total	94	50.76	26.69						
Medium	Unmonitored	134	49.92	26.30	Parental Support * parental mediation	2469.70	4	1.060	.376	.008
	Partially Monitored	84	42.58	20.67						
	Fully Monitored	142	41.06	20.95	Error	309410.00	531			
	Total	360	44.71	23.32						
High	Unmonitored	31	60.21	25.38	Total	1535833.65	540			
	Partially Monitored	18	52.96	23.36						
	Fully Monitored	37	50.67	26.68						
	Total	86	54.59	25.63						
Total	Unmonitored	213	51.45	26.66						
	Partially Monitored	118	44.78	21.87						
	Fully Monitored	209	44.59	23.28						
	Total	540	47.34	24.57						

*p<0.05

How does parental support influence the Mathematics score of the students when their parental mediation is fully monitored, partially monitored or unmonitored? Descriptive statistics showed that highest score in Mathematics was secured by the students with high parental support (M=54.59,SD=25.63) when the medium support group had the lowest score (M=44.71,SD= 23.32). From the

ANOVA, it is seen that there were significant differences in Mathematics mean score among the three categories of parental support [F(2,531)=6.429,p=.002]. When parental mediation was taken into consideration, the effect was inversely proportional. The unmonitored group reported highest mean score in Mathematics (M=51.45,SD=26.66) and the fully monitored group secured the lowest mean score (M=44.59,SD=23.28). But the effect of parental mediation on academic performance in Mathematics was not statistically significant [F(2,531)=2.042, p=.131].

However, ANOVA revealed that students' performance in Mathematics is independent of the interaction between parental support and parental mediation [F(4,531)=1.060,p=.376].

Table 4.91: Mean score of Science by Parental Support and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Parental mediation**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Unmonitored	48	56.97	24.13	Parental Support	6303.39	2	6.695	.001	.025
	Partially Monitored	16	51.96	22.08						
	Fully Monitored	30	60.32	24.71	Parental mediation	1356.42	2	1.441	.238	.005
	Total	94	57.19	23.90						
Medium	Unmonitored	134	58.97	23.08	Parental Support * parental mediation	2534.80	4	1.346	.252	.010
	Partially Monitored	84	52.92	19.76						
	Fully Monitored	142	50.93	19.66	Error	249976.004	531			
	Total	360	54.39	21.27						
High	Unmonitored	31	65.96	23.30	Total	1989753.745	540			
	Partially Monitored	18	60.94	19.33						
	Fully Monitored	37	65.75	21.79						
	Total	86	64.82	21.71						
Total	Unmonitored	213	59.54	23.40						
	Partially Monitored	118	54.02	20.06						
	Fully Monitored	209	54.90	21.57						
	Total	540	56.54	22.10						

*p<0.05

Significant difference was reported in the mean score in Science among students having different levels of parental support [F(2,531)=6.695,p=.001]. While the students with high parental support reported highest mean score in Science (M=64.82, SD=21.71), the medium support group registered the lowest mean score (M=54.39, SD=21.27).

In the case of level of parental mediation, unmonitored group yielded better performance in Science subjects (M=59.54,SD=23.40). However, the academic performance of students in Science was found to be independent of parental mediation [F(2,531)=1.441,p=.238].

After the analysis ANOVA reported that students' performance in Science is also independent of the interaction between parental support and parental mediation [F(4,531)=1.346,p=.252].

Table 4.92: Mean score of Social Science by Parental Support and Parental Mediation

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	parental mediation	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Unmonitored	48	57.14	27.92	Parental Support	6826.71	2	5.654	.004	.021
	Partially Monitored	16	56.34	26.61						
	Fully Monitored	30	59.75	24.93	parental mediation	1874.25	2	1.552	.213	.006
	Total	94	57.84	26.53						
Medium	Unmonitored	134	60.07	26.61	Parental Support * parental mediation	4229.59	4	1.751	.137	.013
	Partially Monitored	84	52.22	22.39						
	Fully Monitored	142	47.34	22.51	Error	320574.27	531			
	Total	360	53.22	24.67						
High	Unmonitored	31	66.47	26.13	Total	2016370.59	540			
	Partially Monitored	18	59.71	22.99						
	Fully Monitored	37	63.44	22.64						
	Total	86	63.75	23.87						
Total	Unmonitored	213	60.34	26.86						
	Partially Monitored	118	53.92	23.05						
	Fully Monitored	209	51.97	23.78						
	Total	540	55.70	25.14						

*p<0.05

In Social Science also parental support was found to be significant factor and performance of the students was improved when they belonged to the group with high support (M=63.75,SD=23.87). The association between parental support and academic performance in Social Science was found to be significant by ANOVA [F(2,531)=5.654,p=.004].

On the other hand, there was no significant association between parental mediation over students' television watching and students' performance in Social Science [F(2,531)=1.552,p=.213]. The unmonitored group secured the highest score in Social Science (M=60.34,SD=26.86).

no significant effect on Social Science score of the school students [F(4,531)=1.751,p=.137].

Clarifying Research Hypothesis 4

H4: b School students' parental support influence the interaction between their level of parental mediation in television use and academic achievement

The result revealed that the students who are mediated extensively by parents show poor performance in all academic subjects .And no statistically bearing variation was found in between academic scores of the sampled students and the interaction between their parental support and level of parental mediation(see tables 4.86 to 4.92).Further, the interaction between the independent variables of parental support and parental mediation indicates the level of parental control over students' watching television is not at all predictor of students' academic score, be it in general academic score or subject scores..Hence the findings with proven statistical result negate the validity of the hypothesis that the influence of the level of parental mediation the academic achievement of students will vary according to their parental support.

PARENTAL SUPPORT, PROGRAME CHOICE, GAS AND SAS

Family environments affect the adolescent's scholastic performance (Shashidhar .S et al 2009) especially parental support and the exposure to the television programmes. Here the programme preference of the students was determined based on the responses received from students on three categories of programme: information, education and entertainment.

The data analysed in the coming sessions will answer the following questions:

- How does television programme choice influence students' academic achievement?
- How is television programme choice defined by parental support?
- What is the nature of the interaction between parental support and television program choice of children in terms of academic achievement?

Results of the analysis on the associations between parental support, program choice and general academic score (GAS) and Subject-wise academic scores (SAS) are detailed below.

Table 4.93: General Mean score by Parental Support and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Informational Programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	10	215.10	64.19	Parental Support	33954.54	2	2.933	.054	.011
	Sometimes	70	192.88	83.03						
	Always	14	170.01	88.80	Informational Programme	10337.40	2	.893	.410	.003
	Total	94	191.84	82.14						
Medium	Never	24	191.66	61.99	Parental Support * Informational programme	13213.58	4	.571	.684	.004
	Sometimes	275	185.60	75.78						
	Always	61	165.00	74.01	Error	3073831.61	531			
	Total	360	182.51	74.90						
High	Never	7	198.78	85.71	Total	22686136.36	540			
	Sometimes	65	220.66	76.04						
	Always	14	220.87	64.19						
	Total	86	218.91	74.42						
Total	Never	41	198.59	65.85						
	Sometimes	410	192.40	77.93						
	Always	89	174.57	76.91						
	Total	540	189.93	77.10						

*p<0.05

Comparative statistics showed that the students with high parental support reported the highest mean score (M=218.91, SD=74.42) in GAS while the students with medium support of parents had the lowest mean score (M=182.51, SD=74.90). But ANOVA revealed that level of students' academic performance in GAS was independent of the parental support they received [F(2,531)=2.933,p=.054].

Surprisingly, students who never watch informational programme secured highest mean score (M=198.59,SD=65.85) in GAS when compared to those who watch sometimes and always. At the same time, the difference was not statistically significant [F(2,531)=.893,p=.410].

As seen in the case of each factor, the interaction between parental support and informational programme choice had no significant effect on the students' performance in GAS [F(4,531)=.571,p=.684].

Table 4.94: Mean score of English by Parental Support and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Information programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	10	74.72	16.47	Parental Support	9061.51	2	8.824	.000	.032
	Sometimes	70	60.00	22.91						
	Always	14	59.44	29.95	Informational programme	1687.40	2	1.643	.194	.006
	Total	94	61.48	23.71						
Medium	Never	24	57.05	19.71	Parental Support *Informational programme	1830.05	4	.891	.469	.007
	Sometimes	275	56.81	22.44						
	Always	61	53.20	25.78	Error	272657.47	531			
	Total	360	56.21	22.85						
High	Never	7	75.60	13.87	Total	2177582.81	540			
	Sometimes	65	67.64	21.95						
	Always	14	71.58	16.18						
	Total	86	68.93	20.56						
Total	Never	41	64.52	19.86						
	Sometimes	410	59.07	22.73						
	Always	89	57.08	25.87						
	Total	540	59.15	23.10						

*p<0.05

Unlike GAS, significant difference was reported in the mean score in English secured by students who received different levels of parental support [F(2,531)=8.824, p=.000]. The students enjoying high parental support reported the highest mean score in English (M=68.93,SD=20.56) while medium support group had the lowest score (M=56.21,SD= 22.85). On the contrary, there was no significant difference in the mean English score of the students based on the time they spent to watch informational programme [F(2,531)=1.643,p=.194]. Descriptive statistics showed that the students who never watch informational programme scored the most in English (M=64.52,SD=19.86).

Yet, ANOVA revealed that the interaction between parental support and mode of informational programme watching by the students on the English score was not statistically significant [F(4,531)=.891,p=.469].

To conclude, though the English score of the students was dependent on the parental support, it was independent of both mode of informational programme watching and the interaction between these two main effects.

Table 4.95: Mean score of Mathematics by Parental Support and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Informational programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	10	63.47	28.07	Parental Support	4704.36	2	3.983	.019	.015
	Sometimes	70	49.55	26.38						
	Always	14	47.72	26.74	Informational programme	975.62	2	.826	.438	.003
	Total	94	50.76	26.69						
Medium	Never	24	49.47	21.61	Parental Support *Informational programme	1927.76	4	.816	.515	.006
	Sometimes	275	45.24	23.48						
	Always	61	40.46	22.97	Error	313561.53	531			
	Total	360	44.71	23.32						
High	Never	7	52.75	28.10	Total	1535833.65	540			
	Sometimes	65	53.88	25.54						
	Always	14	58.78	26.35						
	Total	86	54.59	25.63						
Total	Never	41	53.45	24.47						
	Sometimes	410	47.35	24.49						
	Always	89	44.49	24.76						
	Total	540	47.34	24.57						

*p<0.05

Significant difference was reported in the mean score in Mathematics when it comes to levels of parental support [F(2,531)=3.983,p=.019]. While the students with high parental support reported to have the highest mean score in Mathematics (M=54.59, SD= 25.63), students with medium parental support had the lowest mean score (M=44.71,SD=23.32).

Interestingly, students who watch informational programmes always secured the lowest score (M=53.45,SD=24.47) when compared with those who watch sometimes or never. But the difference was not significant as shown in ANOVA [F(2,531)=.826,p=.438].

What about the interaction between these two main effects on Mathematics score of the students? The result showed that the interaction between parental support and mode of informational programme watching was not statistically significant [F(4,531)=.816,p=.515].

Table 4.96: Mean score of Science by Parental Support and Informational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Informational programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**Df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	10	68.21	25.25	Parental Support	2407.53	2	2.535	.080	.009
	Sometimes	70	57.38	22.96						
	Always	14	48.39	25.88	Informational programme	651.04	2	.685	.504	.003
	Total	94	57.19	23.90						
Medium	Never	24	57.20	19.63	Parental Support *Informational programme	2403.16	4	1.265	.283	.009
	Sometimes	275	54.78	21.73						
	Always	61	51.54	19.80	Error	252165.81	531			
	Total	360	54.39	21.27						
High	Never	7	56.85	22.06	Total	1989753.74	540			
	Sometimes	65	65.11	22.34						
	Always	14	67.46	18.96						
	Total	86	64.82	21.71						
Total	Never	41	59.83	21.48						
	Sometimes	410	56.86	22.29						
	Always	89	53.55	21.38						
	Total	540	56.54	22.10						

*p<0.05

In contrast to Mathematics, the effect of parental support on Science score was not statistically significant [F(2,531)=2.535,p=.080]. At the same time, the students with high parental support secured the highest score in Science subjects (M=64.82, SD=21.71) and students with medium parental support had the lowest mean score (M=54.39,SD= 21.27) as seen in the case of Mathematics. As in the previous cases, students who never watch informational programs yielded the best mean score in Science subjects (M=59.83,SD=21.48). The corresponding p value showed that the mean score of Science was independent of mode of informational programme watching [F(2,531)=.685,p=.504].

However, the performance in Science is independent of the interaction between these two main effects – parental support and mode of informational programme [F(4,531)=1.265, p=.283].

Table 4.97: Mean score of Social Science by Parental Support and Informational programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Informational programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	10	74.40	22.55	Parental Support	4569.63	2	3.707	.025	.014
	Sometimes	70	56.91	26.32						
	Always	14	50.63	27.08	Informational programme	1800.24	2	1.460	.233	.005
	Total	94	57.84	26.53						
Medium	Never	24	55.85	22.22	Parental Support *Informational programme	2480.66	4	1.006	.404	.008
	Sometimes	275	54.04	24.96						
	Always	61	48.49	24.06	Error	327267.83	531			
	Total	360	53.22	24.67						
High	Never	7	61.38	12.82	Total	2016370.59	540			
	Sometimes	65	63.88	24.41						
	Always	14	64.33	26.72						
	Total	86	63.75	23.87						
Total	Never	41	61.32	21.99						
	Sometimes	410	56.09	25.30						
	Always	89	51.32	25.32						
	Total	540	55.70	25.14						

*p<0.05

In Social Science, parental support found to be a significant factor [F(2,531)=3.707,p=.025] and performance of students is improved when they belong to the group with high parental support (M=63.75, SD23.87).

However, the significant association was not seen between students' watching mode of informational programme and their academic performance [F(2,531)=1.460,p=.233]. The students who never watch informational programme had the highest score (M=61.32,SD=21.99) and those who always watch it scored the lowest (M=51.32,SD=25.32). Expectedly, the interaction between parental support and mode of informational programme watching was not statistically significant [F(4,531)=1.006,p=.404].

Parental support, Educational programme and GAS, SAS

Here the research question is how parental support and educational programmes is related to academic achievement of the school students. Detailed below is the analysis of the data on the association between parental support, mode of educational programme watching and General Academic Score (GAS) and Subject wise Academic Score (SAS).

Table 4.98: General Mean score by Parental Support and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Educational programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	11	191.91	79.66	Parental Support	63634.058	2	5.485	.004	.020
	Sometimes	71	188.56	82.18						
	Always	12	211.17	88.39	Educational programme	5613.36	4	.484	.617	.002
	Total	94	191.84	82.14						
Medium	Never	30	170.72	60.96	Parental Support * Educational Programme	24381.81	4	1.051	.380	.008
	Sometimes	247	187.76	77.61						
	Always	83	171.17	70.08	Error	3079994.53	531			
	Total	360	182.51	74.90						
High	Never	7	203.41	60.04	Total	22686136.36	540			
	Sometimes	54	215.63	78.51						
	Always	25	230.36	69.82						
	Total	86	218.91	74.42						
Total	Never	48	180.34	65.36						
	Sometimes	372	191.95	79.02						
	Always	120	187.50	75.62						
	Total	540	189.93	77.10						

*p<0.05

Mean score of GAS secured by the students in Kerala was closely related with the level of parental support they received. While the students attained highest mean score when they belonged to the parental support group (M=218.91,SD=74.42), students with medium support of parents recorded the lowest mean score (M=182.51,SD=74.90). The difference was found to be significant as per the p value [F(2,531)=5.485,p=.004].

In the case of mode of educational programme watching, descriptive statistics showed that the sampled students performed well in GAS when they watch educational programme sometimes (M=191.95,SD=79.02). And they scored the lowest when they never watch it (M=180.34,SD=65.36). Still these mean score differences among the three groups of mode of educational programme watching was not statistically significant [F(4,531)= .484,p=.617].

After the analysis ANOVA revealed that the interaction between support of parents and mode of educational programme watching had no significant bearing on the students' mean score in GAS [F(4,531= 1.051,p=.380].

Table 4.99: Mean score of English by Parental Support and Educational programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Educational programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	11	64.88	22.33	Parental Support	8121.63	2	7.897	.000	.029
	Sometimes	71	59.07	24.42						
	Always	12	72.68	17.82	Educational Pogramme	2354.66	2	2.290	.102	.009
	Total	94	61.48	23.71						
Medium	Never	30	58.42	22.07	Parental Support * Educational Programme	1812.08	4	.881	.475	.007
	Sometimes	247	56.02	23.71						
	Always	83	55.98	20.64	Error	273048.37	531			
	Total	360	56.21	22.85						
High	Never	7	72.12	10.24	Total	2177582.81	540			
	Sometimes	54	66.99	22.72						
	Always	25	72.24	17.54						
	Total	86	68.93	20.56						
Total	Never	48	61.90	21.11						
	Sometimes	372	58.19	23.95						
	Always	120	61.04	21.04						
	Total	540	59.15	23.10						

*p<0.05

The table shows the difference in mean score of English in accordance with parental support level and educational programme choice by the students. The mean score of English was the highest when students were having high parental support (M=68.93, SD=20.56) followed by students with low parental support (M=61.48,SD=23.71) and medium parental support (M=56.21,SD=22.85). And the influence of parents' support on academic performance of students in English was statistically significant [F(2,531)=7.897,p=.000].

On the other hand, the mode of educational programme watching was not significant in determining the mean score of English [F(2,531)=2.290,p=.102]. The highest mean score was secured by those students who always watched educational programmes (M=68.93,SD=23.95) followed by those who never watched it (M=61.90,SD=21.11).

However, the interaction between these two main effects – parents' support and educational programme watching - had no significant bearing on English score of the students [F(4,531)=.881,p=.475].

Table 4.100: Mean score of Mathematics by Parental Support and Educational programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Educational programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	11	53.01	24.60	Parental Support	6489.11	2	5.458	.005	.020
	Sometimes	71	49.45	26.10						
	Always	12	56.38	32.98	Educational Programme	268.62	2	.226	.798	.001
	Total	94	50.76	26.69						
Medium	Never	30	43.20	22.96	Parental Support * Educational Programme	1670.59	4	.703	.590	.005
	Sometimes	247	45.82	23.61						
	Always	83	41.96	22.57	Error	315630.55	531			
	Total	360	44.71	23.32						
High	Never	7	53.95	25.88	Total	1535833.65	540			
	Sometimes	54	53.46	25.51						
	Always	25	57.20	26.66						
	Total	86	54.59	25.63						
Total	Never	48	47.02	23.76						
	Sometimes	372	47.62	24.47						
	Always	120	46.58	25.36						
	Total	540	47.34	24.57						

*p<0.05

Descriptive statistics showed that the highest mean score in Mathematics was secured by the students with high parental support (M=54.59, SD=25.63) followed by those who have low parental support (M=50.76, SD=26.69). ANOVA result showed that parents' support had a significant influence on Mathematics score of the students [F(2,531)=5.458,p=.005].

The main effect of watching mode of educational programme was not found to be significant on mean score of Mathematics [F(2,531)=.226,p=.798]. The results indicated that the highest mean score in Mathematics was secured by the students who watched educational programme sometimes (M=47.62, SD=24.47). ANOVA revealed that the effect of interaction between parental support and educational programme watching mode on the mean score of mathematics was not statistically significant [F(4,531)=.703,p=.590].

Table 4.101: Mean score of Science by Parental Support and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Educational programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	11	54.82	24.28	Parental Support	5516.28	2	5.762	.003	.021
	Sometimes	71	56.53	24.02						
	Always	12	63.24	23.96	Educational Programme	370.23	2	.387	.679	.001
	Total	94	57.19	23.90						
Medium	Never	30	50.92	20.67	Parental Support * Educational Programme	1072.97	4	.560	.692	.004
	Sometimes	247	55.45	21.78						
	Always	83	52.48	19.88	Error	254191.32	531			
	Total	360	54.39	21.27						
High	Never	7	64.47	19.01	Total	1989753.74	540			
	Sometimes	54	64.20	23.05						
	Always	25	66.26	20.07						
	Total	86	64.82	21.71						
Total	Never	48	53.79	21.40						
	Sometimes	372	56.93	22.55						
	Always	120	56.42	21.03						
	Total	540	56.54	22.10						

*p<0.05

While the students with high parental support secured the highest mean score in Science (M=64.82,SD=21.71), students with medium parental support registered the lowest mean score (M=54.39,SD= 21.27). Taking all the mean scores together ANOVA found that parents' support had a significant influence on the mean score of Science [F(2,531)=5.762,p=.003]. On the contrary, the main effect of educational programme watching mode was not statistically significant [F(2,531)=.387,p=.679]. Interestingly, the highest mean score was secured by those students who watched educational programmes sometimes (M=56.93,SD=22.55) when students who never watched it recorded the lowest mean score (M=53.79,SD=21.40). The interaction between parental support and educational programmes had no significant influence in deciding the mean score of Science [F(4,531)=.560,p=.692].

Table 4.102: Mean score of Social Science by Parental Support and Educational Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Educational programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	11	60.38	26.46	Parental Support	7450.06	2	5.979	.003	.022
	Sometimes	71	56.44	26.81						
	Always	12	63.80	26.15	Educational Programme	975.78	2	.783	.458	.003
	Total	94	57.84	26.53						
Medium	Never	30	51.04	23.73	Parental Support * Educational Programme	1599.96	4	.642	.633	.005
	Sometimes	247	53.75	25.14						
	Always	83	52.43	23.79	Error	330839.47	531			
	Total	360	53.22	24.67						
High	Never	7	68.30	18.13	Total	2016370.59	540			
	Sometimes	54	61.38	25.66						
	Always	25	67.59	21.18						
	Total	86	63.75	23.87						
Total	Never	48	55.69	24.11						
	Sometimes	372	55.37	25.61						
	Always	120	56.73	24.21						
	Total	540	55.70	25.14						

*p<0.05

The table analyses the statistical significance of the effect of interaction between parental support and educational programme choices on mean score Social Science secured by the students. Expectedly, students with high level of parental support scored high in Social Science (M=63.75, SD=23.87) while the medium support group secured the lowest mean score (M=53.22,SD=24.67) The corresponding p value revealed that the association between parental support and mean score in Social Science was statistically significant [F(2,531)=5.979,p=.003]. Expectedly, the students who always watched educational programmes had the highest mean score in Social Science (M=56.73,SD=24.21). However, there was no significant association between mode of educational programme watching and academic performance in the Social Science score of students [F(2,531)=.783, p=.458]. As in the case of Science, the interaction between parental support and mode of educational programme watching had no significant bearing on Social Science score of the school students [F(4,531)=.642,p=.633].

Parental support, Entertainment Programme and GAS, SAS

Here the research question is how parental support and entertainment programme is related to academic achievement of the school students. Detailed below is the analysis of the data on the association between parental support, mode of entertainment programme watching and General Academic Score (GAS) and Subject wise Academic Score (SAS).

Table 4.103: Mean score of General by Parental Support and Entertainment programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Entertainment programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	1	93.00	.	Parental Support	23832.13	2	2.081	.126	.008
	Sometimes	27	222.30	71.44						
	Always	66	180.87	83.39	Entertainment programme	57464.41	2	5.019	.007	.019
	Total	94	191.84	82.14						
Medium	Never	6	215.27	71.13	Parental Support * Entertainment programme	31750.66	4	1.387	.237	.010
	Sometimes	99	190.07	71.84						
	Always	255	178.81	76.00	Error	3039908.98	531			
	Total	360	182.51	74.90						
High	Never	6	207.34	82.59	Total	22686136.36	540			
	Sometimes	32	235.56	77.59						
	Always	48	209.26	70.85						
	Total	86	218.91	74.42						
Total	Never	13	202.21	77.73						
	Sometimes	158	204.79	75.09						
	Always	369	183.14	77.19						
	Total	540	189.93	77.10						

*p<0.05

Descriptive statistics showed that the students belongs to high parental support group secured highest mean score in GAS (M= 218.91, SD=74.42) followed by low parental support group (M= 191.84, SD= 82.14) and medium parental support group (M=182.51, SD=74.90). Yet the difference in mean scores of GAS in terms of parental support categories yielded no statistical significance [F(2,531)=2.081,p=.126]. When the mean score in GAS of the students was analysed with different mode of entertainment programme watching, there was significant difference across categories [F(2,531)=5.019,p=.007]. The students who watched it sometimes registered the highest mean score (M=204.79,SD=75.09) while the students who watched it always secured the lowest mean score (M=183.14,SD=77.19). However, ANOVA revealed that the influence of the

interaction between parental support and mode of entertainment watching on the student's General Academic score was not significant [F(4,531)=1.387,p=.237].

Table 4.104: Mean score of English by Parental Support and Entertainment programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Entertainment programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	1	18.00	.	Parental Support	3835.41	2	3.744	.024	.014
	Sometimes	27	67.42	20.57						
	Always	66	59.71	24.25	Entertainment programme	3091.30	2	3.018	.050	.011
	Total	94	61.48	23.71						
Medium	Never	6	60.16	16.17	Parental Support * Entertainment programme	2758.04	4	1.346	.252	.010
	Sometimes	99	56.83	24.25						
	Always	255	55.88	22.48	Error	271953.58	531			
	Total	360	56.21	22.85						
High	Never	6	63.79	25.12	Total	2177582.81	540			
	Sometimes	32	72.29	21.82						
	Always	48	67.34	19.22						
	Total	86	68.93	20.56						
Total	Never	13	58.59	22.89						
	Sometimes	158	61.77	23.97						
	Always	369	58.06	22.69						
	Total	540	59.15	23.10						

*p<0.05

ANOVA revealed that the students with high parental support secured the highest mean score in English M=68.93, SD=20.56) and the students with the medium parental support had the lowest mean score (M=56.21,SD=22.85). The p value revealed that the association between parental support and English mean score of the students was statistically significant [F(2,531)=3.744,p=.024]. Mean score in English secured by the students vary according to their mode of entertainment programme watching. While the students who watched sometimes secured highest score (M=61.77,SD=23.97), students who never watched it had the lowest mean score (M=58.59,SD=22.89). But this difference was not statistically significant [F(2,531)=.667,p=.514]. As a result, ANOVA showed that there was no

significant interaction effect of parental support and mode of entertainment programme watching on the mean score of English [F(4,531)=1.346,p=.252].

Table 4.105: Mean score of Mathematics by Parental Support and Entertainment programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Entertainment programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	1	22.00	.	Parental Support	1527.74	2	1.320	.268	.005
	Sometimes	27	59.56	23.67						
	Always	66	47.59	27.21	Entertainment programme	9336.51	2	8.066	.000	.029
	Total	94	50.76	26.69						
Medium	Never	6	50.50	17.28	Parental Support * Entertainment programme	3478.47	4	1.503	.200	.011
	Sometimes	99	47.80	24.88						
	Always	255	43.38	22.75	Error	307316.71	531			
	Total	360	44.71	23.32						
High	Never	6	49.62	28.31	Total	1535833.65	540			
	Sometimes	32	64.42	24.97						
	Always	48	48.65	24.21						
	Total	86	54.59	25.63						
Total	Never	13	47.90	22.78						
	Sometimes	158	53.18	25.56						
	Always	369	44.82	23.82						
	Total	540	47.34	24.57						

*p<0.05

Descriptive analysis showed that students with medium parental support is reported to have the lowest mean score in Mathematics (M=44.71, SD=23.32) while the highest support group recorded highest mean score (M=54.59,SD=25.63). But the ANOVA indicated that the difference in mean score of Mathematics among the three parental support groups was not statistically significant [F(2,531)=1.320, p=.268]. While students who watched entertainment programme sometimes reported high mean score in Mathematics (M=53.18,SD=25.56), the students who always watched had the lowest mean score (M=44.82,SD=23.82). Clearly, the academic performance in Mathematics was found to be dependent on their mode of entertainment programme watching as per the p value [F(2,531)= 8.066,p=.000].

However, the student's performance in Mathematics is independent of the interaction between parental support and mode of entertainment programme watching [F(4,531)=1.503,p=.200].

Table 4.106: Mean score of Science by Parental Support and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Entertainment programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	1	30.00	.	Parental Support	1985.79	2	2.107	.123	.008
	Sometimes	27	64.75	20.11						
	Always	66	54.51	24.76	Entertainment programme	4352.54	2	4.618	.010	.017
	Total	94	57.19	23.90						
Medium	Never	6	62.27	17.40	Parental Support * Entertainment programme	1714.40	4	.909	.458	.007
	Sometimes	99	57.40	21.36						
	Always	255	53.04	21.23	Error	250235.35	531			
	Total	360	54.39	21.27						
High	Never	6	61.72	26.19	Total	1989753.74	540			
	Sometimes	32	69.28	21.80						
	Always	48	62.23	21.09						
	Total	86	64.82	21.71						
Total	Never	13	59.53	22.15						
	Sometimes	158	61.06	21.69						
	Always	369	54.50	22.03						
	Total	540	56.54	22.10						

*p<0.05

When it comes to the mean score in Science, descriptive statistics revealed that students who belonged to high parental support group achieved the highest score (M=64.82, SD= 21.71) while medium support group scored the lowest (M=54.39, SD=21.27). But the p value showed that the association between parental support and Science score of the students was not statistically significant [F(2,531)=2.107,p=.123]. However, the mean Science score of the students significantly vary in accordance with their mode of entertainment programme watching [F(2,531)=4.618,p=.010]. Students who watched entertainment programme sometimes had highest mean score (M=61.06,SD=21.69) while those

who watched always had lowest mean score (M=54.50,SD=22.03]. ANOVA revealed that influence of the interaction between parental support and mode of entertainment programme watching on the Science score was not statistically significant [F(4,531)= .909,p=.458].

Table 4.107: Mean Score of Social Science by Parental Support and Entertainment Programme Choice

GROUP STATISTICS					TWO-WAY ANOVA RESULTS					
Parental Support	**Entertainment programme**	**N**	**Mean**	**Std. Deviation**	**Between Subjects Effects**	**Sum of Squares**	**df**	**F**	**Sig.**	**Partial Eta Squared**
Low	Never	1	20.00	.	Parental Support	1772.78	2	1.473	.230	.006
	Sometimes	27	66.01	24.22						
	Always	66	55.07	26.74	Entertainment programme	5706.20	2	4.740	.009	.018
	Total	94	57.84	26.53						
Medium	Never	6	76.33	9.72	Parental Support * Entertainment programme	4790.18	4	1.989	.095	.015
	Sometimes	99	58.85	24.46						
	Always	255	50.49	24.40	Error	319642.52	531			
	Total	360	53.22	24.67						
High	Never	6	57.20	29.54	Total	2016370.59	540			
	Sometimes	32	67.74	23.98						
	Always	48	61.91	23.22						
	Total	86	63.75	23.87						
Total	Never	13	63.17	25.74						
	Sometimes	158	61.87	24.49						
	Always	369	52.79	24.93						
	Total	540	55.70	25.14						

*p<0.05

From the descriptive statistics, it was seen that performance of students improved when they had high support of the parents ((M=63.75,SD=23.87). Yet the relationship between parental support and academic performance in Social Science was not statistically significant [F(2,531)=1.473,p=.230]. In the case of mode of entertainment programme watching, the higher they watched the lower was the students' academic achievement. Resultantly, the students who never watched entertainment programme secured the highest mean score in Social Science

(M=63.17,SD=25.74) while the students who always watched it had the lowest mean score (M=52.79,SD=24.93). Moreover, entertainment programme watching and academic performance of the students in Social Science was highly significant [F(2,531)=4.740,p=.009]. On the other hand, ANOVA revealed that the effect of the interaction between parental support and mode of entertainment programme watching on the student's Social Science mean score was not significant [(4,531)=1.989,p=.095].

Clarifying Research Hypothesis 4

H4:c School students' parental support influence the interaction between their television programme choice and academic achievement

The results show that irrespective of parental support, performance of students who watch educational programs is better in all academic subjects. Yet no statistical significance is predicted in between academic scores of the sampled students and the interaction between their parental support and program choice (see tables 4.93 to 4.107). Thus these findings with proven statistical result negate the validity of the hypothesis that nature of the influence of television on the academic achievement of students will vary according to the support of the parents.

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CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

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CONCLUSIONS AND RECOMMENDATIONS

The relationship between television use and academic achievement has received much research attention in recent years especially after the integration of media technology into curriculum frameworks has been a global trend. Of these the studies on the television use by school children gained popularity given the unprecedented application of television content in primary and secondary school teaching and learning process and the advent and acceptance of educational television. Though television remained the dominant form of media among children its influences on them particularly on their academic achievement has generated competing outcomes (Shejwal & Purayidathil 2006, Sherif & Sergant 2006, Notten & Kraaykamp 2009, Li.J 2017). Some researchers found that television viewing was associated with poor educational achievement (Hancox et al 2005) while others predict the positive impact of television on academic performance of school children. In short, television, being an integral part of student life of this century, plays crucial roles both in positive and negative ways defining not only the present but also the future of children's academic progress, and thereby educational thinking and practices as well.

The study

The present study was an attempt to assess the influence of television on academic achievements of school students in Kerala. The study seeks to explore the nature of influence of level of exposure to television on high school students' academic scores in general and in specific subjects. It also investigates how family background, parental mediation and parental support interact with students' television use and resultantly its influence on academic achievement. To materialize this, the researcher has conducted a survey among the high school students across Kerala using scientific method of stratified random sampling. And, the data was subjected to statistical tests to find the tenability of hypotheses. The conclusions given below are on the basis of the findings arrived after strictly following these methods and techniques.

GAS and Level of Television Use

The study found that among school students in Kerala, television is the most used medium with majority of them using it on a regular basis. The current study revealed that television exposure had a significant negative bearing on General Academic Score (GAS) of school children. The general idea generated from the data was that the higher the level of exposure to television, the lower the GAS students could score. Also, it was found that the difference between the scores achieved by low and medium users was very slight. High level of television use causes low academic performance as evidenced by the low general score achieved by the sampled students.

Subject Scores and Level of Television Use

How exposure to television influenced academic performance of school children in this global language was one of the objectives of the study. The study revealed that television exposure had a significant influence on English score of school children. It is apparent from the result that medium level use of television significantly helped students achieve good scores in English. It can also be assumed that those who use television excessively do not choose programmes that help their academic achievement, particularly their performance in English language.

In the case of Mathematics, study found that television had a significant effect on Mathematics score. Medium users found to be different from that of lower and higher users. Here higher level of television use predicts the low mean score. It indicates that heavy use of television leads to low score in Mathematics.

In respect of Science subject, medium users found to have the highest score followed those in high users and low users. Study revealed that high level of television use predicts the low score in science subjects. Study found that television use had a significant influence on Science subjects

Television exposure had a significant influence on school children's performance in Social Sciences. Study showed the higher use of television predicts the low score achievement in social science by the students. The level of exposure to television will significantly influence academic performance of school students. The researcher found that students though study the same class, the interest in

selecting television programmes differ since they are not satisfied equally. Here the theory of uses and gratification is proved that the choice of selecting a media or its content retains with the viewer. It also points out the individual differences in using television for academic purpose. These differences will interact with channel preference, programme choice and place and time of use.

Gender, Television Use and General Academic Performance

Previous studies showed that in television viewing boys spent more time than girls (Gentle and Walsh 2002, Ozdmir 2006). In another study it was found that low television viewer adolescents perform academically better than a heavy television viewer group of adolescents though the difference was not marked as significant difference (Amin,S.N.U 2013). As part of meeting the second objective of the study, the research formulated a hypothesis that the influence of exposure to television on the academic performance of school students would vary among male and female students.

The present study revealed that overall academic performance of students is dependent on their gender and television-viewing pattern if they are taken separately. But, the bearing of the relations between independent variables gender and television use conditions - low, medium and high – on the dependent variable GAS was not seen as significant.

Gender, Television Use and Subject Wise Academic Score

Another objective of the study was the influence of the interaction between gender and three television use levels in the case of subject wise academic scores. The study found that there was no significant interaction effect of gender and television use levels on score in English. It was found that moderate level of use of television help boys and girls to secure highest scores in English language.

In Mathematics, the interaction between gender and user categories had no bearing on the students' mean score in Mathematics. The result showed that high level of television use did not help students to perform well in Mathematics. For males and females, medium level use of television yielded high scores in Mathematics.

In Science too, variance in the use of television did not significantly influenced the differences in academic scores of students. For girls and boys medium level use of television was helpful to perform well in Science subjects.

The interaction between genders with television exposure had no significant bearing on Social Science score of the students. In Social Science also medium level use of television yielded high score in Social Science.

Summarizing the results already mentioned, it can be concluded that there is evidence of significant role played by gender in determining the interaction between television use and academic performance. Taking all subjects together, low academic performance was visible among both the girls and boys who spent on television 14 hours or more on average per week. Among them, the performance is poorer among the boys, though this difference among the genders is not statistically significant. It was found that moderate or low level of use of television helps boys and girls to secure high scores in English, Mathematics, and Science while in Social Science. The results reveals that theory of individual differences is proved since the students differ in choosing the programme genre. There exists even a distinct separation on gender difference in viewing television. Girls and boys stands apart from one another in selecting a television programme. The separation is reflected in their academic achievements too.

Income, Television Use and GAS & SAS

In previous studies, researchers have found that socioeconomic status is a contributor to the academic achievement of students (Jeynes 2002, Eamon 2005, Singh,P& Choudhari, G 2015). The present study also found that income had significant influence on GAS and subject wise academic score. The study found that level of television use was not a predictor of General Academic Scores and subject scores. In terms of this objective present study revealed that the interaction between income and television use had no significant influence on GAS and Subject-wise Academic Scores (SAS). Irrespective of income levels of their family, students who use television extensively shows perform poorer in all academic subjects since no statistically significant bearing was found in between academic scores of the sampled students and the interaction between their income levels and television use levels. It is to be noted that this uniform result was yielded when

there exists significant difference among different income groups in their academic performance. This finding showed that the nature of the influence of television on the academic achievement of students will vary according to the financial status of their families.

Income, Parental Mediation and GAS & SAS

In both GAS and SAS, income was found to have a significant bearing in determining performance. Another finding was that parental control over students' television watching is not a predictor of General Academic Scores and Subject scores, except in the case of Mathematics score. In general, the study revealed that the interaction between the independent variables of Income and level of parental mediation to television which indicates the level of parental control over students' watching television is not at all predictor of students' academic score, be it in general academic score or subject scores.

Programme Choice and GAS & SAS

The study also investigated how various types of programmes such as informational, educational and entertainment programmes, influenced the interaction between their television use and academic performance. Previous researches found informational programmes can helps students to improve better opportunity in increasing their knowledge and skills (Memory.D.M. 1992). The present study tries to compare the general academic score in respect of family income and information programme choice, study found that the interaction between family income and informational programme watching is not a predictor of academic achievement of the school students.

In the case of educational programmes study was found that Educational programme watching is a predictor of GAS and Mathematics score except in other subjects. And it also found that the interaction between economic status and educational programmes had a significant influence on social science score of the school students. Study revealed that students who watch educational programmes always, helps to improve the social science score.

Another finding of the study was entertainment programme had no significant influence on academic score of the students. The study revealed that

academic score was decreasing of those students who always watch entertainment programmes. Study also found that family income and choice of entertainment programme had no significant influence on academic score of the students.

Parent's Education, Television Use and GAS & SAS

Parent's education was found an important role in the academic achievement of the school students (Farooq et al 2011). In the present study also found, parent's educations have a significant bearing in determining performance in subjects and GAS. Study revealed that the interaction between independent variables of parent's education and level of exposure to television is a predictor of academic performance in English and science subjects, not in GAS, Mathematics and social science. Study revealed that parent's education had an important role in the prediction of academic performance of the school students. Here theory of planned behavior suits well since the education, income, etc. influence the student's academic performance.

Parents' Education, Parental Mediation and GAS & SAS

Parental control over students' television watching is not a predictor of General Academic Scores and Subject scores, except in the case of Mathematics score. It also found that the interaction between the independent variables of parents education and level of parental mediation is not at all predictor of students' academic score, be it in general academic score or subject scores.

Parent's Education, Programme Choice and GAS & SAS

In the case of programme preference, the present study found that, there was no significant influence on academic score of the school students. At the same time study found that students who watch educational programmes sometimes secured highest score in GAS and SAS. Study also found that interaction between parents education with programme choice had no significant influence on academic score of the school students.

Parental Support, Television Use and GAS & SAS

The present study found that parental support was a significant factor in the academic performance of the school students. At the same time study also found

that the interaction between parental support and level of television exposure had no significant influence on GAS and subjects.

Parental Support, Parental Mediation and GAS & SAS

The study was found that parental support with level of parental mediation had no significant influence in determining performance in GAS and SAS. But parental support found to be having a significant factor which means study found that the students the medium support of parents had the highest academic score.

Parental Support, Programme Choice and GAS & SAS

The interaction between Parental supports with programme choice was found to be not a significant factor in determining performance in GAS and SAS. At the same time study revealed that parental support was a significant factor in determining academic performance of the school students.

In general, the conclusions derived from the findings of the study support the underpinnings of the theories like individual difference theory, planned behavior theory, cultivation Analysis and uses and Gratification theory on which the entire study was based. The television use by school students is governed by a range of personal preferences and family antecedents. Outcomes of the use of television may turn out to be the determinants of or motivation for further use. In short, the interaction between and among the variables are found to be more complex and the situation warrants more in-depth analysis of each.

RECOMMENDATIONS

On the basis of the findings of study we may say that television has both positive and negative effects on school student's academic performance. The overall trend of the present finding gives a clear indication that excess television viewing leads to the lowest academic achievement of the school students. At the same time medium viewers had the highest academic score. Economic status of the family, parent's education, programme choice and parental support had an important role in the academic achievement of the school students. Following are the recommendations of the study.

- The overall outcome of the study points to the fact that there is a wider chance for using visual media, particularly television, as a strategic tool for teaching and learning process in the state. Television is the most popular mass medium among the school students in Kerala. This students' attachment to television is not fully utilized for offering their educational content through the medium, may be due to the absence of proper policy in this regard. The governmental policy towards educational television warrants introspection and adequate changes shall be made in the content management and broadcasting pattern now followed by Victers, Gyandarshan Etc. run by state and central governments.

- As family antecedents have a critical role in determining the influence of television on the academic life of school students, there shall be personalized attention on the television exposure of each student. The present system of applying a common method of monitoring will not fetch intended results. In this regard, personalized apps with multimedia content focusing on basic concepts in the syllabi can be considered for distribution. And, this recommendation looks effective given the learning apps now distributed by private firms. Television houses may consider their own learning apps as an extension of their current educational programmes.

- Parental education on the rational use of television by students shall be a top on the agenda of school education policy since most of the students spend major portion of their television time when they are at home. Since parental control of television use is found to have positive impact on the academic performance, more studies are to be conducted to this aspect. Also, better method of parental control is to be devised to tap this potential for effective use of television for higher academic performance. Media literacy and media diet awareness are suitable methods for ensuring better parental control. The agencies concerned can consider these strategies.

- As television is found to be the major media choice of school students, there shall be more responsible content strategy on the part of television industry. The content they produce shall cater to the educational and informational needs of the students. Students shall be a critical factor while broadcasters devise their audience strategy. Governments may consider insisting a

particular percentage of educational content meant for students a mandatory component of daily television programming.

- The present study was conducted based on a limited sample and as such it may have its own deficiencies for generalization. The findings of this study are mostly indicative in nature. A study based on an elaborated sample would give more insights into the hidden aspects of the subject and will help formulate more practical and solution oriented strategy. Audience survey now conducted by television houses, especially those in the government sector, can include questions related to the usage of academic content by students at different levels to know more about the amendments to be made in content and delivery methods now in place.

- Gaming is fast becoming a pedagogical strategy in academic world. Multimedia has extensive options to realize this method in an effective way. Television houses can consider gaming as a content creation method for educational purpose.

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APPENDIX

INFLUENCE OF TELEVISION ON ACADEMIC ACHIEVEMENTS OF SCHOOL STUDENTS IN KERALA

I am conducting a study on the topic ' Influence of Television on Academic Achievements of School Students in Kerala' for the partial fulfillment of Doctor of Philosophy in Journalism from Dept of JMC, University of Calicut. I request you to spare a little of your valuable time to respond to this questionnaire. I assure you that the responses will be kept confidential and used for academic purpose only.

Smitha P

Part I

1. Name of the School :
2. Locality :
3. Name of the student : …….
4. Gender : Male ☐ Female ☐
5. Class & Division : .....……
6. Physically challenged? : Yes ☐ No ☐
7. If yes, nature of challenge : ……..
8. Parents Education : Up to SSLC ☐
   Up to Degree ☐
   PG and Above ☐
9. Occupation of Father
   Govt. Service ☐
   Private Service ☐
   Business/Self employed/Farmer ☐
   Coolie ☐
   Pensioner ☐
   Unemployed/Home maker ☐
10. Occupation of Mother :
    Govt. Service ☐
    Private Service ☐
    Business/Self employed/Farmer ☐
    Coolie ☐
    Pensioner ☐
    Unemployed/Home maker ☐

11. Monthly family income : up to 15000 ☐
    15001-50000 ☐
    >50001 ☐

Part II

12. How often do you watch television during a normal week? (Tick (✓) your response)
    a) 7 days a week ☐
    b) 6 days a week ☐
    c) 5 days a week ☐
    d) 4 days a week ☐
    e) 3 days a week ☐
    f) 2 days a week ☐
    g) 1 day a week ☐
    h) less than once a week ☐

13. How much time do you, generally, spend watching television on a normal day? (Tick (✓) any one that is applicable in your case)
    a) less than 30 minutes ☐
    b) between 30 minutes to less than 1 hour ☐
    c) between 1 hour to less than 1 hour 30 minutes ☐
    d) between 1 hour 30 minutes to less than 2 hours ☐
    e) 2 hours and more ☐

14. How many channels do you watch most often?
    a) 1-5 ☐
    b) 6-10 ☐
    c) 11-15 ☐
    d) More than 15 ☐

15. Where do you watch television? Tick those applicable to you.
    a) Home ☐
    b) School ☐
    c) Other places ☐

16. How many television sets do you have at your home? (Tick only one)

a) Zero ☐
b) One ☐
c) Two ☐
d) Three ☐
e) More than Three ☐

17. How do you watch television most often?

a) Alone ☐
b) With family members ☐
c) With friends ☐

18. How often do you watch the following types of programs?

a) Informational programs
a) Very often ☐ b) Sometimes ☐ c) Never ☐

b) Educational programs
a) Very often ☐ b) Sometimes ☐ c) Never ☐

c) Entertainment programs
a) Very often ☐ b) Sometimes ☐ c) Never ☐

19. How often do you obey the following rules about television watching at your home?

a) No TV before homework or during a particular time which affects study
a) Very often ☐ b) Sometimes ☐ c) Never ☐

b) Remote control used by adults only
a) Very often ☐ b) Sometimes ☐ c) Never ☐

c) Regularly check on what you are watching
a) Very often ☐ b) Sometimes ☐ c) Never ☐

d) Don't sit too close to the TV
a) Very often ☐ b) Sometimes ☐ c) Never ☐

e) Watch only news/educational programs
a) Very often ☐ b) Sometimes ☐ c) Never ☐

f) Don't use television during the time of homework
a) Very often ☐ b) Sometimes ☐ c) Never ☐

g) Don't eat while watching television

a) Very often ☐ b) Sometimes ☐ c) Never ☐

h) Take notes while watching educational/news programs

a) Very often ☐ b) Sometimes ☐ c) Never ☐

20. Following are some statements about television use. Tick those applicable to you.

a) I watch television because it gives me information and knowledge that help my studies.

Agree ☐

Disagree ☐

b) I watch television because it helps to pass my spare time.

Agree ☐

Disagree ☐

c) I watch television as a matter of habit.

Agree ☐

Disagree ☐

d) I watch television because it helps me to have fruitful discussion/ interaction with others.

Agree ☐

Disagree ☐

e) I watch television because it enhances companionship as others in my family watch them.

Agree ☐

Disagree ☐

f) I watch television because it helps me arrive at decisions on various matters related to my life.

Agree ☐

Disagree ☐

g) I watch television since it helps me forget my worries and tensions.

Agree ☐

Disagree ☐

21. How do you prefer the following as sources of information/knowledge required for/helpful for your study? Number them as first, second, third, fourth, fifth, sixth and seventh, according to your order of preference.

(a) Newspapers ☐
(b) Television ☐
(c) Radio ☐
(d) Internet ☐
(e) Books other than text books ☐
(f) Family / Friends and Relatives ☐
(g) Other sources …… ☐

22. How often do you use the following media?

(a) Newspapers

a) Very often ☐ b) Sometimes ☐ c) Never ☐

(b) Radio

a) Very often ☐ b) Sometimes ☐ c) Never ☐

(c) Internet

a) Very often ☐ b) Sometimes ☐ c) Never ☐

(d) Books other than text books

a) Very often ☐ b) Sometimes ☐ c) Never ☐

23. How much time do you, generally, spend studying at home/doing homework on a normal day? (Tick (✓) any one that is applicable in your case)

a) less than 1 hour ☐
b) between 1 hour to less than 2 hours ☐
c) between 2 hours to less than 3 hours ☐
d) between 3 hours to less than 4 hours ☐
e) 4 hours and more ☐

24. How much time do you, generally, spend playing outdoor with friends on a normal day? (Tick (✓) any one that is applicable in your case)

a) less than 30 minutes ☐
b) between 30 minutes to less than 1 hour ☐
c) between 1 hour to less than 1 hour 30 minutes ☐
d) between 1 hour 30 minutes to less than 2 hours ☐
e) 2 hours and more ☐

25. Following are some statements; please tick (✓) the option most suitable to you. **(SA-**Strongly Agree, **A**-Agree ,**NR-**Neutral, **D-**Disagree, **SD**-Strongly Disagree)

No.	*Statements*	*SA*	*A*	*NR*	*D*	*SD*
1	My parents compel me to secure good marks/grades					
2	I love my parents very much					
3	My family members are good at studies					
4	My parents praise me a lot when I get good marks/grades					
5	I try my level best to get good marks/grades, because I know success in education will ensure a bright future.					
6	I like my teachers very much					
7	My teachers praise me when I get good marks/grades					
8	My teachers punish me severely when I fail in getting good marks/grades					
9	My teachers are very talented in teaching					
10	I like my school very much					
11	My close friends are good at studies					
12	My handwriting is good, so I get good marks					