‘THE IMPACT OF TELEVISION ADVERTISING ON FOOD HABITS: A COMPARATIVE ANALYSIS BETWEEN URBAN AND RURAL CHILDREN IN GOA’

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MS. RADHAMANI DIVAKAR

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PROF. GUNTUR ANJANA RAJU
H.O.D

DEPARTMENT OF COMMERCE
GOA UNIVERSITY
GOA - 403 206
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DECLARATION

I, Radhamani Divakar, hereby declare that the thesis titled, "The Impact of Television Advertising on Food Habits: A Comparative Analysis between Urban and Rural Children in Goa" submitted to the Goa University, Goa, for the award of the degree of Doctor of Philosophy is the outcome of original and independent research work undertaken by me during the period 2011 to 2015. This study is carried out under the supervision and guidance of Prof. Guntur Anjana Raju, H.O.D, Department of Commerce, Goa University. It has not previously formed the basis for the award of any degree, diploma, or certificate of this or any other Universities. I have duly acknowledged all the sources used by me in the preparation of this thesis.

Date:
Place: Panaji- Goa

Ms.Radhamani Divakar
Research Scholar

Certificate

This is to certify that the thesis titled, "The Impact of Television Advertising on Food Habits: A Comparative Analysis between Urban and Rural Children in Goa" for the award of Ph.D. degree in Commerce, is the bonafide record of the original work done by Ms. Radhamani Divakar, during the period of study under my supervision. The thesis has not been formed the basis for the award of any degree, diploma, certificate, associateship, fellowship, or similar title to the candidate of this University or any other University.

Date: Prof. Guntur Anjana Raju

Place: Goa University Research Guide

Dedicated to my

Late Father Madhavan Divakaran

And

My Mother Mrs.Rajamma Divakaran.

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LIST OF ABBREVIATIONS

Adv	Advertising
T.V	Television
A.S.C.I	Advertising Standard Council of India
SSC	Secondary School Certificate
HSSC	Higher Secondary School Certificate
Govt	Government

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CHAPTER 1

INTRODUCTION

TO

TELEVISION AND ADVERTISING

CHAPTER ONE
INTRODUCTION TO TELEVISION AND ADVERTISING

1.1 INTRODUCTION TO TELEVISION AND ADVERTISING

Television is a vital source of information and entertainment. Children all over the world spend maximum free time in front of the TV. The time that children spend in front of television can be better utilised in other fruitful activities (Dietz and Gortmaker, 1985). It has been found that generally the time that children who are in the age group of 5-8 spend in front of television has been 1 ½ - 2 ½ hours per day(Larson and Verma 1999).

In India too TV has reached every nook & corner. However TV watching also has negative outcomes. Children's interest reduces in reading, playing, exercise, study etc. and they will be seen sitting in front of TV for long number of hours doing nothing developing aggressive and destructive behaviour (R.K Gupta, DP Saini et al 1994).

Most parents today are pre occupied with various activities throughout the day. As a result they depend on TV to occupy their child while they do their household chores. It takes a lot of effort to restrict children's TV watching. Today with both parents working it becomes a struggle for them to maintain the home and the work place. Whether they like it or not parents sometimes overlook the continuous presence of their child in front of television. They feel that at least the child is quiet and is occupied in the house rather than being naughty and running around. (Karen Hill Scott, 2005). According to recommendation of the American Academy of Paediatrics children should not be allowed to watch TV before the age of 2 and after that not over than 1-2 hours a day. The secret in managing ones child is not in counting how long he is in front of the TV but in calculating how long the parent is able to hold the child's attention away from television.

Advertising is communication which is non-personal in nature which is persuasive and paid for in relation to products; services or ideas by a recognisable sponsor (Datta 2008).Children are basically innocent and immature. When they see an advertisement they do not understand the "intent of sale" in it and get easily influenced to buy it (Wilcox, 2004). This is not limited to the small children but also the bigger ones. Similarly boys were more influenced than girls in watching television (Chernin 2008). Many of the girls and bigger children watch television due to their curiosity, to find out new things and some due to loneliness. (Ahluwalia and Singh, 2012). Television has been found to be the most effective and popular audio visual media that conveys all types of messages to people. It is available in every home whether upper, middle or low class. People's accessibility to television is increasing as a number of channels with variety of entertainment and informative programmes are available round the clock.

It has been found that in a year a child on an average sees more than 40,000 television commercials and the main types of product seen are toys, candies, cereals and other fast food items (Kunkel &Gantz 1992).

In countries like India where there is low literacy rate advertisers find television to be a more effective media of communication than any other source (Ciochetto 2004). Children between the ages of 5-14 spend a lot of free time in front of television. They may end up watching 20,000 TV commercials in a year (Cruz 2004). Children also exert a lot of pressure on their parents buying and spending decisions (Hawkins et al 2001).

1.2 CHILDREN AND FOOD ADVERTISING

Research has shown that children become aware of the difference between advertisements and programmes at the age of 3. They understand the communication intent in advertisements from around the age of 5. They understand the persuasive nature of advertising by the age of 7 or 8. With age the understanding about advertising increases.

Children are looked upon by marketers for 3 reasons:

1. They include the present market
2. They include the future market
3. They also motivate parents to make purchases (Mc Neal 1987)

In Australia children in the age of 5-12 watch TV for an average of 2 hours each week, they view up to 4 hours of advertisements weekly and yearly the number goes up to 208 hours .It can be said that the highest number of TV food advertisements aimed at children are shown on Australian television (Adler R, Bernard F et al 1977). Garber, Morgan & Signorelli (1982) found that consuming snacks while watching TV increases with age and Carrath, Goldberg & Skinner (1991) found that adolescents normally prefer to eat potato chips, popcorn, cookies & corn chips.

Children in UK watch television for 17 hours a week on an average. Food advertising constitutes 40% of the advertisements. The items advertised are mainly snacks, food and drinks which are processed and various breakfast items. Such extensive TV viewing can result into obesity (Anderson et al, 1998). Francis et al (2003) has undertaken study on teenage girls and found that those who were found eating in front of TV consumed more especially dietary fat. There was a strong correlation between eating of unhealthy food and time spent in watching TV daily (Woodward et al 1997).

India is undergoing an enormous nutritional revolution. With the advent of fast food chains the move today is to replace the old eating habits with high energy, high calorie dense foods (Bowmen et al 2004, Nielson et al 2002). Take away food, junk food, fast food are the new names associated with food revolution. Such eating habits have resulted into increased risk of cancer, obesity, poor quality of diet and other ailments (Pereira et al 2005).

Children have been found to consume saturated fat, high levels of sugar, sodium and less amount of fruits, vegetables and whole grains. (Enns CW). The Institute of Medicine of the National Academics found that marketing of food through TV advertising had tremendous effect on children's preferences of food resulting into obesity.

The phrase ‘part of balanced breakfast’ is something we quite often hear in relation to cereal advertisements. Research shows that maximum of the children below 7 years do not actually know what it means (Palmar & Mc Dowell, 1981). Children normally understand this term to mean that cereal alone is a sufficient meal (Gies 1982).

The food advertisement has a considerable impact on the eating habits of children. Advertisements normally show food items rich in fat, saturated fat, sugar, salt, sodium which are very harmful to children’s health. Children get easily carried away by these advertisements and want to buy the advertised product. Constant TV watching and eating of such food without any other activity leads to various diseases and ailments like heart problems, obesity, cholesterol which is very bad in the long run.

It has been seen that school going children consume a lot of snacks every day but these have high calories, fat, sugar and salt (Webners 2003).

The reason for obesity and overweight problem in children were examined by many researchers and it was found that spending long hours in front of TV is one of the prominent factor.

Different aspects surrounding advertising directed to children have been dealt with by researchers (e.g. Preston 2005, Mc Dermott O’Sullivan, Stead and Hastings 2006, Patterson and Fjellstrom 2004).

1.3 CHILDREN AND CONSUMPTION OF ADVERTISED FOOD

Fast food means food which can be quickly prepared and eaten. They include items like sandwiches, chicken fried, pizza, potato fry, ice cream and others. They are highly processed so as to retain its taste, and served in an attractive manner. Such type of food when consumed on a daily basis can cause health problems. It has high appeal to persons below 35 years. Such type of food is served in places called fast food restaurants. Such food is low in fibre, calcium and iron and high in calories.

Various factors have contributed to fast food use which include increase in the number of working women, nuclear families, urbanisation, since such type of food are prepared quickly, are low priced and easily available they are more in demand. Many of the fast food centres are meeting needs of health conscious customers by including low fat menu items, vegetables, fruits and use vegetable oil for frying.

Cartoon characters have been used by market players to encourage children to visit fast food restaurants (Guber & Berey 1993). This aspect has been brought to light by many researchers (Neely & Schumann 2004).

1.4 PARENT'S ATTITUDE TOWARDS T.V AND FOOD ADVERTISING

Parents cannot always accept to buy whatever the child demands after seeing various advertisements. Atkin (1975) found that more than ½ of the children got annoyed when their toy request was turned down. Similarly Atkin (1978) observed that children got disappointed and angry when their large number of request for cereal food were turned down at supermarket.

Purchase requests and parent child conflict had a strong relation in families with low income as compared to high income. This could be because parents in low income families tend to refuse the demands due to limited financial resources. (Bardi & Borgognini -Tali, 2001).

Parent's attitude towards advertising to children: Since parents are the mediators between advertising and children, their attitude towards advertisements is very important. The attitudes of mothers may differ according to cultures. The negative attitude of mothers towards advertising was brought to light by Wiman (1983) in his work in USA. Mukhery (2005) in his comparative study of mothers attitudes in India and Japan found that Indian mothers have less negative attitude towards advertising on television especially those directed at children and indulged in less supervision

There are different types of mediations undertaken by parents. The first one is' active mediation' (e.g. Nathenson 2001, 2002) or 'instructive mediation' (Desmond, Singer, Calam and Coli more 1985, Warren 2002).

In simple words active or instructive mediation means the way in which parents talk to their children about various programmes shown on television as and when required.

The second type of mediation is' restrictive mediation'. Here parents set certain rules regarding the time spent in T.V watching. (Corder – Bolz and Fellows 1979, Rossiter and Robertson 1975). Here T.V viewing is regarded as a reward or punishment. It may give positive outcome (Desmond et al. 1985) or negative outcomes (Nathenson 1999).

Brucks, Armstroing& Gold berg (1988) state that 9 and 10 year old children have to be constantly reminded about the ill effects of advertising in order to protect them against it. Akin (1975) state that older children (i.e.7-11 years) were more affected by advertising than smaller children (i.e.4-6 years). Several more studies by (Metcalfe and Mischel 1999, Kuczynski, Kochenska, Reddle-Yarvow and Girnius Brown 1987) have shown that older children (7-11 years) are more affected by advertising, which often result into parent-child conflict. Many studies (Atkin 1975, Buijzen and Valkenburg 2000, Ayla 1994) found that boys mainly indulge in conflicts with their parents on the effects of advertising. According to Cowan and Avants 1988 boys are less complaining and are found to be more independent than girls to demand to their parents.

Young de Bruin & Eagle (2003) in their study on parents in Great Britain and Sweden on television advertising to children found that children constantly pressurise their parents to buy advertised products, their demand increases with increase in TV watching, they are more influenced then adults and end up buying unwanted products.

According to Burra & Burra (1977) stronger legislative control is what is demanded by 65% of the parents while Cosmos &Yannopaulas (1981) state that 64% of mothers want advertisements on television to children to be banned.

CHAPTER 2

LITERATURE REVIEW

AND

RESEARCH METHODOLOGY

CHAPTER TWO

LITERATURE REVIEW AND RESEARCH METHODOLOGY

2.1 INTRODUCTION

Television is the most economical and a popular medium which is in use today (Saxena, 2005). Today a T.V set is a common sight in every home whether rich or poor, urban or rural (Shah & D'Souza, 2008). Advertisers therefore use television as it can reach maximum people with minimum cost Television has become an inseparable part of one's life. After a hard day's work people look up to television to provide them entertainment and information of their choice. It has become an instrument of relaxation instead of conversing with family members.

In U.S children in the age of 6-14 watch television for 25 hours per week. They see 20,000 commercials in a year. Such intense T.V watching initiates wants in children and they are found to nag and pester their parents to buy the advertised products (Leonhardt Kerwin, 1997).

In India too there has been a drastic change in the family structure. There is development of nuclear families, working women and women with career ambition. As a result we find that parents succumb to children's pressure (Rajesh Sud, 2007). In the recent past there has been a sea change in the life style and living standard in India. With a total population of over 1 billion, India will be the world's biggest consumer market. One fourth of this huge population is in urban area and three fourth of it is in rural areas (Sehrawet & Kundu, 2007). As a result marketers are eyeing India as their largest future market. Advertising on television has a direct effect on eating habit of children (Aktas Arnas, 2006). TV advertising and prime time programmes are found to have an influence on the food habits of children .It has

been found that viewing television brings about snacking. To add to this food commercials shown in between programmes create a desire to consume food rich in energy.

Continuous TV watching lowers metabolism in children (Pavleen Soni, Raghbir Singh, 2012). Several studies have shown that foods advertised on TV are mainly high in sugar and fat.

Banning advertising all together will not solve the problem as children would see advertisements in shop windows, internet, movie screens etc. Understanding the role advertising plays is important in children's growing up. Children have to understand to make critical comparisons and choosing what is right for them.

The following literature reviews have been undertaken to study the various aspects of the impact of T.V advertising on the food habits of children**.**

2.2 TELEVISION VIEWING AND ADVERTISING

Kara Chan (2000) in her study on Chinese children's level of understanding and how they look at advertising was examined. 448 children from grade 1-6 in kindergartens were selected. The results showed that children in grade two, i.e. 7-8 years old start to understand what is advertising and were slowly getting to know the persuasive intent of advertising on television. One third of the older children from grade 4 know that television stations carried advertisements for money. The main reason for liking or not liking commercial depends upon the ability to entertain.

Borzekowski D.L, Robinson T.N (2001) in their study tried to find out whether food commercials shown on television influenced pre-schoolers food preferences. For this children were allowed to see a video tape of cartoons that were popular among children which contained or did not contain commercials in them. Forty six 2-6 year old children were selected for this study from Northern California. They found that children who saw videos with commercials were more prone to pick up advertised products than those who were not shown commercials. Further it revealed that even a small exposure to commercials can influence children's preferences of food.

Carol Bryrd Bredbenner (2002) analysed the content of advertisements that were broadcast from 1993 to 1999 in the top ranked children's television programs that were shown on Saturday mornings.

They were further compared with recommendations made on diet and guidelines set for advertising. It was found that in the last three decades food was the biggest category in advertisement. The advertisements were mainly for breakfast cereals and food that had high doses of sugar and fat. Foods rich in protein and dairy products were hardly advertised.

Oats et al (2003) in his paper takes a look at the ethical concerns in advertising on television to children. He reviews UK and Sweden's policy. In the UK advertisements are allowed to be targeted to children but they are governed by code of practice. According to this all advertisements should be decent, honest, truthful and legal. On the other hand in Sweden it is the Swedish Broadcasting Commission that overlooks television broadcasting. Ever since 1991 they considered advertisements to children below the age of 12 to be illegal.

Nidhi Kotwal, Neelima Gupta and Arjee Devi (2008), in their study on the effect of advertisements shown on TV on the purchase behaviour of adolescent girls found that it is advertisements that influence families to buy new products for themselves. Pocket money was used by girls to purchase eatables, beauty items, gifts and cards which they have seen on TV. This study was undertaken on 100 adolescents' girls who were in 9^{th} to 12^{th} standard in Gandhi Nagar area of the city of Jammu. The results also found that while buying food items 80% of the people were influenced by advertisements.

Study carried out by **Amardeep Kaur Ahluwalia and Raghbir Singh (2012)** in their study tried to find out the level of understanding of advertisements shown on television among children from various socio economic groups in the urban areas giving stress to middle and upper middle class.400 children from various places of Punjab, from well-known private schools having children from middle and upper class. T test, Z test, ANOVA and Pearson's correlation was used. Results showed that children watching TV was around 76% and those who were able to differentiate

advertisements and programmes were 91%. It was found that almost all children said that they could identify the difference between ads and programmes. The fact is that there is a selling intent in advertisements while it is entertainment which is the intent of programmes was understood by 53.2% of the children.

This understanding was higher among those in 14-16 years as against 8-10 years old. Children showed a better understanding of advertisements when somebody elderly accompanied them when they were watching alone .Maximum of the parents discussed about advertisements among their children only when they were enquired, instead of taking the lead on their own. Further it was found that parents discussed the effects of advertisements with their daughters then with children who were older.

Ayuntanji Gbadamosi, Robert .E. Hinson, Eddy.K, Tukamushaba, Irene Ingunjiri (2012) studies the attitudes of children towards advertisements on television. They find that advertising is found to be entertaining and enjoyable by children and they like its humour, music, characters that are animated, love the celebrities, actions and stunts exhibited. Children aged 5-12 were selected.

Raghothan Reddy, Sashidhar B (2013) studied the T.V viewing habits of children from high school in order to know the good and bad effects of television viewing. It was found that average time children viewed television ranged from 1 to 6 hours/day. Health problems like headache, eye strain, sleep disturbances, neck pain and nail biting were found among children due to T.V viewing. It was also found that duration of T.V viewing had a distinct effect in causing headache and eye strain but there was no significant effect related to disturbance in sleep and performance at school.

2.3 FOOD ADVERTISING TO CHILDREN

Research undertaken by **Gold &Hei (1990),** showed that the more children watched television the more is the risk of high cholesterol. Children who watch for 4 hours a day stand a higher chance than children who watch for 2 hours a day. He states that if parents cannot control the T.V viewing of children they should see that they do enough exercise and adopt nutritional eating habits

Hal ford, J.C.G, Gillespie .J. Brown et al (2004b) conducted study on lean, overweight and obese children. It tried to find out children's ability to recognise 8 food and 8 non-food related advertisements. It was found that children who were obese were more familiar with food advertisements than non-food advertisements on TV.

Similarly children who were obese ate minimum amount of savoury low fat food while the children with normal weight continued to eat savoury low fat snack after seeing the non-food advertisements. This shows obese children's interest to food. More the exposure to advertisements more is the consumption of unhealthy food.

Aktas Arnas (2006) in his study on the impact of food advertising on TV and its effect on purchase request of children undertaken in Turkey found that out of the total 775 TV advertisements shown, 344 were for food which included products like chocolates, milk, chips, products made from milk like cheese, and cereals had for breakfast. It was also found that 89.6% children ate and drank while watching TV. On the other hand children who nagged and forced parents to buy what they saw on TV were 40.3%. This has increased the unhealthy consumption of children. Questionnaire was developed and given to 347 mothers with children in the age group of 3-8 years. Chi square and ANOVA was used.

Helen Dixon, Maree Scully et al (2007) in their study examines the association between regular T.V viewing habits of children and their attitude towards food and also tries to evaluate the influence of different T.V advertisements for healthy and unhealthy food on children's knowledge of their diet, attitudes and intentions.

The study comprised of 919 school students from grade 5 and 6 from Melbourne, Australia. It was found that more the T.V use and more frequent viewing of commercials led to positive approach towards junk food and its consumption. Further experiment revealed that advertisements directed towards nutritious food promoted a favourable attitude towards these food. It was found that changing the environment on children's food advertisement wherein nutritious food is promoted and there is

less representation of junk food can normalise and bring about consumption of healthy food.

In the study conducted by **Yoon J, Lyu E & Lee K (2008)** on 1050 middle and high school students aged 14-19 from 5 school districts in Busan (Korea) found that there was significant difference in the perception of fast food with regard to gender. Females are found to have a higher awareness of fast food being unhealthy than males and would take more care of their health and nutrition.

Similarly it was found that students from high school were not much concerned about their nutritional status as compared to middle school students when choosing their fast food.

Jennifer Harris, John Bargh and Kelly Brownell (2009) have stressed on the existence of advertised food rich in calorie and low in nutrient as the main contributor to obesity. They try to test the hypothesis that continuous exposure to advertising of food while watching television creates automatic consumption of advertised food. It was found that children ate more by 45% when they were exposed to advertisement of food on television. It was also observed that adults ate more of both unhealthy as well as healthy food after exposure to food advertisement.

Muhammad Haroon, Tahir Masood Quereshi et al (2011) in their study on 200 children and their parents tried to examine advertisements on television and children's eating pattern while seeing television and their desire to purchase various items they saw on television. The results revealed that children were a witness to large number of advertisements and their wants were very much influenced by food advertisements shown on television. It also had an influence on their food choices and health.

Asha Kiran and Deepthi R (2012) in their study on the impact of junk food on the health of individuals state that junk food is the result of globalisation, urbanisation and modern life style. Junk food is irresistible and consumed by people due to taste, attractiveness, time factor and advertising.

But it is associated with a large number of diseases like cholesterol, diabetes, high blood pressure, clogging of arteries and cancer. For children in the age of 6-12 years

food nutrition is the main priority, hence children should control eating junk food, give preference for nutritious food and develop awareness for healthy food.

Rathod R. M & Par mar B.J (2012) in their study on chocolate brands found that when children want to buy advertised food items they do not bother about the price. They also do not consider whether it is healthy or unhealthy for them. The only thing they have in their mind is to purchase the product. Advertising has a stronger effect on younger children.

Stefanie Selly, Patricia Brasili (2014) in their study tries to examine Italian children and adolescents as to which foods are fattening. 244 children and 305 adolescents from Bologne, Northern Italy were examined. It was found that lean meat, condiments, fruits not sweet and vegetables were found to be fattening. Boys preferred such type of food while girls preferred bread and pasta.

2.4 CONSUMPTION OF ADVERTISED PRODUCTS

Babicz - Zielinska .E (2001) in their study have tried to find out factors influencing purchase of different types of food like vegetables, fruits, products related to dairy, spreads, baking and frying. It was undertaken among 448 polish students. It was found that in case of vegetables it was freshness, taste and health that were given priority. In case of dairy products it was freshness, taste and health that were given importance. It was also found that female students had a higher score in case of choice of the various factors.

This research by **Meyers & Wallace (2003)** tries to find out what are the factors that influence people towards fast food restaurants. Survey was undertaken in University of Wisconsin Stevens: 519 completed questionnaires were gathered. It was found that taste of food and workers expertise were the most important factors while selecting a fast food restaurant. Least importance was given to in store promotion.

Goyal& Singh (2007) in their study of Indian consumers has a liking for visiting fast food restaurants mainly for fun and change but home-made food is their first choice. They feel that food cooked at home is far better than the one served at fast food restaurant. Highest value has been given for taste and quality followed by location and cleanliness, comparative study of Mc Donald and KFC.

Elizabeth Denney Wilson, Anthony Okely et al (2009) study tries to examine the influence of soft drinks and fast food among 2719 adolescents aged 11-16 from 93 schools in New South Wales, Australia. It was found that 50% of the boys and 30% of the girls said they consumed soft drinks daily especially grade 8 students. One fourth of them chose soft drink in place of water or milk. While 40% stated that soft drinks was always in their homes. The study found that since soft drinks were present at home children of all age groups consumed it for lunch.

Consumption of fast food was more among boys as compared to girls in all the ages. Boys preferred fast food due to convenience and value for money while girls preferred fast food to home-made food due to the large size and discounts associated with it.

Salami C.G.E and Ajobo R.T (2012) in their study about fast food restaurants in Asaba, Nigeria tried to assess the customer's perceptions about the quality of service in fast food restaurants.

Customers were randomly selected and it was found that product range, availability and product consistency and good packaging affect perception and quality. Gender has no effect on this. It was found that people visit fast food restaurants for change and not because of nutritional value

Naheed Vaida (2013) in his study on fast food consumption among adolescent's students found that children in the age group of 14-18 like to eat fast food while those in the age of 19 were not eating fast food. However 50% of respondents in the age of 15-18 skipped lunch. The entire pocket money of children in age of 16-18 was spent on fast food. The highest consumption was during pre-lunch period. There was rarely any consumption of fast food in the morning as all children were at home.

Pavleen Kaur, Jyoti Vohra (2013) have studied the food promotional strategies adopted by retail outlets to attract children. A sample of 179 mothers from Amritsar in Punjab was taken. Data was analysed using mean, standard deviation, factor analysis and ANOVA. The results showed that free gifts that are highlighted on the package was an effective strategy to promote food to children, in addition to assorting food, sales force who were cooperative, giving easy access to favourable foods of children and keeping the packed food at proper shelf locations. It was also

found that boys were more strongly influenced by promotional strategies as compared to girls.

The objective of this paper by **AzilabintiJaini, Noor Asmabinti Ahmed et al (2015)** is to find out the factor that bring about positive experience and to find out the reasons that motivate people to dine-in at a certain fast food restaurant. Convenience sampling method was used.

The findings of the study showed that there is a favourable relationship between quality of food, quality of service and perceived value and experience of customer. Overall this paper suggests that an outlet that deals in fast food should concentrate on providing services to customers and side by side also provide improve other qualities so as to maintain long term relationship with customers.

The study by Horsu Emmanuel &Yeboah Solomon (2015) tried to find out the perceptions, preferences and factors that being about development of fast food among tertiary students. Study was conducted on 159 consumer's from2 main tertiary institutions in Cape Coast. The result show that urbanisation , long hours of work, rising interest in outside meals, advertising and increase in income lead to growth of fast food. People who like fast food consider it to be convenient, something that saves time, tasty and good for a change while those who hate it consider it to be unhealthy expensive and alien. People normally prefer take away like pizza, burger etc.

2.5 PARENTAL ATTITUDE TOWARDS ADVERTISING AND FAST FOOD CONSUMPTION

Kara Chan and James Mc Neal (2002) conducted a study on Chinese parent's attitude for advertising and mediation undertaken by parents on TV viewing. Study was conducted on 1065 parents whose children were in the age group of 6-14 in China. Results showed that parents in China hold negative attitude towards advertising on television in general and about children's advertising in particular. They feel that advertising is not worthy. Parents strongly feel that advertisements should full of lies be banned. About 98% of the parents keep a check on what

children view and how long they view although parents do not co-view or discuss with their children about advertising.

The results of the study by **Neeru Kapoor & DPS Verma (2005) show** that advertisements on TV have a significant influence on Indian children's consumer socialization. Parents too accept the fact that TV influences the buying behaviour of children.

But one aspect to be kept in mind is that parents should have continuous interaction with their children if they wanted to protect their children from the adverse effect of TV advertisements. They need to explain to their children the right picture. In other words they need to decide what their child should learn from TV advertisements.

Hyunjae 'Jay' Yu (2007) conducted a study on the effects of T.V snack/fast food advertisements and conflict between parents and children. It deals with the diverse relationships between conflict and the various environmental factors surrounding children like mother's general attitude towards advertising, mother's employment status, income and presence of siblings. This study tests the ecological theory and tries to find out whether it can be applied in advertising research.

The study undertaken by **Nathalie Dens, Patrick De Pelsmacker (2007)** tries to find out how advertising and advertised food affects parents attitude and concern for children's eating habits and advertising viewing and how monitoring is undertaken. It was found that attitudes parents exhibit on nutrition and intensity at which family conflicts occur due to advertising are the main factors for undertaking restrictive mediation of television.

Singh Takur Mahima, Khatri Puja (2008) attempted to find out whether child rearing practices are different from one culture to another and whether it is an important factor that influences the behaviour of purchase in families. They have attempted to study the parenting styles in America and India and have found that there is no significant difference in cultures of the two countries regarding what interest and desire children have about packed products. The difference is in the role played by children in influencing actual buying. It has been found that American

parents undertake restrain in buying whatever children ask while Indian parents purchase whatever is promoted by marketers and asked by children. For Indian parents children are their centre of attention and tend to buy whatever is asked by them without thinking of the consequences.

The study undertaken by **Pavleen Soni, Raghbir Singh (2012**) tried to find out the strategies for mediation of TV content (for ads and programmes) that are followed by parents

For this a structured questionnaire was given to 714 individuals in the age group of 15-24 years to find out what type of mediation is followed by families in India. The sample was from schools and colleges in the 3 cities of Punjab. The results revealed that Indian mothers undertake mediation of advertisements in general & advertisements of food in particular. Mothers mediate as per the age of children. They undertake it more strongly to younger children as compared to older ones. Data was analysed by using descriptive statistics, ANOVA and exploratory factor analysis.

2.6 RESEARCH GAP

After an extensive literature review the following research gap has been observed:

1) Most of research studies have concentrated either on high school or secondary school children while this study is undertaken on primary and high school children in the age of 6-12 years.
2) Most of the studies have been undertaken either in urban area or rural area but no comparative study has been undertaken between urban and rural area especially in Goa.
3) Research studies have been undertaken on the impact of advertising on various products but not much work has been undertaken exclusively on food products.

It is in this context that the present study has been undertaken.

2.7 SIGNIFICANCE OF THE STUDY

This study assumes importance due to the following

1) It has been found that the food habits of children are ever changing. The practice of eating home-cooked food is slowly being replaced by packed food or fast food mainly in the age of 6-15 years.
2) Food companies which are multinational or domestic are in favour of food and beverages that are low in nutrients and high in energy and adopt various practices to bring about purchase and consumption continuously.
3) Marketers today consider children as a big future market mainly in a country like India.

4) Today children get a lot of pocket money and so they have the ability to spend and encourage buying of various products for the family.
5) Despite the advent of internet and other developments in technology, television is still the vital source of communication.
6) Children between the ages of 5-14 spend a lot of time in front of television and end up watching 20,000 T.V commercials in a year.
7) Children are very much motivated to buy various food and beverages made available in the market.
8) Such overconsumption of unhealthy food is no doubt going to create health problems like diabetes, stroke and cancer. As a result there is an urgent need to save our children from the abundant food advertisements.
9) If this practice persists the old eating habits will definitely become extinct and will slowly and surely be replaced by the modern style of eating along with companionship of obesity, diabetes and heart disease for the future.

Taking consideration of the above points this study is an attempt to examine how T.V viewing has transformed the outlook of children, how they are influenced by food advertisements, how this has brought about a change in the eating habits and how this new trend in consumption could have an adverse effect on their health. A comparative analysis is undertaken to find out the impact of T.V advertising on children in urban and rural areas.

This study also evaluates the existing rules and regulations and tries to find out whether existing rules are sufficient enough or is there an urgent need to make

amendments in the existing rules or establish new laws to safeguard the interest of children's future.

2.8 OBJECTIVES OF THE STUDY

The topic "The impact of television advertising on food habits: A comparative analysis between urban and rural children in Goa" has been carried out to find answers to the following objectives.

1. To study the TV viewing habits of children in Goa.
2. To examine the influence of TV advertising on food and beverage preferences of children.

3. To analyse factors influencing consumption of advertised products.
4. To examine parents attitude towards advertising, TV viewing and consumption of advertised products

2.9 Hypothesis

In order to study and find solutions to each of the four objectives, a set of hypothesis has been formulated in order to test the validity of the data. Hypothesis framed for each objective is given below.

Objective 1: To study the TV viewing habits of children in Goa.

H01: There is no significant difference in the TV viewing habits of children in urban and rural areas of Goa.

H02: There is no significant difference in the TV viewing habits of children in North and South districts of Goa.

H03: There is no significant difference in the TV viewing habits of children in relation to their age.

H04: There is no significant difference in the TV viewing habits of children in relation to their gender.

Objective 2: To examine the influence of TV advertising on food and beverage preferences of children**.**

H01: There is no significant difference in the influence of TV advertisements on food and beverage preferences of children in urban and rural areas of Goa.

H02: There is no significant difference in the influence of TV advertisements on food and beverage preferences of children in North and South districts of Goa.

H03: There is no significant difference in the influence of TV advertisements on food and beverage preferences of children in relation to their age.

H04: There is no significant difference in the influence of TV advertisements on food and beverage preferences of children in relation to their gender.

Objective 3: To analyse factors influencing consumption of advertised products.

H01: There is no significant difference in the impact of various factors on consumption of advertised products in urban and rural areas of Goa.

H02: There is no significant difference in the impact of various factors on consumption of advertised products in North and South districts of Goa.

H03: There is no significant difference in the impact of various factors on consumption of advertised products in relation to their age.

H04: There is no significant difference in the impact of various factors on consumption of advertised products in relation to their gender.

Objective 4: To examine parents attitude towards advertising, TV viewing and consumption of advertised products.

H01: There is no significant difference in parent's attitude towards advertising, TV viewing and consumption of advertised products in urban and rural areas of Goa.

H02: There is no significant difference in parent's attitude towards advertising, TV viewing and consumption of advertised products in North and South districts of Goa.

H03: There is no significant difference in parent's attitude towards advertising, TV viewing and consumption of advertised products in relation to their age.

H04: There is no significant difference in parent's attitude towards advertising, TV viewing and consumption of advertised products in relation to their gender.

2.10 RESEARCH METHODOLOGY

Goa the smallest state in India with a lot of scenic beauty is called as the land of the sun, sand and sea. It has a total area of 3,702 sq. km and a total population of 14, 57, 723 (2011 Census) mostly residing in villages. This state is equally divided between urban and rural areas. It has a literacy rate of 87.40% (2011 Census). The state has 1240 primary schools and 448 middle schools. For administrative purpose it has been divided into 2 districts i.e. North and South Goa and 12 talukas.

This study is the result of research undertaken from 2011 to 2015. Data was collected from various schools in urban and rural areas of Goa from November 2013 to February 2015. The authorities from education department were consulted to get permission to enter schools. The objective of the study was explained and their acceptance was gathered. For this study a total of 38 schools and 1000 children were considered. The schools in Goa are mostly aided by Govt. of Goa and cater to 1 74,516 students from primary and middle level (Table 2.1). Of the total students 80,968 are from South Goa and 93,548 are from North Goa. 22 schools from North Goa and 16 schools from South Goa were visited for collecting the data (Table 2.2 and 2.3). Random sampling was undertaken in selecting the sample while convenience sampling was undertaken in selecting the schools. The sample covered around 5.7% of the total population. While deciding the sample care was taken so that due weightage was given to urban and rural segments. As a result 500 respondents from rural and urban areas each were considered for the study. An equal number of 500 fully filled questionnaires were recovered from various schools visited in North and South Goa.

Before starting the actual work, a pilot study was undertaken. Thereafter changes were incorporated in the questionnaire which was finally distributed to 1500 respondents out of which 1000 correctly filled questionnaires were considered for analysis. Sample consisted of 1000 children in the age group of 6-12 years and one of their parent selected randomly.

Since parents are children's caretakers they were also the prime respondents for this study. Children were asked to take the questionnaires home. The questionnaire had four parts. Three parts of it had to be filled by the child and the fourth part by the parent who spent maximum time with the child. First part of the questionnaire was to study the T.V viewing habits of children, the second part was to study the food and beverage preferences of children, the third part to study the factor influencing consumption of advertised product while the fourth and last part which was filled by the parent was to study parents T.V viewing behaviour and what they felt about their child's behaviour on various aspects related to T.V viewing and consumption of advertised products. For the second, third and fourth part respondents were told to rate the items on a 5 point likert scale.

T.V advertisements showing food products particularly confectionery items for the period from January 2014 to June 2014 were considered for the second part of the study. Data gathered was classified on the basis of Area (urban and rural), District (North and South Goa), Age (6-7, 8-9, 10-12 years) and Gender (male and female).The information gathered has been carefully interpreted.

Table 2.1

Primary and middle level students from South and North Goa at a glance

Institution	South Goa	North Goa	Total
Primary level	46662	52056	98718
Middle level	34306	41492	75798
Total	80968	93548	174516

Source: Department of Education 2012-2013

Table2.2

List of schools visited in North Goa

Sr.No.	Names of the Schools	Urban/Rural
1	Mustifund Primary School, Panaji	Urban
2	Little Penguins Primary School, Old Goa	Urban
3	St. Cruz Primary School, St.Cruz	Rural
4	St. Michael Convent High School, Vagator	Urban
5	Mustifund Middle School, Panaji	Urban

6	St. John Primary School, Sanquelim	Urban
7	Chubby Cheeks Spring Valley High School, Alto Porvorim	Rural
8	Shree Saraswati High School , Kavlem , Ponda	Rural
9	S.S. Samiti I.V.B.D. High School, Dhavli, Ponda	Rural
10	Mahanadu G. Naik Memorial High School, Banastarim, Ponda	Rural
11	Lokmanya Tilak Vidyalaya, Kavlem, Ponda	Rural
12	Shree Kamleshwar High School, Deulwada	Rural
13	Mandrem High School, Mandrem, Pernem	Urban
14	G.S. Amonkar Vidya Mandir ,Mapusa	Urban
15	Dr. K.B. Hedge war High School, Mala, Panaji	Urban
16	Peoples High School, Mala, Panaji	Urban
17	St. Anthony's Duler, Mapusa	Rural
18	Shri Shantadurga High School, Bicholim	Urban
19	Sacred Heart Of Jesus High School, Anjuna	Rural
20	St. Joseph High School, Arpora	Rural
21	Vidhyaniketan High School, Calangute	Rural
22	Our Lady of Fatima Primary School, Valpoi,	Urban

Table 2.3
List of schools visited in South Goa

Sr. No.	Names of the Schools	Urban/Rural
1	Our Lady of Perpetual Succor High School, Cortalim	Rural
2	Our Lady of Destora, Vasco	Rural
3	Father Agnel Central School, Pilar	Rural
4	Loyola High School, Margao	Urban
5	Our Lady Of Rosary High School, Fatorda	Urban
6	Shri Shantadurga High School, Sancaole,	Rural
7	Shri Mallikarjun Vidyalaya High School, Canacona	Urban
8	Sarvodaya Education High School, Quepem	Urban
9	Busy Bee English High School ,Vasco	Urban
10	St. Joseph Institute, Vasco	Urban
11	C.P.I. Primary School, Nagarcem, Canacona	Rural
12	Govt. High School, Bali, Quepem	Rural
13	Union High School, Sanguem	Urban
14	Our Lady of Miracles High School, Sanguem	Urban
15	Government High school, Fatorpa, Quepem	Rural
16	Government High school, Shristhal, Canacona	Rural

Chi Square analysis (X^2) was conducted in objective 1 and 4 among various sets of variables in order to assess the relationship and the level of significance of the variables under study. Here the cells having expected frequency of 5 or higher is considered while Fisher's Exact Test is used when the expected frequency of the cells is 5 or less and you want to conduct a Chi Square test. The variables that bring

about change in each other are called independent variables and dependent variables. They are statistically associated with each other significantly. Since change in one variable causes change in other, the first one is called independent variable and second one is called dependent variable. To measure the strength we require contingency coefficient which lies between 0 and 1 and can be used for any cross tabulation with any number of rows (R) and any number of columns (C) provided R and C are equal. However it cannot attain the maximum value of 1. The maximum value of the contingency coefficient depends on the number of rows and columns in the cross tabulation .Garret's mean score is also used in objective 1 to rank the variables.

Factor analysis is a statistical method used to describe variability among observed, correlated variables in terms of a potentially lower number of unobserved variables called factors. In other words it is used to bring down the number of variables into smaller and manageable ones by combining the related factors. It has been used in objective 2 and 3. Principal component analysis (PCA) is used for factor extraction, which is the first phase of exploratory factor analysis.

Pearson's coefficient of correlation (r) is used to find out the degree of association between various sets of responses in order to make certain whether they are positively or negatively related to each other. Further regression analysis was used to explain the variation in one variable (i.e. dependent variable) based on the variation in the other variable (i.e. independent variable). Mann Whitney test has been used for comparing two samples that are independent or not related (i.e. urban and rural, North and South Goa) while Kruskal Wallis test has been used for comparing more than two samples that are independent or not related (i.e. 6-7 yrs.,

8-9 yrs. and 10-12 yrs.).They are used when data cannot be measured on a quantitative scale.

2.11 SCHEME OF CHAPTERISATION

The thesis is divided into seven chapters.

CHAPTER 1: INTRODUCTION

This chapter gives an introduction to television and advertising, children and food advertising, children and consumption of advertised food and parent's attitude towards T.V and food advertising. It brings to light the background of the research problem and explains in what context this study has been undertaken.

CHAPTER 2: LITERATURE REVIEW AND RESEARCH METHODOLOGY

This chapter reviews similar studies carried out on the impact of television advertising on food habits of children and identifies the research gap. It also gives information about the topic, objectives, hypothesis, significance of the study,

research methodology and tools and techniques used for analysing the data. It also explains the sample profile, how it has been collected and analysed.

CHAPTER 3: T.V VIEWING HABITS OF CHILDREN IN GOA

How children are influenced by T.V viewing is analysed and explained with the help of data gathered from students in Goa. It is analysed under different heads using various variables.

CHAPTER 4: INFLUENCE OF T.V ADVERTYISING ON FOOD AND BEVERAGE PREFERENCES OF CHILDREN

How T.V advertising influences children's food and beverage preferences are discussed in detail in this chapter with the help of data gathered from students in Goa. Here advertisements seen on television are taken into consideration and children's preferences for food and beverages are studied. Further children's level of consumption of various food and beverages are also looked into.

CHAPTER 5: FACTORS INFLUENCING CONSUMPTION OF ADVERTISED PRODUCTS

What are the factors that influence consumption of advertised products is covered up in this chapter. Data has been gathered from various schools in Goa and has been analysed to find out the results.

CHAPTER 6: PARENTS ATTITUDE TOWARDS ADVERTISING, T.V VIEWING AND CONSUMPTION OF ADVERTISED PRODUCTS

What are parents attitude towards advertising, T.V viewing and consumption of advertised products is discussed in this chapter. Data has been gathered from parents in Goa. First and foremost parents T.V viewing behaviour has been studied and further their opinions on their children's T.V viewing behaviour, about advertising and its impact on children, consumption of advertised products by children and what is their opinion about influence of T.V in changing the food habits of children are discussed in this chapter.

CHAPTER 7: FINDINGS, CONCLUSION AND SUGGESTIONS

This chapter summarises and puts forward what has been understood from this study It gives the findings of this study and the conclusion. It also gives suggestions for improving the situation and puts forth what future research can be undertaken.

2.12 LIMITATIONS OF THE STUDY

1. Since the data was collected from children in the age group of 6-12 years the questionnaire had to be made as simple as possible for their level of understanding and at the same time to serve the purpose of research.

2. Since respondents are in the age group of 6-12 years they are very young, tender and their understanding level is slowly picking up so the response has been very slow.

3. Several rounds had to be made in case of many rural schools as some children took longer time to give their feedback.

CHAPTER 3

T.V VIEWING HABITS OF CHILDREN

CHAPTER THREE

T.V VIEWING HABITS OF CHILDREN

3.1 INTRODUCTION

Television has been found to be the most effective audio-visual media that conveys all types of messages to people. It is available in every home whether upper, middle or lower class. People's accessibility to television is increasing as a number of channels with a variety of entertainment and informative programmes are available round the clock.

Children are basically innocent and immature. They watch television every day for 2-3 hours which include cartoons, sports, reality shows and other entertainment programmes. When they see an advertisement they do not understand the 'intent of sale' in it and get easily influenced to buy it (Wilcox 2004). This is not limited only to the small children but also to the bigger ones. Boys are more influenced than girls in watching television. (Chernin 2008). Many of the girls and bigger children watch

television due to their curiosity to find out new things and some due to loneliness. (Ahluwalia and Singh, 2011). Hence it has been found that the time that children spend in front of television can be better utilised in other fruitful activities (Dietz and Gortmaker, 1985). Therefore the good and bad effect of television is a matter of great concern.

3.2 HYPOTHESIS AND METHODOLOGY

This chapter deals with T.V viewing habits of children, Data was collected from 1000 children from all over Goa. It was classified on the basis of Area (urban and rural), District (North and South Goa), Age (6-7, 8-9, 10-12 years) and Gender (male and female). Information was gathered on children having T.V at home, children watching T.V outside, children's hours of T.V watching on school days and holidays, watching of advertisements, memorability of advertisements, persons accompanying children while watching T.V, frequency of parents discussion with children and frequency of children's T.V viewing which has been cross tabulated and statistically tested.

The following hypotheses were framed:

H01: There is no significant difference in the T.V viewing habits of children in urban and rural areas of Goa.

H02: There is no significant difference in the T.V viewing habits of children in North and South districts of Goa.

H03: There is no significant difference in the T.V viewing habits of children in relation to their age.

H04: There is no significant difference in the T.V viewing habits of children in relation to their gender.

3.3 DEMOGRAPHIC PROFILE OF THE STUDY

Table 3.1

Total number of respondent's in the state of Goa

Category	Particulars	Frequency	Percentage
Area wise	Urban	500	50.0
	Rural	500	50.0
District wise	North Goa	500	50.0
	South Goa	500	50.0
Gender wise	Male	563	56.3
	Female	437	43.7
Age wise	6-7 years	134	13.4
	8-9 years	388	38.8
	10-12 years	478	47.8

Source: Primary data

This study takes into consideration urban and rural areas of the 2 districts of Goa namely South Goa and North Goa. The number of respondents is 1000 which includes 500 from North Goa and 500 from South Goa. Similarly total number of respondents from urban area is 500 and rural area is 500. Gender wise classification shows number of male respondents to be 563 and female to be 437. Age wise classification shows number of respondents in the age group of 6-7 years to be 134, 8-9 years to be 388 and 10-12 years to be 478.

Table 3.2

Educational qualification of parents in the state of Goa

Educational Qualification	Fathers Education		Mothers Education	
	Frequency	Percentage	Frequency	Percentage
Non matriculate	113	11.3	148	14.8
S.S.C	299	29.9	265	26.5
HSSC	186	18.6	203	20.3
Diploma	108	10.8	44	4.4
Graduate	191	19.1	242	24.2
Post graduate	73	7.3	71	7.1
Others	30	3.0	27	2.7
Total	**1000**	**100.0**	**1000**	**100.0**

Source: Primary data.

Table 3.2 shows the educational qualification of the parents. It can be seen that maximum number of parents have passed SSC (i.e. 29.9% fathers and 26.5% mothers), followed by graduation (191 fathers and 242 mothers) and HSSC (186 fathers and 203 mothers).10.8% of the fathers have passed diploma courses, 7.3%

fathers and 7.1% mothers are post graduates while 11.3% fathers and 14.8% mothers are non-matriculates.

Table 3.3

Occupation of parents in the state of Goa

Occupation	Fathers Occupation		Mothers Occupation	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Agriculturist	23	2.3	4	.4
Service	676	67.6	236	23.6
Business	301	30.1	58	5.8
House wife	-	-	702	70.2
Total	**1000**	**100.0**	**1000**	**100.0**

Source: Primary data.

Table 3.3 shows parents occupation in the state of Goa.

Fathers being the head of the family are occupied in some or the other occupation. From the table 3.3 it can be seen that maximum of the fathers i.e. 67.6% are employed in service sector while 30.1% are in business. Only a small number i.e. 2.3% are involved in agriculture. On the other hand maximum of the mothers i.e. 702 are housewives taking care of children and various household activities. 236 of the mothers are employed in service sector while 58 of them are running business activities, contributing to the family income.

Table 3.4

Type of family in the state of Goa

Type	Frequency	Percentage
Nuclear	523	52.3
Joint	378	37.8
Extended	99	9.9
Total	**1000**	**100.0**

Source: Primary data.

Table 3.4 shows the type of family in the state of Goa.

With modernisation and people moving to the city to find jobs, the joint family is slowly replaced by nuclear families. It can be seen that maximum number of respondents come from nuclear families i.e. 52.3% while 37.8% still continue with joint family while 9.9% come from extended families.

Table 3.5
Annual family income of families in Goa

Income	Frequency	Percent
Less than Rs. 60,000	153	15.3
Rs. 60,000-1,20,000	249	24.9
Rs. 1,20,000-2,40,000	208	20.8
Rs. 2,40,000-3,60,000	166	16.6
Rs. 3,60,000-5,00,000	112	11.2
Rs. 5,00,000-10,00,000	82	8.2
Above Rs. 10,00,000	30	3.0
Total	**1000**	**100.0**

Source: Primary data

From the table 3.5 it is clear that maximum i.e. 24.9% of the respondents have annual family income ranging between Rs, 60,000-1,20,000 followed by 20.8% respondents having annual family income between 1,20,000-2,40,000. Similarly 8.2% of the respondents have annual income of Rs. 50,000-1, 00,000 and only 3% have annual income above 10, 00,000.

3.4 ANALYSIS OF T.V VIEWING HABITS OF CHILDREN IN GOA

Hypothesis framed has been tested by cross tabulating the data collected using percentages and chi square to find out whether there is any relationship between the variables.

The analysis has been explained below.

Table 3.6
Number of children having TV at home in the state of Goa

Category		Yes / No	Number of children	Percentage %
Area wise	Urban	Yes	493	98.6
		No	7	1.4
		Total	500	100.0
	Rural	Yes	489	97.8
		No	11	2.2
		Total	500	100.0
District wise	North Goa	Yes	493	98.6
		No	7	1.4
		Total	500	100.0
	South Goa	Yes	489	97.8
		No	11	2.2

		Total	500	100.0
Age wise	6-7 years	Yes	133	99.3
		No	1	.7
		Total	134	100.0
	8-9 years	Yes	379	97.7
		No	9	2.3
		Total	388	100.0
	10-12 years	Yes	470	98.3
		No	8	1.7
		Total	478	100.0
Gender wise	Male	Yes	549	97.5
		No	14	2.5
		Total	563	100.0
	Female	Yes	433	99.1
		No	4	.9
		Total	437	100.0

Source: Primary data

Table 3.7

Pearson's Chi square test showing number of children having T.V at home

Category	Chi Square value	Df	Asymp sig (2 sided)
Area wise	.905	1	.341
District wise	.905	1	.341
Age wise	1.478	2	.478
Gender wise	3.437	1	.064

Source: Primary data

Significant at 5% level of significance.

Table 3.6 shows the cross tabulated and classified data and table 3.7 shows the chi square result. It can be seen that maximum of the children have TV at home.

Only an insignificant number of respondents do not have TV at home. 98.6% respondent's in urban area and 97.8% respondent's in rural area watch T.V.

Similarly it can be seen that 99.3% in the age of 6-7years, 97.7% in the age of 8-9 years and 98.3% in the age of 10-12 years have T.V at home. Gender wise shows 97.5% males and 99.1% females to have T.V at home.

Chi Square test was applied to see whether there is any association between having TV at home and the various categories i.e. area wise, district wise, age wise and gender wise. All the p values were found to be greater than 0.05 at 5% level of significance. Hence it can be concluded that there is no association between having TV at home and area, gender, district and age.

Table 3.8

Number of children watching TV outside home

Category		Yes / No	No of children	Percentage %
Area wise	Urban	Yes	98	19.6
		No	402	80.4
		Total	500	100.0
	Rural	Yes	74	14.8
		No	426	85.2
		Total	500	100.0
District wise	North Goa	Yes	80	16.0
		No	420	84.0
		Total	500	100.0
	South Goa	Yes	92	18.4
		No	408	81.6
		Total	500	100.0
Age wise	6-7 years	Yes	19	14.2
		No	115	85.8
		Total	134	100.0
	8-9 years	Yes	60	15.5
		No	328	84.5
		Total	388	100.0
	10-12 years	Yes	93	19.5
		No	385	80.5
		Total	478	100.0
Gender wise	Male	Yes	107	19.0
		No	456	81.0
		Total	563	100.0
	Female	Yes	65	14.9
		No	372	85.1
		Total	437	100.0

Source: Primary data

Table 3.9

Pearson's Chi Square Test showing number of children watching T.V outside home

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	4.044	1	.044*
District wise	1.011	1	.315
Age wise	3.388	2	.184
Gender wise	2.948	1	.086

Source: Primary data

*Significant at 5% level of significance.

The classified and cross tabulated data is given in table 3.8 and the chi square result is shown in table 3.9. From the table it can be seen that children who visit their friends, neighbours, relatives watch TV there. Similarly when children face

restrictions in their own house they tend to visit their neighbours and watch TV there. It can be seen that 19.6%respondent's in urban and 14.8% respondents in rural area watch T.V outside.

Similarly 16.0% in North Goa and 18.4% in South Goa watch T.V outside. Age wise analysis shows 14.2% in 6-7 years, 15.5% in 8-9 years and 19.5% in 10-12 years of age watch T.V outside. While gender wise analysis shows 107 males and 65 females watch T.V outside.

Chi square test was applied to see whether there is any association between children watching TV outside home and the various categories i.e. area wise, district wise, age wise and gender wise. There is a significant association as far as area is concerned as the p value is .044 which is less than 0.05 at 5% level of significance. All the other p values were greater than 0.05 at 5% level of significance and so it can be stated that there is no association between children watching TV outside home and area, gender and age.

Table 3.10

Children's hours of TV watching on school days and holidays in the state of Goa

Category			**School days**		**Holidays**	
		Time spent in T.V watching	**No.of children**	**Percentage**	**No. of children**	**Percentage**
Area wise	Urban	Less than 1 hour	176	35.2	40	8.0
		1-2 hours	203	40.6	131	26.2
		2-3 hours	79	15.8	158	31.6
		More than 3 hours	42	8.4	171	34.2
		Total	500	100.0	500	100.0
	Rural	Less than 1 hour	184	36.8	39	7.8
		1-2 hours	202	40.4	131	26.2
		2-3 hours	80	16.0	151	30.2
		More than 3 hours	34	6.8	179	35.8
		Total	500	100.0	500	100.0

District wise	North Goa	Less than 1 hour	178	35.6	35	7.0
		1-2 hours	192	38.4	122	24.4
		2-3 hours	86	17.2	147	29.4
		More than 3 hours	44	8.8	196	39.2
		Total	500	100.0	500	100.0
	South Goa	Less than 1 hour	182	36.4	44	8.8
		1-2 hours	213	42.6	140	28.0
		2-3 hours	73	14.6	162	32.4
		More than 3 hours	32	6.4	154	30.8
		Total	500	100.0	500	100.0
		1-2 hours	241	42.8	144	25.6
		2-3 hours	95	16.9	182	32.3
		More than 3 hours	40	7.1	187	33.2
		Total	563	100.0	563	100.0
	Female	Less than 1 hour	173	39.6	29	6.6
		1-2 hours	164	37.5	118	27.0
		2-3 hours	64	14.6	127	29.1
		More than 3 hours	36	8.2	163	37.3
		Total	437	100.0	437	100.0
Age wise	6-7 years	Less than 1 hour	42	31.3	7	5.2
		1-2 hours	58	43.3	34	25.4
		2-3 hours	24	17.9	44	32.8
		More than 3 hours	10	7.5	49	36.6
		Total	134	100.0	134	100.0
	8-9 years	Less than 1 hour	152	39.2	38	9.8
		1-2 hours	165	42.5	107	27.6
		2-3 hours	47	12.1	119	30.7
		More than 3 hours	24	6.2	124	32
		Total	388	100.0	388	100.0
	10-12 years	Less than 1 hour	166	34.7	34	7.1
		1-2 hours	182	38.1	121	25.3
		2-3 hours	88	18.4	146	30.5
		More than 3 hours	42	8.8	177	37
		Total	478	100.0	478	100.0

Source: Primary data

Table 3.11

Pearson's Chi Square Test on hours of TV watching on school days in the state of Goa

Category	Chi Square value	Df	Asymp.Sig (2 sided)
Area wise	1.029	3	.794
District wise	4.091	3	.252
Gender wise	5.652	3	.130
Age wise	11.096	6	.085

Source: Primary data, Significant at 5% level of significance

Table 3.12

Pearson's Chi Square Test on hours of TV watching on holidays in the state of Goa

Category	Chi Square value	Df	Asymp.Sig (2 sided)
Area wise	.354	3	.950
District wise	8.030	3	.045*
Gender wise	3.782	3	.286
Age wise	5.681	6	.460

Source: Primary data,*Significant at 5% level of significance

Table 3.10 shows children's hours of TV watching on school days and holidays. It has been cross tabulated area wise, district wise, gender wise and age wise.

Children in urban and rural areas were found to watch 1-2 hours of TV on school days while it extended to more than 3 hours on holidays. District wise analysis shows that children in North Goa watch TV for 1-2 hours on school days while on holidays they watch for 2-3 hours only. Children of all age groups were found to watch a minimum of 1-2 hours on school days and more than 3 hours on holidays. On the other hand on school days boys (male) were found to watch for 1-2 hours while girls (female) spent less than 1 hour in front of T.V while on holidays it was more than 3 hours for both male and female.

Chi square was applied as shown in table 3.11 to see whether there is any association between hours of TV watching and school days. As all the p values were found to be greater than 0.05 at 5% level of significance it can be stated that there is no significant association between children's hours of T.V watching and area, district, age and gender.

Further chi square was applied as shown in table 3.12 to see whether there is any association between hours of TV watching and holidays. It has been found that as far as area, gender and age is concerned there is no significant association as p values are greater than 0.05 while in case of district there is a significant association as p value is .045 which is found to be less than 0.05 at 5% level of significance. Hence it can be concluded that there is no association between hours of TV watching on holidays and area, gender and age while there is significant association district wise.

Table 3.13

Number of children watching advertisements in the state of Goa

Category		Yes/No	No. of children	Percentage
Area wise	Urban	Yes	432	86.4
		No	68	13.6
		Total	500	100.0

	Rural	Yes	442	88.4
		No	58	11.6
		Total	500	100.0
District wise	North Goa	Yes	439	87.8
		No	61	12.2
		Total	500	100.0
	South Goa	Yes	435	87.0
		No	65	13.0
		Total	500	100.0
Age wise	6-7 years	Yes	116	86.6
		No	18	13.4
		Total	134	100.0
	8-9 years	Yes	344	88.7
		No	44	11.3
		Total	388	100.0
	10-12 years	Yes	414	86.6
		No	64	13.4
		Total	478	100.0
Gender wise	Male	Yes	491	87.2
		No	72	12.8
		Total	563	100.0
	Female	Yes	383	87.6
		No	54	12.4
		Total	437	100.0

Source: Primary data

Table 3.14

Pearson's Chi square test showing number of children watching advertisements

Category	Chi square value	Df	Asymp.Sig (2 sided)
Area wise	.908	1	.341
District wise	.145	1	.703
Age wise	.914	2	.633
Gender wise	.042	1	.838

Source: Primary data, Significant at 5% level of significance

Table 3.13 shows the number of children watching advertisements in the state of Goa. It has been found that all children from all areas, districts, age categories and gender watch advertisements. 86.4% respondents from urban area and 88.4% respondents from rural area watch advertisements.

Similarly 87.8% respondents from North Goa and 87.0% respondents in South Goa watch advertisements. Age wise it can be seen that 116 in age of 6-7 years, 344 in the age of 8-9 years and 414 in the age group of 10-12 years watch ads. On the other hand 87.2% males and 87.6% females watch advertisements.

As seen from table 3.14 chi square was applied to see whether there is any association between children watching advertisements and various categories (i.e. area wise, district wise, gender wise and age wise). It has been found that there is no association between children watching advertisements and various categories as all p values are greater than 0.05 at 5% level of significance.

Table 3.15
Children's memorability about advertisements in the state of Goa

Category		Type of Adv.	No. of children	Percentage
Area wise	Urban	Food	165	33
		Clothing	44	8.8
		Toys	144	28.8
		Electronics	80	16
		Others	67	13.4
		Total	500	100.0
	Rural	Food	161	32.2
		Clothing	39	7.8
		Toys	166	33.2
		Electronics	65	13
		Others	69	13.8
		Total	500	100.0
District wise	North Goa	Food	168	33.6
		Clothing	41	8.2
		Toys	148	29.6
		Electronics	75	15

		Others	68	13.6
		Total	500	100.0
	South Goa	Food	158	31.6
		Clothing	42	8.4
		Toys	162	32.4
		Electronics	70	14
		Others	68	13.6
		Total	500	100.0
Age wise	6-7 years	Food	52	38.8
		Clothing	2	1.5
		Toys	52	38.8
		Electronics	14	10.4
		Others	14	10.4
		Total	134	100.0
	8-9years	Food	142	36.6
		Clothing	29	7.5
		Toys	130	33.5
		Electronics	41	10.6
		Others	46	11.9
		Total	388	100.0
	10-12 years	Food	132	27.6
		Clothing	52	10.9
		Toys	128	26.8
		Electronics	90	18.8
		Others	76	15.9
		Total	478	100.0
Gender wise	Male	Food	164	29.1
		Clothing	23	4.1
		Toys	198	35.2
		Electronics	104	18.5
		Others	74	13.1
		Total	563	100.0
	Female	Food	162	37.1
		Clothing	60	13.7
		Toys	112	25.6
		Electronics	41	9.4
		Others	62	14.2
		Total	437	100.0

Source: Primary data

Table 3.16

Pearson's Chi Square Test showing children's memorability of advertisements

Category	Chi Square value	Df	Asymp. Sig (2 sided)
Area wise	3.493	4	.479
District wise	1.123	4	.891
Age wise	40.465	8	.000*
Gender wise	53.773	4	.000*

Source: Primary data, *Significant at 5% level of significance

Table 3.15 shows children's memorability about advertisements in the state of Goa. Analysis undertaken area wise showed that in urban areas children remembered more of food advertisements i.e. (33%) followed by toy advertisement (28.8%) while in rural areas children being more playful they remember more of toy advertisements

(33.2%) followed by food advertisements i.e. (32.2%). In North Goa children remembered more of food advertisements i.e. (33.6%) followed by toy advertisements (29.6%) while in South Goa children remember more of toy advertisements (32.4%) followed by food advertisements i.e. (31.6%).

Chi Square was applied to see whether there is any association between children's memorability about advertisements and the 4 categories (i.e. area wise, district wise, age wise and gender wise). It has been found that there is no association between children's memorability about advertisements and area and district as all p values for the 2 categories was found to be greater than 0.05 at 5% level of significance.

Further age wise analysis showed that children in the age group of 6-7 years had high memorability of food ads (38.8%) as well as for toy ads (38.8%).Children of 8-9 years are more grown up as compared to 6-7 years. They remember food ads (36.6%) as well as toy ads (33.5%). They have a liking for electronics advertisements (10.6%). On the other hand children in the age group of 10-12 years have fascination for food (27.6%), toys (26.8%), and electronics (18.8%), and clothes advertisements (10.9%).

Gender wise analysis showed that boys (males) remembered more of toy advertisements (35.2%) followed by food (29.1%), electronics (18.5%), with less interest in clothing (4.1%) while girls (females) remembered more of food advertisements (37.1%), followed by toys (25.6%), with more interest in clothing (13.7%) while electronics ads showed (9.4%) memorability. Therefore it can be seen that boys prefer playful objects while girls are more occupied with food and clothing.

Chi Square was applied to see whether there is any association between children's

memorability about ads and the 2 categories (age and gender). It was found that there is a significantly high association between children's memorability about advertisements and age and gender as both p values were found to be .000 which is less than 0.01 at 5% level of significance.

Table 3.17
Children's reactions on seeing advertisements

Category		Children's reactions	Number of children	Percentage
Area wise	Urban	Watch with interest	267	53.4
		Switch TV channels	137	27.4
		Lower the volume	73	14.6
		Leave the room	23	4.6
		Total	500	100.0
	Rural	Watch with interest	256	57.2
		Switch TV channels	139	27.8

		Lower the volume	74	14.8
		Leave the room	31	6.2
		Total	500	100.0
District wise	North Goa	Watch with interest	275	55.0
		Switch TV channels	126	25.2
		Lower the volume	71	14.2
		Leave the room	28	5.6
		Total	500	100.0
	South Goa	Watch with interest	248	49.6
		Switch TV channels	150	30.0
		Lower the volume	76	15.2
		Leave the room	26	5.2
		Total	500	100.0
Age wise	6-7 years	Watch with interest	61	45.5
		Switch TV channels	50	37.3
		Lower the volume	15	11.2
		Leave the room	8	6.0
		Total	134	100.0
	8-9 years	Watch with interest	222	57.2
		Switch TV channels	90	23.2
		Lower the volume	54	13.9
		Leave the room	22	5.7
		Total	388	100.0
	10-12 years	Watch with interest	240	50.2
		Switch TV channels	136	28.5
		Lower the volume	78	16.3
		Leave the room	24	5.0
		Total	478	100.0
Gender	Male	Watch with interest	294	52.2
		Switch TV channels	158	28.1
		Lower the volume	75	13.3
		Leave the room	36	6.4
		Total	563	100.0
	Female	Watch with interest	229	52.4
		Switch TV channels	118	27.0
		Lower the volume	72	16.5
		Leave the room	18	4.1
		Total	437	100.0

Source: Primary data

Table 3.18

Pearson's Chi Square Test on children's reaction on seeing advertisements

Category	Chi Square value	Df	Asymp. Sig (2 sided)
Area wise	1.438	3	.697
District wise	3.725	3	.293
Age wise	13.197	6	.040*
Gender wise	4.126	3	.248

Source: Primary data, *Significant at 5% level of significance

From the table 3.17 it can be seen that all children have lot of interest in watching advertisements. They watch advertisements with the same interest as they watch their favourite programmes. Around 53.4% of the respondents in urban area and 51.2% respondents in rural area watch T.V with interest while 27% respondents in both

areas switch channels, 14% lower the volume and the remaining leave the room on seeing advertisements.

District wise analysis shows 55% respondents in North Goa and 49.6% respondents in South Goa watching T.V with interest. 25.2% in North Goa and 30% in South Goa switch channels.14% lower the volume and 5% leave the room in both the districts.

Children in the age group of 6-7 years were found to switch channels more often (i.e. 37.3%) than the other age groups as they are immature, restless and playful and are constantly searching for cartoons, music or something new. Similarly as age advances children's interest towards TV decreases. This is seen from the table as children in the age group of 10-12 are found to watch less advertisement (i.e. 50.2%) as compared to 8-9 years (i.e. 57.2%). They are also found to lower the volume (i.e. 16.3%) when they see advertisements as compared to 8-9 year old (i.e. 13.9%).

Gender wise analysis shows 52.2% boys (males) and 52.4% girls (females) watching ads with interest while 28.1% males and 27.0% females switching T.V channels.

Chi square test was applied to see whether there is any association between children's reactions on seeing advertisements and the various categories i.e. area, district, age and gender wise. From table 3.18 it can be seen that all the p values were greater than 0.05 at 5% level of significance which shows that there is no significant association between children's reactions on seeing advertisements and area, district and gender except in case of age where it was found that there is a significant association as the p value is .040 which is less than 0.05 at 5% level of significance.

Table 3.19

Persons accompanying children while watching TV in the state of Goa

Category		Persons accompanying	No. of children	Percentage
Area wise	Urban	Parents	181	36.2
		Brothers/sisters	226	45.2
		Grand parents	27	5.4
		Friends	11	2.2
		Neighbours	1	.2
		None	54	10.8
		Total	500	100.0
	Rural	Parents	188	37.6
		Brothers/sisters	224	44.8
		Grand parents	24	4.8
		Friends	20	4
		Neighbours	3	.6
		None	41	8.2
		Total	500	100.0
District wise	North Goa	Parents	181	36.2

		Brothers/sisters	226	45.2
		Grand parents	32	6.4
		Friends	16	3.2
		Neighbours	1	.2
		None	44	8.8
		Total	500	100.0
	South Goa	Parents	188	37.6
		Brothers/sisters	224	44.8
		Grand parents	19	3.8
		Friends	15	3
		Neighbours	3	.6
		None	51	10.2
		Total	500	100.0
Age wise	6-7 years	Parents	47	35.1
		Brothers/sisters	62	46.3
		Grand parents	9	6.7
		Friends	3	2.2
		Neighbours	0	.0
		None	13	9.7
		Total	134	100.0
	8-9 years	Parents	143	36.9
		Brothers/sisters	179	46.1
		Grand parents	16	4.1
		Friends	12	3.1
		Neighbours	1	.3
		None	37	9.5
		Total	388	100.0
	10-12 years	Parents	179	37.4
		Brothers/sisters	209	43.7
		Grand parents	26	5.4
		Friends	16	3.3
		Neighbours	3	.6
		None	45	9.4
		Total	478	100.0
Gender wise	Male	Parents	210	37.3
		Brothers/sisters	241	42.8
		Grand parents	29	5.2
		Friends	17	3
		Neighbours	4	7
		None	62	11
		Total	563	100.0

Table 3.19 (contd…..)

Category		Persons accompanying	No. of children	Percentage
Gender wise	Female	Parents	159	36.4
		Brothers/sisters	209	47.8
		Grand parents	22	5
		Friends	14	3.2
		Neighbours	0	.0
		None	33	7.6
		Total	437	100.0

Source: Primary data

Table 3.20

Pearson's Chi Square Test showing persons accompanying children while watching T.V

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	5.710	5	.335

District wise	5.003	5	.415
Age wise	3.788	10	.956
Gender wise	7.674	5	.175

Source: Primary data, Significant at 5% level of significance.

Table 3.19 shows persons accompanying children while watching TV. From the cross tabulation it can be seen that 45.2% respondents in urban area and 44.8% respondents in rural area were accompanied by their brothers/ sisters while watching T.V while 36.2% respondents in urban and 37.6% respondents in rural area were accompanied by their parents. Only a small number of respondents were accompanied by grandparents, friends and neighbours.

Around 45% respondents were accompanied by siblings and around 36% were accompanied by parents in North and South Goa. 45% children in all age groups prefer to watch T.V with their siblings while 36.9% respondents watch with their parents. Similarly gender wise also shows a similar picture. 45% of the boys (male) and girls (female) watch T.V with their siblings while 36.9% of them watch with their parents.

As seen in table 3.20 chi square test was undertaken to find out whether there is any association between persons accompanying children while watching TV and the various categories i.e. area wise, district wise, age wise and gender wise. As all the p values were greater than 0.05 at 5% level of significance it can be stated that there is no association between persons accompanying children while watching TV and area, gender, district and age.

Table 3.21
Frequency of parent's discussion with children in the state of Goa

Category		Frequency of discussion	No. of children	Percentage
Area wise	Urban	Often	41	8.2
		Sometimes	210	42
		Only if asked	162	32.4
		Never /seldom	87	17.4
		Total	500	100.0
	Rural	Often	38	7.6
		Sometimes	215	43
		Only if asked	171	34.2
		Never /seldom	76	15.2

		Total	500	100.0
District wise	North Goa	Often	35	7
		Sometimes	213	42.6
		Only if asked	163	32.6
		Never /seldom	89	17.8
		Total	500	100.0
	South Goa	Often	44	8.8
		Sometimes	212	42.4
		Only if asked	170	34
		Never /seldom	74	14.8
		Total	500	100.0
Age wise	6-7 years	Often	10	7.5
		Sometimes	59	44
		Only if asked	44	32.8
		Never /seldom	21	15.7
		Total	134	100.0
	8-9 years	Often	32	8.2
		Sometimes	155	39.9
		Only if asked	136	35.1
		Never /seldom	65	16.8
		Total	388	100.0
	10-12 years	Often	37	7.7
		Sometimes	211	44.1
		Only if asked	153	32
		Never /seldom	77	16.1
		Total	478	100.0
Gender wise	Male	Often	46	8.2
		Sometimes	240	42.6
		Only if asked	189	33.6
		Never /seldom	88	15.6
		Total	563	100.0
	Female	Often	33	7.6
		Sometimes	185	42.3
		Only if asked	144	33
		Never /seldom	75	17.2
		Total	437	100.0

Source: Primary data

Table 3.22

Pearson's Chi Square Test showing frequency of parent's discussion with children

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	1.158	3	.763
District wise	2.555	3	.465
Age wise	1.776	6	.939
Gender wise	.507	3	.917

Source: Primary data,

Significant at 5% level of significance.

Table 3.21 shows frequency of parent's discussion with children. From the table it can be seen that parents discussed only sometimes with their children regarding TV advertisements or in other cases only if asked. Any discussion what so ever took place between them only when children asked them about it. Around 42- 44% of the parents area wise ,district wise age wise and gender wise 'sometimes 'discussed with their children about advertisements while around 32-34% of the parents 'discussed only if asked '.

Chi square test as shown in table 3.22 was undertaken to find out whether there is any association between frequency of parent's discussion with children and the various categories i.e. area wise, district wise, age wise and gender wise. As all the p values were greater than 0.05 at 5% level of significance it can be stated that there is no association between frequency of parent's discussion with children and area, gender, district and age.

Table 3.23

Factors attracting children to TV advertisements in the state of Goa

Category		Factors	Garrets mean score	Rank
Area wise	Urban	Music	56.7	1
		Brand	49.7	3
		Colour	50.2	2
		Celebrity	48.3	4
		Presentation	48.0	5
		Slogan	47.1	6
	Rural	Music	55.4	1
		Brand	49.3	4
		Colour	50.9	2
		Celebrity	49.9	3

		Presentation	47.7	5
		Slogan	46.9	6
District wise	North Goa	Music	56.0	1
		Brand	49.0	4
		Colour	49.6	3
		Celebrity	50.2	2
		Presentation	47.6	5
		Slogan	47.6	6
	South Goa	Music	56.1	1
		Brand	49.9	3
		Colour	57.5	2
		Celebrity	48.0	5
		Presentation	48.1	4
		Slogan	46.4	6
Age wise	6-7 years	Music	57.6	1
		Brand	48.8	4
		Colour	57.8	2
		Celebrity	50.6	3
		Presentation	44.1	6
		Slogan	47.4	5
	8-9 years	Music	56.5	1
		Brand	49.8	3
		Colour	57.1	2
		Celebrity	49.2	4
		Presentation	47.3	5
		Slogan	46.0	6
	10-12 years	Music	55.2	1
		Brand	49.4	3
		Colour	49.8	2
		Celebrity	48.6	5
		Presentation	49.3	4
		Slogan	47.7	6
Gender wise	Male	Music	56.6	1
		Brand	49.7	3
		Colour	50.8	2
		Celebrity	48.5	4
		Presentation	47.8	5
		Slogan	46.6	6
	Female	Music	55.3	1
		Brand	49.2	4
		Colour	50.3	2
		Celebrity	49.9	3
		Presentation	47.9	5
		Slogan	47.5	6

Source: Primary data

In table 3.23 an attempt was made to study factors attracting children to T.V viewing. Respondents were asked what is it that influences them to watch advertisements. Was it music, brand, colour, celebrity, presentations or slogan that they liked the most? Garrets mean score was used to rank the factors. An analysis was done area wise, region wise, age wise and gender wise to know the preference of children.

Area wise it can be seen that in urban area 56.7% of the respondents give first preference to music giving it the first rank, 50.2% of the respondents prefer the

colour and so it gets second rank, 49.7% prefer brand and so it is ranked third, followed by celebrity 48.3% with fourth rank, presentation with 48.0% preference gets fifth rank and slogan gets the least preference with 47.1% getting sixth rank. In the rural areas 55.4% respondents give first preference to music. They watch advertisements for the beautiful music played, while colour gets second rank with 50.9% respondents preferring it. Children in rural areas are very much influenced by celebrities. 49.9% gives third preference to celebrities. 49.3% to brand giving it fourth rank, 47.7% giving fifth preference to presentation and 46.9% giving sixth rank to slogan.

Region wise ranking was provided to various factors influencing children towards advertisements. It can be seen that music gets first rank with 56% children from North Goa and 56.1% children from South Goa giving preference to music.

The second preference in North Goa with 50.2% of respondents goes to celebrity; colour gets third preference with 49.6% respondents preferring it. 49% respondents give fourth preference to brand, 47.6% gave fifth preference to presentation and slogan gets sixth preference due to 47.6% respondents.

On the other hand in South Goa 51.5% children give preference to colour, 49.9% give third preference to brand, 48.1% give fourth preference to presentation, 48% give fifth preference to celebrity and 46.4% give sixth rank to slogan.

Age wise analysis showed 57.6% children in the age group of 6-7 years, 56.5% in the age group of 8-9 years and 55.2% children in the age group of 10-12 years give first preference to music.

Similarly 51.8% respondents in the age group of 6-7 years, 57.1% in the age group of 8-9 years and 49.8% children in the age group of 10-12 years give second preference to colour.

50.6% children in the age group of 6-7 years give third preference to celebrity, 48.8% give fourth preference to brand, fifth preference was given to slogan by 47.4% respondents and 44.1% give sixth preference to presentation.

49.8% children in the age group of 8-9 years give third preference to brand, 49.2% give fourth preference to celebrity, fifth preference was given to presentation by 47.3% respondents and 46% give sixth preference to slogan.

49.4% respondents in the age group of 10-12 years give third preference to brand, 49.3% give fourth preference to presentation, fifth preference was given to celebrity by 48.6% respondents and 47.7% give sixth preference to slogan.

It can be seen that children in various age groups show different variations in their liking towards advertisements.

Gender wise analysis showed that 56.6% boys and 55.3% girls give first preference to music, similarly 50.8% boys and 50.3% girls give second preference to colour. 49.7% boys give third preference to brand, 48.5% boys give fourth preference to celebrity, 47.8% boys give fifth preference to presentation and 46.6% give sixth preference to slogan.

On the other hand 49.9% girls give third preference to celebrity, 49.2% give fourth preference to brand, 47.9% give fifth preference to presentation and 47.5% give sixth preference to slogan.

Table 3.24

Frequency of children's TV viewing in the state of Goa

Category		Frequency of T.V viewing	No. of children	Percentage
Area wise	Urban	Less	3	6
		Moderate	315	63
		High	182	36.4
		Total	500	100.0
	Rural	Less	6	1.2
		Moderate	313	62.6
		High	181	36.2
		Total	500	100.0
District wise	North Goa	Less	4	.8
		Moderate	306	61.2

		High	190	38.0
		Total	500	100.0
	South Goa	Less	5	1
		Moderate	322	64.4
		High	173	34.6
		Total	500	100.0
Gender wise	Male	Less	7	1.2
		Moderate	347	61.6
		High	209	37.1
		Total	563	100.0
	Female	Less	2	.5
		Moderate	281	64.3
		High	154	35.2
		Total	437	100.0
Age wise	6-7 years	Less	1	.7
		Moderate	81	60.4
		High	52	38.8
		Total	134	100.0
	8-9 years	Less	6	1.5
		Moderate	259	66.8
		High	123	31.7
		Total	388	100.0
	10-12 years	Less	2	.4
		Moderate	288	60.3
		High	188	39.3
		Total	478	100.0

Source: Primary data
Significant at 5% level of significance

Table 3.25
Pearson's Chi Square Test showing frequency of children's T.V viewing

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	1.009	2	.604
District wise	1.315	2	.518
Gender wise	2.206	2	.332
Age wise	8.348	4	.080

Source: Primary data
Significant at 5% level of significance.

Table 3.24 shows that frequency of children's TV viewing is moderate in the state of Goa. It is 63% in urban area and 62.6% in rural area. Similarly it is 61.2% in North Goa and 64.4% in South Goa. Age wise it is 60.4% for 6-7 year old, 66.8% for 8-9 year old and 60.3% for 10-12 year old. Gender wise it is found that 61.6% males and 64.3% females view television.

From the above it can be seen that children are not totally addicted to television, they watch minimum number of hours on school days while on holidays their viewing increases which is quite normal.

Chi square test was undertaken in table 3.25 to find out whether there is any association between frequency of children's TV viewing and the various categories i.e. area wise, district wise, age wise and gender wise. As all the p values were greater than 0.05 at 5% level of significance it can be stated that there is no association between frequency of children's TV viewing and area, gender, district and age.

3.4. Discussion and Conclusion

The above explanation can be summarised in the table below:

Table 3.26
Table showing the chi square values

Sr. No.	Various aspects of T.V viewing tested based on the objective	Area U / R	District N / S	Age 6-7, 8-9, 10-12 years	Gender M / F
		Accepted	Accepted	Accepted	Accepted
1	Children having T.V at home	.341	.341	.478	.064
2	Children watching T.V outside home	.044*	.315	.184	.086
3	Children's hours of TV watching on school days	.794	.252	.130	.085
4	Children's hours of TV watching on holidays	.950	.045*	.286	.460
5	Number of children watching advertisements	.341	.703	.633	.838
6	Children's memorability about advertisements	.479	.891	.000*	.000*
7	Person's accompanying children while watching TV	.335	.415	.956	.175
8	Frequency of parents discussion with children	.763	.465	.939	.917
9	Frequency of children's TV viewing	.604	.578	.332	.080
10	Children's reactions on seeing advertisements	.697	.293	.040*	.248

Source: Primary data.
*Significant at 5% level of significance.

From the present study it can be concluded that children from of all areas, district, of all age groups and of both sexes were found to be regular TV viewers. It supports the findings of Costa. J. C (2012) that having TV at home is not the sole criteria for watching advertisements. Irrespective of having a TV at home, children from all categories do watch advertisements. Similar finding has been drawn by Sara, V, and Jain. N.C, Singhai, M (2013) that most of the children in urban and rural areas spent quite a lot of time sitting in front of the TV screen watching various programmes.

It can further be revealed that children in the age group of 8-9 years were very sensitive and were found to be more influenced in watching advertisements and also remembering them. They had high memorability for food advertisements followed by advertisements of toys. This is consistent with Chan. K (2000) observation that children from grade 2 (i.e. age of 7-8 years) knew what advertising was and had developed and appreciation for TV commercials

It was observed that girls watch advertisements more as compared to boys and also remember them. They were more fascinated by food advertisements followed by toy advertisements .Girls preferred to taste new flavour and relish tasty food as compared to boys who experimented with variety of toys and electronic items. This finding supports that of Chernin (2008) that younger as well as older children are influenced by food commercials. Boys were found to be more influenced than girls. Similar finding by Cherney (2006) observed that boys in the age group of 5-13 years were found to spend more time in sporting activities watching TV and playing computer games. It was found that girls spent less amount of time watching TV and the main reasons observed during data collection was that girls are more studious and sincere in their studies and were also engaged in household activities which kept them busy.

Larson and Verma (2002) found that in Indian urban middle class families, 73% of TV viewing occurred with family members. TV viewing is a family activity occurring in a context where parent's supervision and influence are likely. This study observed that parents discussed about TV advertisements more with girls and older children and that too only when their children enquired about it from them.

It was also found that parents discussed about TV advertisements more with girls and older children and that too only when their children enquired about it from them. Similar conclusion has also been drawn by Ahluwalia A.K & Singh R. (2012).

Children from urban area showed more interest in watching advertisements and were found to be watching TV either alone or with their siblings, while children in rural area were accompanied by their parents while watching television. This could be because parents in urban areas were either employed or busy in other activities and

were away from home while on the other hand parents in rural areas were less busy and at home and so could find time to watch TV with their children.

Children are attracted to watching television on school days as well as on holidays. From the survey it was found that on school days children watch TV for 2 hours while on holidays it extends to more than 3 hours. The findings of the study by Gurleen K, Sukhmani (2011) reveals that most young Indians watch TV either most often or sometimes and spend about 3 to 5 hours daily. There is significant difference in frequency of watching TV between males and females. Similar findings have been observed by Signorielli (1989) that the average child (under 12) watch approximately 3 and a half hours of TV per day. It can also be seen that children in the age group of 10-12 years watch less amount of television as compared to children in the age group of 8-9 years and their interest is more in electronic items and clothes as compared to the other age groups whose interest is more in food and toys.

This could be because as age advances the viewership of television decreases as children are pre occupied with other activities. As this age group is slowly moving into the threshold of being teenagers their interest in seeing advertisements is slowly replaced by other priorities. There are literatures that state that as children grow older, they become more cynical and distrustful of advertising claims (Riecken & Yavas 1990, Rossiter 1979, Robertson &Rossiter 1974). This finding also supports that of Saraf, Jain &Singhai (2013) that as age advances the TV viewing hours of children decrease. Children cannot be easily convinced as they grow up, since they also use alternate sources of information and depend less on TV advertisements (Van Evra 1995).

Thus from the above analysis it can be concluded that overall TV viewing behaviour of children is the same as far as area and age is concerned.

While in case of gender there is a significant difference as far as memorability of advertisements are concerned.

Boys remember more of toys and electronic advertisements while girls remember food advertisements. Similarly boys were found to watch T.V with their parents or siblings while girls preferred to watch with their siblings. As far as region is concerned it can be seen that children in South Goa watch for 2-3 hours on holidays as compared to children in North Goa who watch for more than 3 hours. Overall we

find that children's frequency of T.V viewing was found to be moderate in the state of Goa.

Some more results that can be drawn include:

1) 99% of the Children from urban areas and 98% of the Children from rural areas were found to be regular T.V viewers.
2) 45.5% children in age group of 6-7 years, 57.2% children in the age group of 8-9 years and 50.2% children in the age group of 10-12 years watch advertisements with a lot of interest.
3) 432 children in urban areas and 442 children in rural areas like to watch T.V Advertisements.
4) 164 boys (males) and 162 girls (females) like food advertisements while 198 boys and 112 girls like toy advertisements
5) On School days 203 children in urban areas and 202 children in rural areas watched television for 1-2 hours.
6) On Holidays 171 children in urban areas and 179 children in rural areas watched television for more than 3 hours.
7) Around 45% of the children watched television with their siblings.
8) 40-44% of the parents undertook discussion with their Children on Advertisements "sometimes' while 32-42% of the parents undertook discussion 'only if asked'.
9) Around 56% of the Children were attracted to music while 50-57% Children was attracted to colour in T.V advertisements.
10) 58 children in the age group of 6-7 years, 165 children in the age group of 8-9 years and 182 children in the age group of 10-12 years watch television for 1-2 hours on school days.

11) 49 Children in in the age group of 6-7 years, 124 Children in the age group of 8-9 years and 177 Children in the age group of 10-12 years watch television for more than 3 hours on holidays.
12) 60-64% of the Children undertook moderate T.V viewing while 35-39% of the Children were high T.V viewers while the remaining were low T.V viewers

Hence from the Table 3.27 it can be seen that children watching TV outside home shows a significant relationship area wise and children's hours of TV watching on holidays shows significant relationship district wise. On the other hand children's memorability about advertisements show significantly high relationship age wise and gender wise. All other variables show no significant relationship between various aspects of TV viewing and area, district, age and gender. Hence we can conclude that there is no significant relationship between the various variables tested above and area, district, age and gender and therefore H01, H02, H03 and H04 are accepted.

CHAPTER 4

INFLUENCE OF T.V ADVERTISING

ON FOOD & BEVERAGE

PREFERENCES OF CHILDREN

CHAPTER FOUR

INFLUENCE OF T.V ADVERTISING ON FOOD AND BEVERAGE PREFERENCES OF CHILDREN

4.1 INTRODUCTION

Food advertisements have considerable impact on the eating habits of children. They normally show food items rich in fat, saturated fat, sugar, salt and sodium which are very harmful to children's health. Children get easily carried away by these advertisements and want to the buy the advertised products. Constant T.V watching and eating of such food without any physical activity leads to obesity and overweight problems.

4.2 HYPOTHESIS AND METHODOLOGY

This chapter deals with the second objective i.e. to examine the influence of T.V advertising on food and beverage preferences of children. For undertaking this study information was gathered on amount of pocket money obtained by children per month, eating while watching T.V, T.V advertisements that influence purchase of food and beverages, frequency of consumption of eatables and drinks and finally the impact of T.V viewing on food habits. T.V advertisements showing food products particularly confectionery items from January 2014 to June 2014 were considered for the study. Questionnaire was prepared with a list of advertisements and the food products advertised and children were asked to state which of the products under each advertisement was consumed by them. Similarly other questions related to food and beverage consumption were also asked. Hypothesis were framed and tested by cross tabulating the data by using percentages and chi square test. Further factor analysis and correlation were also used.

The following hypothesis were framed:

H01: There is no significant difference in the influence of T.V advertisements on food and beverage preferences of children in urban and rural areas of Goa.

H02: There is no significant difference in the influence of T.V advertisements on food and beverage preferences of children in North and South districts of Goa.

H03: There is no significant difference in the influence of T.V advertisements on food and beverage preferences of children in relation to their age.

H04: There is no significant difference in the influence of T.V advertisements on food and beverage preferences of children in relation to their gender.

The above hypothesis were analysed and further tested on the basis of area, district, age and gender.

4.3. ANALYSIS

This section gives the analysis of the study on the basis of Area (urban and rural), District (North and South Goa), Age (6-7, 8-9, 10-12years) and Gender (male and female). In order to study the influence of advertisements on food and beverages Chi Square Test was used while in order to evaluate the impact of T.V viewing on food habits Correlation was used.

Table 4.1

Pocket money obtained by children in the state of Goa

Category		Amount received per month	Number of children	Percentage
Area wise	Urban	Less than Rs. 100	117	23.4
		Rs 100 to Rs 200	52	10.4

		Rs 200 to Rs 400	21	4.2
		Above Rs 400	17	3.4
		None	293	58.6
		Total	500	100.0
	Rural	Less than Rs. 100	141	28.2
		Rs 100 to Rs 200	54	10.8
		Rs 200 to Rs 400	19	3.8
		Above Rs 400	7	1.4
		None	279	55.8
		Total	500	100.0
District wise	North Goa	Less than Rs. 100	132	26.4
		Rs 100 to Rs 200	54	10.8
		Rs 200 to Rs 400	27	5.4
		Above Rs 400	13	2.6
		None	274	54.8
		Total	500	100.0
	South Goa	Less than Rs. 100	126	25.2
		Rs 100 to Rs 200	52	10.4
		Rs 200 to Rs 400	13	2.6
		Above Rs 400	11	2.2
		None	298	59.6
		Total	500	100.0
Age wise	6-7 Years	Less than Rs. 100	33	24.6
		Rs 100 to Rs 200	08	6
		Rs 200 to Rs 400	03	2.2
		Above Rs 400	01	.7
		None	89	66.4
		Total	134	100.0
	8-9 years	Less than Rs. 100	76	19.6
		Rs 100 to Rs 200	23	5.9
		Rs 200 to Rs 400	13	3.4
		Above Rs 400	06	1.5
		None	270	69.6
		Total	388	100.0
	10-12 years	Less than Rs. 100	149	31.2
		Rs 100 to Rs 200	75	15.7
		Rs 200 to Rs 400	24	5.0
		Above Rs 400	17	3.6
		None	213	44.6
		Total	478	100.0
Gender wise	Male	Less than Rs. 100	130	23.1
		Rs 100 to Rs 200	57	10.1
		Rs 200 to Rs 400	16	2.8
		Above Rs 400	15	2.7
		None	345	61.3
		Total	563	100.0
	Female	Less than Rs. 100	128	29.3
		Rs 100 to Rs 200	49	11.2
		Rs 200 to Rs 400	24	5.5
		Above Rs 400	09	2.1
		None	227	57.9
		Total	437	100.0

Source: Primary data

Table 4.2

Pearson's Chi square Test showing pocket money obtained by children

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	6.880	4	.142

District wise	6.251	4	.181
Age wise	67.418	8	.000*
Gender wise	12.383	4	.015*

Source: Primary data, *Significant at 5% level of significance

From the table 4.1 it can be seen that maximum numbers of children do not get pocket money. This shows that maximum parents are not in favour of children buying junk food and consuming them. In addition due to Govt. scheme of providing "mid-day meal" to children in schools there is no need for children to buy and eat anything from outside.

On the other hand there are children who get pocket money. Most of them get less than Rs.100. The analysis done area and district wise show similar result while in case of age wise analysis it can be seen that maximum of the children in the age group of 6-7 years and 8-9 years do not get any pocket money while in in case of 10-12 year old ones 31.2% get less than Rs. 100, 15.7% get between Rs. 100-200. This shows that bigger children get more pocket money as compared to the smaller ones.

Gender wise analysis shows that more number of girls get pocket money as against the boys. 29.3% girls and 23.1% boys get less than Rs. 100 while 11.2% girls and 10.1% boys get between Rs. 100-200.

Chi square test was undertaken to find out whether there is any association between pocket money obtained by children and the various categories i.e. area wise, district wise, age wise and gender wise. From the table it can be seen that in case of area wise and district wise analysis the p value is .142 and .181 which is greater than 0.05 at 5% level of significance while for age wise and gender wise it is .000 and .015 which is less than 0.01 and 0.05 at 5% level of significance.

Hence it can be concluded that pocket money obtained by children has no association with area and district while in case of age and gender there is a significant association.

Table 4.3

Number of children eating while watching TV in the state of Goa

Category		Yes/ No	Number of	Percentage

			children	
Area wise	Urban	Yes	231	46.2
		No	269	53.8
		Total	500	100.0
	Rural	Yes	215	43.0
		No	285	57.0
		Total	500	100.0
District wise	North Goa	Yes	248	49.6
		No	252	50.4
		Total	500	100.0
	South Goa	Yes	198	39.6
		No	302	60.4
		Total	500	100.0
Age wise	6-7 years	Yes	65	48.5
		No	69	57.5
		Total	134	100.0
	8-9 years	Yes	174	44.8
		No	214	55.2
		Total	388	100.0
	10-12 years	Yes	207	43.3
		No	271	56.7
		Total	478	100.0
Gender wise	Male	Yes	266	47.2
		No	297	52.8
		Total	563	100.0
	Female	Yes	180	41.2
		No	257	58.8
		Total	437	100.0

Source: Primary data
Significant at 5% level of significance.

Table 4.4

Pearson's Chi Square Test showing children eating while watching T.V

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	6.880	4	.142
District wise	6.251	4	.181
Age wise	67.418	8	.000*
Gender wise	12.383	4	.015*

Source: Primary data *Significant at 5% level of significance.

From the Table 4.3 it can be seen that maximum number of children do not eat while watching TV or in other words children do not have the habit of eating while watching TV. The numbers of children who do not eat while watching TV are more in South Goa (i.e. 60.4%) as compared to North Goa (i.e. 50.4%).

Chi square test was undertaken to see whether there is any association between children eating while watching TV and the various categories i.e. area wise, district

wise, age wise and gender wise. From the table 4.4 it can be seen that for area wise and district wise the p values are greater than 0.05 at 5% level of significance which shows that there is no significant relationship between children eating while watching TV and area and district. On the other hand in case of age the p value is .000 which is less than 0.01 at 5% level of significance and for gender it is .015 which is less than 0.05 at 5% level of significance. This shows that there is a significantly high relationship between children eating while watching TV and age while in case of gender there is a significant relationship.

In order to examine the influence of food and beverages on children, questionnaires were given to children with a list of T.V advertisements and the products that are sold under them. In other words questionnaire method was adopted to find out which advertised food products were preferred by children. Data collected was analysed and is shown below area wise, district wise, age wise and gender wise.

Table 4.5
Advertisements influencing children's purchase of various food and beverages area wise in the state of Goa

Advertisements		Area			
		Urban		Rural	
		frequency	%	frequency	%
Alpaliebe	None	58	11.6	62	12.4
	Cream fills	89	17.8	69	13.8
	Chocolates	246	49.2	228	45.6
	Both	107	21.4	141	28.2
Total		**500**	**100.0**	**500**	**100.0**
Dominos	None	60	12.0	69	13.8
	Pizza	253	50.6	181	36.2
	Burgers	64	12.8	70	14.0
	Both	123	24.6	180	36.0
Total		**500**	**100.0**	**500**	**100.0**
KFC	None	84	16.8	77	15.4
	1)Pizza	38	7.6	29	5.8
	2)Burgers	30	6.0	27	5.4
	3)French fries	145	29.0	104	20.8
	4)Crunch	57	11.4	40	8.0
	1,2	10	2.0	14	2.8
	1,3	16	3.2	13	2.6
	1,4	13	2.6	17	3.4
	2,3	15	3.0	20	4.0
	2,4	6	1.2	10	2.0
	3,4	27	5.4	35	7.0
	1,2,3	10	2.0	30	6.0
	2,3,4	9	1.8	12	2.4
	All	40	8.0	72	14.4
Total		**500**	**100**	**500**	**100**

Source: Primary data

Table 4.5 (contd…)

Advertisements		Area			
		Urban		Rural	
		frequency	%	frequency	%
Maggie	None	136	27.2	150	30.0
	Noodles	364	72.8	350	70.0
Total		**500**	**100**	**500**	**100**
Yippie	None	148	29.6	155	31.0
	Noodles	352	70.4	345	69.0
Total		**500**	**100**	**500**	**100**
Cadbury	None	56	11.2	50	10.0
	Chocolates	444	88.8	450	90.0
Total		**500**	**100**	**500**	**100**
			100	**500**	**100**
	Biscuits	392	78.4	385	77.0
Total		**500**	**100**	**500**	**100**
Kinder joy	None	76	15.2	100	20.0
	Chocolates	424	84.8	400	80.0
Total		**500**	**100**	**500**	**100**
Horlicks	None	83	16.5	114	22.8
	Health drinks	244	48.8	232	46.3
	Biscuits	76	15.2	71	14.2
	Both	97	19.5	83	16.7
Total		**500**	**100**	**500**	**100**
Boost	None	150	30.0	170	34.0
	Health drinks	350	70.0	330	66.0
Total		**500**	**100**	**500**	**100**
Complan	None	182	36.4	196	39.2
	Health drinks	318	63.6	304	60.8
Total		**500**	**100**	**500**	**100**
Bournvita	None	159	31.8	169	33.8
	Health drinks	341	68.2	331	66.2
Total		**500**	**100**	**500**	**100**
Quaker oats	None	260	52.0	274	54.8
	Oats	240	48.0	226	45.2
Total		**500**	**100**	**500**	**100**
Kellogg's	None	235	47.0	220	44.0
	Cornflakes	265	53.0	280	56.0
Total		**500**	**100**	**500**	**100**
Dabur	None	102	20.4	85	17.0
	1)Chavanprash	79	15.8	56	11.2
	2)Honey	115	23.0	110	22.0
	3)Glucose	74	14.8	67	13.4
	1,2	18	3.6	16	3.2
	1,3	17	3.4	26	5.2
	2,3	40	8.0	53	10.6
	All	55	11.0	87	17.4
Total		**500**	**100**	**500**	**100**
Go cheese	None	160	32.0	124	24.8
	Cheese	110	22.0	114	22.8
	Butter	145	29.0	148	29.6
	Both	85	17.0	114	22.8
Total		**500**	**100**	**500**	**100**
Amul	None	16	3.2	19	3.8
	1)Milk	15	3.0	13	2.6
	2)Butter	16	3.2	13	2.6
	3)Cheese	8	1.6	5	1.0
	4)Ice cream	58	11.6	36	7.2
	5)Sweet drinks	4	.8	4	.8

Table 4.5 (contd…)

Advertisements	Area

		Urban		Rural	
		Frequency	**%**	**Frequency**	**%**
Amul	6)Chocolates	7	1.4	9	1.8
	7)Shrikhand	18	3.6	7	1.4
	All	65	13.0	96	19.2
	1,4	23	4.6	19	3.8
	4,7	17	3.4	9	1.8
	4,5	6	1.2	12	2.4
	4,6	19	3.8	22	4.4
	3,4	6	1.2	7	1.4
	2,3,4,6,7	9	1.8	3	.6
	2,4	9	1.8	6	1.2
	3,4,7	13	2.6	5	1.0
	1,4,7	9	1.8	7	1.4
	1,4,5	5	1.0	7	1.4
	1,3,7	7	1.4	6	1.2
	4,6,7	4	.8	10	2.0
	4,5,6	11	2.2	13	2.6
	1,2,6	6	1.2	7	1.4
	1,2,4	8	1.6	8	1.6
	1,2,3,4	11	2.2	14	2.8
	1,2,3,7	7	1.4	6	1.2
	1,4,6,7	16	3.2	12	2.4
	1,4,5,6	27	5.4	19	3.8
	1,2,3,4,7	10	2.0	16	3.2
	1,2,4,5,6	6	1.2	8	1.6
	1,2,4,6,7	11	2.2	9	1.8
	2,4,5,6,7	4	.8	9	1.8
	1,2,4,5,6	7	1.4	8	1.6
	1,4,5,6,7,	15	3.0	14	2.8
	3,7	4	.8	13	2.6
	1,2,3,4,5,6,	10	2.0	10	2.0
	3,4,5,6,7	13	2.6	19	3.8
Total		**500**	**100**	**500**	**100**
Baskin Robbins	None	120	24.0	110	22.0
	Ice cream	380	76.0	390	78.0
Total		**500**	**100**	**500**	**100**
Kwality walls	None	157	31.4	140	28.0
	Ice cream	343	68.6	360	72.0
Total		**500**	**100**	**500**	**100**
Sunfeast	None	107	21.4	108	21.6
	Biscuits	140	28.0	137	27.4
	Noodles	157	31.4	128	25.6
	Both	96	19.2	127	25.4
Total		**500**	**100**	**500**	**100**
Milano	None	205	41.0	250	50.0
	Biscuits	295	59.0	250	50.0
Total		**500**	**100**	**500**	**100**
Glucose	None	82	16.4	88	17.6
	Biscuits	118	23.6	85	17.0
	Health drinks	222	44.4	215	43.0
	Both	78	15.6	112	22.4
Total		**500**	**100**	**500**	**100**
Nestle	None	68	13.6	50	10.0
	Gems	114	22.8	100	20.0
	Chocolates	166	33.2	147	29.4
	Both	152	30.4	203	40.6
Total		**500**	**100**	**500**	**100**
Coca cola	None	105	20.9	111	22.2
	Soft drinks	280	56.1	245	49.1
	Soda	50	10.0	37	7.3
	Both	65	13.0	107	21.4
Total		**500**	**100**	**500**	**100**
Priya gold	None	240	48.0	235	47.0
	Biscuits	260	52.0	265	53.0
Total		**500**	**100**	**500**	**100**
Pepsi	None	149	29.8	119	23.8
	Soft drinks	255	51.0	263	52.6
	Soda	35	7.0	35	7.0
	Both	61	12.2	83	16.6
Total		**500**	**100**	**500**	**100**

Table 4.5 (contd…)

Advertisements		Area			
		Urban		Rural	
		Frequency	%	Frequency	%
Slice	None	148	29.6	130	26.0
	Soft drinks	352	70.4	370	74.0
Total		**500**	**100**	**500**	**100**
Limca	None	175	35.0	155	31.0
	Soft drinks	325	65.0	345	69.0
Total		**500**	**100**	**500**	**100**
Kissan	None	86	17.2	77	15.4
	1)Jam	226	45.2	170	34.0
	2)Squash	21	4.2	22	4.4
	3)Sauce	52	10.4	55	11.0
	1,2	14	2.8	15	3.0
	1,3	45	9.0	85	17.0
	2,3	8	1.6	8	1.6
	All	48	9.6	68	13.6
Total		**500**	**100**	**500**	**100**
Kurkure	None	166	33.2	140	28.0
	Wafers	334	66.8	360	72.0
Total		**500**	**100**	**500**	**100**
Lays	None	177	35.4	137	27.4
	Wafers	323	64.6	363	72.6
Total		**500**	**100**	**500**	**100**
Balaji	None	198	39.6	160	32.0
	Wafers	302	60.4	340	68.0
Total		**500**	**100**	**500**	**100**
Uncle chips	None	147	29.4	162	32.4
	Chips	353	70.6	338	67.6
Total		**500**	**100**	**500**	**100**
Tang	None	157	31.4	132	26.4
	Sweet drinks	343	68.6	368	73.6
Total		**500**	**100**	**500**	**100**
Rasna	None	139	27.8	117	23.4
	Sweet drinks	361	72.2	383	76.6
Total		**500**	**100**	**500**	**100**
Act II	None	120	24.0	100	20.0
	Popcorn	380	76.0	400	80.0
Total		**500**	**100**	**500**	**10.00**
Foodles	None	189	37.8	185	37.0
	Noodles	311	62.2	315	63.0
Total		**500**	**100**	**500**	**100**

Source: Primary data

The Table 4.5 shows the influence of advertisements on purchase of various food and beverages in urban and rural areas of Goa. An attempt has been made to discuss the demand for various advertised food products in relation to their competitors. In case of expensive branded eatables like Dominos, KFC products the demand is more in urban areas as compared to rural areas. This is evident from the results shown in Table 4.5. The demand for Domino's pizza is 50.6% in urban areas and 36.2% in rural areas. While the demand for burgersis14%in rural areas and 12.8% in urban areas. KFC has a range of products which includes pizza, burgers, French fries and crunch. Of these French fries are quite popular among children.

The demand for French fries is 29% in urban areas and 20.8% in rural areas. It can be seen from the above that Domino's pizza is more popular and in demand as compared to KFC.

Moving on to noodles the 3 advertised products considered are Maggie, Yippee, and Foodles. Out of these Maggie noodles have 72.8% demand in urban areas and 70% demand in rural areas. Yippee noodles have 70.4% demand in urban areas and 69% demand in rural areas.

On the other hand Foodles have 62.2% in urban areas and 63% in rural area. Sun feast has 31.2% demand in urban areas and 25.6% in rural areas. Out of the 3 advertised products Maggie noodles were moreover preferred by children for its taste and were highly influenced by the advertisement followed by Yippee noodles and then Foodles.

Taking a look at chocolates we have Alpaliebe, Cadbury, Kinder joy, Nestle, Amul with their mouth watery chocolates. We find Alpaliebe has cream fills which has 17.8% demand in urban areas and 13.8% demand in rural areas. It also has the normal Alpaliebe chocolates that have 49.2% demand in urban areas and 45.6% in rural area

Chocolates are the favourite of all children and this is evident from the above analysis. Children whether they live in urban and rural areas are fond of it, they cannot resist the temptation of eating chocolates. It can be seen that Cadbury is leading followed by kinder joy, Nestle and Amul. On the other hand Cadbury chocolates have 88.8% demand in urban areas and 90% in rural areas. Kinder joy chocolates on the other hand have 84.8% demand in urban areas and 79.8% demand in rural areas. Nestle has 2 types of products, Gems and chocolates. Gems have 23% demand in urban areas and 20% demand in rural areas while chocolates have 33% demand in urban areas and 29.4% demand in rural areas.

Amul has a wide of products from milk to Shrikhand. Chocolates constitute one of its products in the product range. It is found individually to have 1.4% demand in urban areas and 1.8% demand in rural areas but the percentage will increase when considered in combination with others in its range of products.

Moving to health drinks we have Horlicks, boost, Complan, Bournvita and Glucose. Horlicks has 49% demand in urban areas and 46.3% demand in rural areas. Boost has 70% demand in urban areas and 66% demand in rural areas. Complan has 63.4% demands in urban areas and 60.6% demand in rural areas. Bournvita has 68.2% demand in urban areas and 66.4% demand in rural areas. Glucose has 44.4% demand in urban areas and 43% demand in rural areas. Similarly Dabur Glucose has 14.8% demand in urban areas and 13.4% demand in rural areas.

From the above it can be seen that health drinks are consumed by children in urban as well as rural areas. Health drinks has today become a substitute for breakfast. It has also become an energy drink to be had at any time of the day. The wide publicity given by celebrities adds to its lustre. It can be seen from the above that Boost is most (70%) demanded by children followed by Bournvita (68.2%) Complan (63.4%) Horlicks (49%) and Glucose with 44.4% demand.

Bread and butter is the most sought after breakfast by most working mothers. Go Cheese and Amul are the 2 brands that are in demand as far as butter and cheese is concerned. Go cheese has 22% demand in urban areas and 22.6% demand in rural areas while butter has 29.0% demand in urban areas and 29.4% demand in rural areas.

Amul has a range of products out of which butter and cheese are only 2 constituents. The demand for Amul product is split up between of its range of products while Go cheese has only 2 products. As a result demand for Amul butter individually is 3.2% demand in urban areas and 2.6% demand in rural areas while Amul cheese has 1.6% demand in urban areas and 1% demand in rural areas but will increase in combination to other products in its range of products.

It can be seen from the analysis that demands for butter and cheese is more or less the same in urban and rural areas unlike other products as all people consume these products.

Ice creams are loved by children very much. An attempt was made to study the 3 ice-cream brands i.e. Baskin Robbins, Kwality walls and Amul. Baskin Robbins has 76% demand in urban areas and 78% demand in rural areas.

While Kwality Walls has 69.2% demand in urban areas and 72.0% demand in rural areas. While Amul ice cream has overall 11.6% demand in urban areas and 7.2% demand in rural areas.

It can be seen that children in rural areas consume ice cream more than urban areas. Similarly it can be seen that though individually Amul shows less demand collectively with other products it has more demand and stands out to rank as the most popular and sought after ice cream followed by Baskin Robbins and Kwality walls.

Biscuits are a common snack for children as well as adults. Study has been conducted on Sun feast, Milano, Glucose, Horlicks, Priya gold and Cadbury Oreo biscuits. It has been found that Sun feast biscuits have 28% demand in urban areas and 27.4% demand in rural areas. Milano biscuits have 59% demand in urban areas and 50% demand in rural areas. Glucose biscuits have 23.6% demand in urban areas and 17% demand in rural areas. Horlicks biscuits have 15% demand in urban areas and 14.2% demand in rural areas. Priya gold biscuits have 52% demand in urban areas and 53% demand in rural areas. Cadbury Oreo has 78.4% demand in urban areas and 77% demand in rural areas.

It can be seen from the analysis that children from urban and rural areas like to eat a lot of biscuits. There is not much difference as far as consumption of biscuits in the 2 areas is concerned. Among the different brands Milano biscuits have the highest demand i.e. 58% followed by Priya gold i.e. 57.4%in urban areas.

If we take into consideration health conscious products of Glucose and Horlicks, we find Glucose biscuits have 23.6% demands and Horlicks has 15% demands in urban areas. This shows that children in urban areas are conscious of their health and prefer healthy snacks.

Soft drinks are a craze for children. They drink soft drinks any time of the day and anywhere. Study has been undertaken on Coca cola, Pepsi, Slice, Limca, Kissan squash, Tang and Rasna and Amul sweet drinks. It has been found that in case of Coca cola the demand is 56.1% in urban areas and 49.1% in rural areas. Demand for Pepsi is 51% in urban areas and 52.6% in rural areas.

Demand for Slice is 70.4% in urban areas and 74% in rural areas. Demand for Limca is 65% in urban areas and 69% in rural areas. Demand for Kissan squash is 4.2% in urban areas and 4.4% in rural areas. Demand for Rasna is 72.2% in urban areas and 76.6% in rural areas.

In case of soft drinks like Pepsi, Slice, and Limca, the demand is more in rural areas as compared to urban areas. While in case of Coca cola the demand is more in urban areas. Even in case of sweet drinks like Kissan and Rasna the demand is more in rural areas as compared to urban areas. This shows that the trend of consuming soft drinks has slowly spread to rural areas. Children in rural areas can afford to buy soft drinks and also like to consume it. We also find that Slice is more popular followed by Limca, Coca cola, and Pepsi while among sweet drink Rasna is the leader of the market.

Wafers and chips are children's favourite. Analysis was done on Kurkure, Lays, Balaji and Uncle Chips. It was found that Kurkure wafers had 66.8% demand in urban areas and 72% demand in rural areas. Lays has 64.6% demand in urban areas and 72.4% demand in rural areas. Balaji has 60.4% demand in urban areas and 67.8% demand in rural areas. Uncle chips had 70.6% demand in urban areas and 67.6% demand in rural areas.

It can be seen that children in rural areas consume more of wafers as compared to those in urban areas. Only in case of Uncle Chips the demand is more in urban areas while in case of all other wafers the demand is more in rural areas. The presence of celebrities in the advertisements has a greater influence on rural children. These advertisements catch their attention and they ask their parents to buy it for them or they themselves go and buy them. They also imitate their friends and peers in this aspect. Among the various brands Lays has highest demand followed by Kurkure, Balaji and Uncle Chips in rural areas.

Table 4.6
Ads influencing children' purchase of various food and beverages district wise in Goa

Advertisements		District			
		North Goa		South Goa	
		Frequency	%	frequency	%
Alpaliebe	None	68	13.6	52	10.4
	Cream fills	81	16.2	78	15.6
	Chocolates	236	47.2	238	47.6
	Both	115	23.0	132	26.4
Total		**500**	**100**	**500**	**100**
Dominos	None	66	13.2	64	12.8
	Pizza	202	40.4	232	46.4
	Burgers	80	16.0	53	10.6
	Both	152	30.4	151	30.2
Total		**500**	**100**	**500**	**100**
KFC	None	84	16.8	77	15.4
	1)Pizza	47	9.4	20	4.0
	2)Burgers	34	6.8	23	4.6
	3)French fries	113	22.6	136	27.2
	4)Crunch	47	9.4	50	10.0
	1,2	15	3.0	13	2.6
	1,3	13	2.6	16	3.2
	1,4	14	2.8	16	3.2
	2,3	20	4.0	14	2.8
	2,4	5	1.0	12	2.4
	3,4	31	6.2	31	6.2
	1,2,3	23	4.6	15	3.0
	2,3,4	7	1.4	14	2.8
	All	47	9.4	63	12.6
Total		**500**	**100**	**500**	**100**
Maggie	None	142	28.4	145	29.0
	Noodles	358	71.6	355	71.0
Total		**500**	**500**	**500**	**500**
Yippie	None	146	29.2	158	31.6
	Noodles	354	70.8	342	68.4
Total		**500**	**100**	**500**	**100**
Cadbury	None	54	10.8	55	11.0
	Chocolates	446	89.2	445	89.0
Total		**500**	**100**	**500**	**100**
Cadbury Oreo	None	111	22.2	114	22.8
	Biscuits	389	77.8	386	77.2
Total		**500**	**100**	**500**	**100**
Kinder joy	None	92	18.4	85	17.0
	Chocolates	408	81.6	415	83.0
Total		**500**	**100**	**500**	**100**
Horlicks	None	103	20.6	104	20.7
	Health drinks	243	48.6	225	45.3
	Biscuits	73	14.6	72	14.3
	Both	81	16.2	99	19.7
Total		**500**	**100**	**500**	**100**
Boost	None	147	29.4	172	34.4
	Health drinks	353	70.6	328	65.6
Total		**500**	**100**	**500**	**100**
Complan	None	178	35.6	200	40.0
	Health drinks	322	64.4	300	60.0
Total		**500**	**100**	**500**	**100**
Bournvita	None	156	31.2	170	34.0
	Health drinks	344	68.8	330	66.0
Total		**500**	**100**	**500**	**100**
Quaker oats	None	270	54.0	264	52.8
	Oats	230	46.0	236	47.2
Total		**500**	**100**	**500**	**100**
Kellogg's	None	236	47.2	220	44.0
	Cornflakes	264	52.8	280	56.0
Total		**500**	**100**	**500**	**100**
Dabur	None	105	21.0	84	16.8
	1)Chavanprash	80	16.0	56	11.2
	2)Honey	112	22.4	112	22.4
	3)Glucose	64	12.8	80	16.0
	1,2	11	2.2	20	4.0

	1,3	21	4.2	24	4.8
	2,3	41	8.2	50	10.0
	All	66	13.2	74	14.8

Source: Primary data 68

Table 4.6 (contd…..)

Advertisement		District			
		North Goa		South Goa	
		Frequency	%	Frequency	%
Total		**500**	**100**	**500**	**100**
Go cheese	None	140	28.0	140	28.0
	Cheese	110	22.0	110	22.0
	Butter	150	30.0	144	28.8
	Both	100	20.0	106	21.2
Total		**500**	**100**	**500**	**100**
Amul	None	22	4.4	13	2.6
	1)Milk	17	3.4	11	2.2
	2)Butter	18	3.6	11	2.2
	3)Cheese	8	1.6	5	1.0
	4)Ice cream	39	7.8	55	11.0
	5)Sweet drinks	4	.8	4	.8
	6)Chocolates	10	2.0	6	1.2
	7)Shrikhand	17	3.4	8	1.6
	All	77	15.4	84	16.8
	1,4	13	2.6	29	5.8
	4,7	19	3.8	7	1.4
	4,5	10	2.0	8	1.6
	4,6	17	3.4	24	4.8
	3,4	9	1.8	4	.8
	2,3,4,6,7	8	1.6	4	.8
	2,4	12	2.4	3	.6
	3,4,7	8	1.6	10	2.0
	1,4,7	8	1.6	8	1.6
	1,4,5	4	.8	8	1.6
	1,3,7	7	1.4	6	1.2
	4,6,7	9	1.8	5	1.0
	4,5,6	5	1.0	19	3.8
	1,2,6	7	1.4	6	1.2
	1,2,4	8	1.6	8	1.6
	1,2,3,4	12	2.4	13	2.6
	1,2,3,7	9	1.8	4	.8
	1,4,6,7	14	2.8	14	2.8
	1,4,5,6	23	4.6	23	4.6
	1,2,3,4,7	8	1.6	18	3.6
	1,2,4,5,6	7	1.4	7	1.4
	1,2,4,6,7	9	1.8	11	2.2
	2,4,5,6,7	6	1.2	7	1.4
	1,2,4,5,6	10	2.0	5	1.0
	1,4,5,6,7,	11	2.2	18	3.6
	1,2,3,4,5,6,	10	2.0	10	2.0
	3,4,5,6,7	15	3.0	17	3.4
Total		**500**	**100**	**500**	**100**
Baskin Robbins	None	119	23.8	110	22.0
	Ice cream	381	76.2	390	78.0
Total		**500**	**100**	**500**	**100**
Kwality walls	None	160	32.0	135	27.0
	Ice cream	340	68.0	365	73.0
Total		**500**	**100**	**500**	**100**
Sunfeast	None	123	24.6	92	18.4
	Biscuits	128	25.6	149	29.8
	Noodles	137	27.4	147	29.4
	Both	112	22.4	112	22.4
Total		**500**	**100**	**500**	**100**
Milano	None	240	48.0	215	43.0
	Biscuits	260	52.0	285	57.0
Total		**500**	**100**	**500**	**100**
Glucose	None	74	14.8	96	19.2
	Biscuits	105	21.0	98	19.6
	Health drinks	237	47.4	200	40.0
	Both	84	16.8	106	21.2
Total		**500**	**100**	**500**	**100**
Nestle	None	70	14.0	48	9.6
	Gems	108	21.6	107	21.4
	Chocolates	157	31.4	155	31.0
	Both	165	33.0	190	38.0
Total		**500**	**100**	**500**	**100**

Coca cola	None	110	22.1	105	21.0
	Soft drinks	262	52.3	265	52.9
	Soda	58	11.6	28	5.7

Table 4.6 (contd…..)

Advertisements		District			
		North Goa		**South Goa**	
		Frequency	**%**	**Frequency**	**%**
	Both	70	14.0	102	20.4
Total		**500**	**100**	**500**	**100**
Priya gold	None	240	48.0	237	47.4
	Biscuits	260	52.0	263	52.6
Total		**500**	**100**	**500**	**100**
Pepsi	None	144	28.8	124	24.8
	Soft drinks	253	50.6	265	53.0
	Soda	43	8.6	27	5.4
	Both	60	12.0	84	16.8
Total		**500**	**100**	**500**	**100**
Slice	None	145	29.0	130	26.0
	Soft drinks	355	71.0	370	74.0
Total		**500**	**100**	**500**	**100**
Limca	None	175	35.0	160	32.0
	Soft drinks	375	65.0	340	68.0
Total		**500**	**100**	**500**	**100**
Kissan	None	87	17.4	80	16.0
	1)Jam	205	41.0	191	38.2
	2)Squash	25	5.0	18	3.6
	3)Sauce	50	10.0	59	11.8
	1,2	10	2.0	15	3.0
	1,3	58	11.6	72	14.4
	2,3	5	1.0	11	2.2
	All	60	12.0	54	10.8
Total		**500**	**100**	**500**	**100**
Kurkure	None	165	33.0	145	29.0
	Wafers	335	67.0	355	71.0
Total		**500**	**100**	**500**	**100**
Lays	None	163	32.6	152	30.4
	Wafers	337	67.4	348	69.6
Total		**500**	**100**	**500**	**100**
Balaji	None	198	39.6	160	32.0
	Wafers	302	60.4	340	68.0
Total		**500**	**100**	**500**	**100**
Uncle chips	None	157	31.4	152	30.4
	Chips	343	68.6	348	69.6
Total		**500**	**100**	**500**	**100**
Tang	None	148	29.6	141	28.2
	Sweet drinks	352	70.4	359	71.8
Total		**500**	**100**	**500**	**100**
Rasna	None	134	26.8	122	24.4
	Sweet drinks	366	73.2	378	75.6
Total		**500**	**100**	**500**	**100**
Act II	None	115	23.0	102	20.4
	Popcorn	385	77.0	398	79.6
Total		**500**	**100**	**500**	**100**
Foodles	None	195	39.0	180	36.0
	Noodles	305	61.0	320	64.0
Total		**500**	**100**	**500**	**100**

Source: Primary data

Further district wise analysis has been undertaken in Table 4.6 to study the children's demand for advertised products. In case products like Dominos and KFC, it can be seen that Domino's pizza has 40.4% demand in North Goa and 46.4% demand in South Goa. As against this burgers have 16% demand in North Goa and 10.6% demand in South Goa .In case of KFC, pizza has 9.4% demand in North Goa and 4% demand in South Goa, and burgers have 6.8% demand in North Goa and 4.6%

demand in South Goa while French fries 22.6% demand in North Goa and 27.2% demand in South Goa.

From the above it can be said that there is maximum demand for Domino's pizza i.e. 40.4% as compared to KFC. In case of KFC French fries are more demanded i.e. 27.2% in south Goa as compared to North Goa (22.6%). Over all we find that children in North Goa consume the above products more than those in South Goa.

Moving on to chocolates we find that Alpaliebe cream fills have 16.2% demand in North Goa and 15.6% demand in South Goa while the other type of chocolate has 47.2% demand in North Goa and 47.6% demand in South Goa.

Cadbury chocolates have 89.2% demand in North Goa and 89% demand in South Goa. Kinder joy chocolates have 81.6% demand in North Goa and 83% demand in South Goa. Amul chocolates have 2% demand in North Goa and 1.2% demand in South Goa. Nestle gems has 21.6% demand in North and 21.4% South Goa while Nestle chocolates have 31.4% demand in North Goa and 31% demand in South Goa.

From the analysis it can be seen that there is not much difference in the demand for chocolates by children in North and South Goa. All children love to eat chocolates. It can also be seen that Cadbury chocolates have maximum demand followed by kinder joy, Alpaliebe chocolates and the others.

In case of children's favourite noodles we find that Maggie noodles have 71.6% demand in North Goa and 71% demand in South Goa; Yippie noodles have 70.8% demand in North Goa and 68.4% demand in South Goa. Lastly Foodles have 61% demand in North Goa and 64% demand in South Goa.

We find from the above that irrespective of brand there is not much difference in the demand of noodles. All children whether in North or South Goa like to consume noodles. Maggie noodles have the maximum demand followed by Yippie and Foodles.

In case of Go cheese products, cheese has 22% demands in North and South Goa while butter has 30% demand in North Goa and 28.8% demand in South Goa.

On the other hand Amul has a wide range of products one of which is butter which is very popular all over India. Amul butter has 3.6% demand in North Goa and 2.2% demand in South Goa, cheese has 1.6% demand in North Goa and 1% demand in

South Goa which has other combinations where in butter and cheese are also included. This demand may seem low individually but is high with other combinations.

In case of health drinks Horlicks has 48.6% demand in North Goa and 45.3% demand in South Goa. Boost has 70.6% demand in North Goa and 65.6% demand in South Goa. Complan has 64.4% demand in North Goa and 60% demand in South Goa. Bournvita has 68.8% demand in North Goa and 66% demand in South Goa. Glucose has 47.4% demand in North Goa and 40% demand in South Goa. Similarly Dabur Glucose has 12.8% demand in North Goa and 16% demand in South Goa.

From the above analysis it can be seen that there is no much difference in the consumption of health drinks in North and South Goa. Children love to have health drink any time of the day to give them energy and remain fit and fine. Children in North Goa were found to consume health drink more than those in South Goa. Of all the brands Boost is more in demand (70.6%), Horlicks (48.6%), and Glucose (47.4%). The popularity of Boost is related to the presence of celebrities which attract children to this product.

Moving on to ice creams we find that Baskin Robbins 76.2% demand in North Goa and 78% demand in South Goa. Kwality Walls has 68% demand in North Goa and 73% demand in South Goa. Amul ice creams have 7.8% demand in North Goa and 11% demand in South Goa.

From the above it can be seen that there is more or less not much difference in the demand of ice creams. All children irrespective of where they live consume ice creams which are their favourite. Among all the brands it can be seen that Baskin Robbins has high demand (78%), Kwality walls has (73%) and in case of Amul which has a range of products the demand is shared by all the combinations though individually it has 11% demand.

Taking a look at biscuits it is found that Sunfeast biscuits have 25.6% demand in North Goa and 29.8% demand in South Goa. Cadbury Oreo biscuits have 77.8% demand in North Goa and 77.2% demand in South Goa. Milano biscuits have 52% demand in North Goa and 57% demand in South Goa.

Glucose biscuits have 21% demand in North Goa and 19.6% demand in South Goa. Horlicks biscuits have 14.6% demand in North Goa and 14.3% demand in South Goa. Priya Gold biscuits have 52% demand in North Goa and 52.6% demand in South Goa.

Biscuits are a common snack of children and are consumed quite often. For some biscuits is tea time snack while for others it is consumed more than once a day. From the analysis it can be seen that there is not much difference in the consumption in North and South Goa. Of all the brands Cadbury Oreo has highest demand (77.8%), Milano biscuits (57%) followed by Priya Gold (52.6%), Sunfeast (29.8%), Glucose (21%) and Horlicks (14.6%).

To move ahead soft drinks are quite commonly consumed by children today. Coca cola has 52.3% demand in North Goa and 52.9% demand in South Goa. Pepsi has 50.6% demand in North Goa and 53% demand in South Goa. Slice has 71% demand in North Goa and 74% demand in South Goa. Limca has 65% demand in North Goa and 68% demand in South Goa. Kissan squash has 5% demand in North Goa and 3.6% demand in South Goa. Tang has 70.4% demand in North Goa and 71.8% demand in South Goa. Rasna has 73.2% demand in North Goa and 75.6% demand in South Goa.

It can be seen from the above analysis that all children like to consume soft drinks and sweet drinks. Only the brand name differs. There is not much difference in the consumption of these products in North and South Goa. A closer look at the table 4.6 shows that children in South Goa consume more soft drinks and sweet drinks as compared to North Goa. Among soft drinks Slice has a lot of popularity (74%) followed by Limca (68%), Pepsi (53%), Coke (52.9%). On the other hand in case of

sweet drinks Rasna has maximum demand (75.6%) followed by Tang (71.8%) and Kissan squash (5%).

Taking a look at wafers and chips it can be seen from the table that Kurkure wafers have 67% demand in North Goa and 71% demand in South Goa. Lays has 67.4% demand in North Goa and 69.6% demand in South Goa.

Balaji has 60.4% demand in North Goa and 68% demand in South Goa. Uncle Chips has 68.6% demand in North Goa and 69.6% demand in South Goa.

From the analysis it can be seen that there is no much difference in the demand for the above products in North and South Goa, which means children irrespective of place like to eat wafers and chips. Among the various brands Kurkure has maximum demand (71%) followed by Lays and Uncle Chips and Balaji with around 68% demand. It can also be seen that consumption of wafers and chips is more in South Goa as compared to North Goa.

Table 4.7
Advertisements influencing children's purchase of various food and beverages gender wise in the state of Goa

Advertisements		Gender			
		Male		Female	
		frequency	%	Frequency	%
Alpaliebe	None	65	11.5	55	12.6
	Cream fills	95	16.9	63	14.4
	Chocolates	243	43.2	231	52.9
	Both	160	28.4	88	20.1
Total		**563**	**100**	**437**	**100**
Dominos	None	73	13.0	56	12.8
	Pizza	242	43.0	192	43.9
	Burgers	70	12.5	65	14.9
	Both	178	31.5	124	28.4
Total		**563**	**100**	**437**	**100**
KFC	None	80	14.2	82	18.8
	1)Pizza	40	7.1	30	6.8
	2)Burgers	30	5.3	29	6.7
	3)French fries	143	25.4	106	24.3
	4)Crunch	64	11.4	35	8.1
	1,2	11	2.0	13	3.0
	1,3	13	2.3	16	3.7
	1,4	16	2.8	14	3.2
	2,3	20	3.6	11	2.3
	2,4	7	1.2	4	.9
	3,4	30	5.4	33	7.6
	1,2,3	21	3.7	17	3.9
	2,3,4	16	2.8	7	1.6
	All	72	12.8	40	9.1
Total		**563**	**100**	**437**	**100**
Maggie	None	155	27.5	128	29.3
	Noodles	408	72.5	309	70.7
Total		**563**	**100**	**437**	**100**
Yippie	None	163	29.0	140	32.0
	Noodles	400	71.0	297	68.0
Total		**563**	**100**	**437**	**100**
Cadbury	None	62	11.0	47	10.8
	Chocolates	501	89.0	390	89.2
Total		**563**	**100**	**437**	**100**
Cadbury Oreo	None	127	22.6	95	21.7
	Biscuits	436	77.4	342	78.3
Total		**563**	**100**	**437**	**100**
Kinder joy	None	102	18.1	75	17.2
	Chocolates	461	81.9	362	82.8
Total		**563**	**100**	**437**	**100**
Horlicks	None	105	18.6	106	24.2
	Health drinks	272	48.3	195	44.5
	Biscuits	81	14.4	63	14.5
	Both	105	18.7	73	16.8
Total		**563**	**100**	**437**	**100**
Boost	None	175	31.1	147	33.6
	Health drinks	388	68.9	290	66.4
Total		**563**	**100**	**437**	**100**
Complan	None	197	35.0	183	41.9
	Health drinks	366	65.0	254	58.1
Total		**563**	**100**	**437**	**100**
Bournvita	None	173	30.7	154	35.2

	Health drinks	390	69.3	283	64.8
Total		**563**	**100**	**437**	**100**
Quaker oats	None	294	52.2	239	54.7
	Oats	269	47.8	198	45.3
Total		**563**	**100**	**437**	**100**
Kellogg's	None	255	45.3	197	45.1
	Cornflakes	308	54.7	240	54.9

Source: Primary data

Table 4.7 (contd…..)

Advertisement		**Gender**			
		Male		**Female**	
		Frequency	**%**	**Frequency**	**%**
Total		**563**	**100**	**437**	**100**
Dabur	None	96	17.1	96	22.0
	1)Chavanprash	73	13.0	62	14.2
	2)Honey	133	23.6	91	20.8
	3)Glucose	74	13.1	67	15.3
	1,2	19	3.4	12	2.7
	1,3	27	4.8	15	3.4
	2,3	58	10.3	33	7.6
	All	83	14.7	58	13.2
Total		**563**	**100**	**437**	**100**
Go cheese	None	150	26.6	130	29.7
	Cheese	120	21.4	106	24.3
	Butter	177	31.4	115	26.3
	Both	116	20.6	86	19.7
Total		**563**	**100**	**437**	**100**
Amul	None	17	3.0	18	4.1
	1)Milk	13	2.3	15	3.4
	2)Butter	15	2.7	14	3.2
	3)Cheese	8	1.4	5	1.1
	4)Ice cream	54	9.6	40	9.2
	5)Sweet drinks	6	1.1	4	.9
	6)Chocolates	10	1.8	6	1.4
	7)Shrikhand	13	2.3	12	2.7
	All	98	17.4	63	14.4
	1,4	27	4.8	15	3.4
	4,7	11	2.0	15	3.4
	4,5	9	1.6	9	2.1
	4,6	14	2.5	27	6.2
	3,4	5	.9	8	1.8
	2,3,4,6,7	10	1.8	2	.5
	2,4	8	1.4	7	1.6
	3,4,7	12	2.1	6	1.4
	1,4,7	8	1.4	8	1.8
	1,4,5	6	1.1	6	1.4
	1,3,7	8	1.4	5	1.1
	4,6,7	6	1.1	8	1.8
	4,5,6	13	2.3	11	2.5
	1,2,6	9	1.6	4	.9
	1,2,4	13	2.3	3	.7
	1,2,3,4	18	3.2	7	1.6
	1,2,3,7	8	1.4	5	1.1
	1,4,5,6	32	5.7	14	3.2
	1,2,3,4,7	14	2.5	12	2.7
	1,2,4,5,6	7	1.2	7	1.6
	1,2,4,6,7	15	2.7	5	1.1
	2,4,5,6,7	5	.9	8	1.8
	1,2,4,5,6	5	.9	10	2.3
	1,4,5,6,7,	16	2.8	13	3.0
	3,7	7	1.2	10	2.3
	1,2,3,4,5,6,	12	2.1	8	1.8
	3,4,5,6,7	16	2.8	14	3.2
Total		**563**	**100**	**437**	**100**
Baskin Robbins	None	127	22.6	103	23.5
	Ice cream	436	77.4	334	76.5
Total		**563**	**100**	**437**	**100**
Kwality walls	None	156	27.7	140	32.1

	Ice cream	407	72.3	297	67.9
Total		**563**	**100**	**437**	**100**
Sunfeast	None	119	21.2	97	22.2
	Biscuits	155	27.5	122	27.9
	Noodles	153	27.1	131	30.0
	Both	136	24.2	87	19.9
Total		**563**	**100**	**437**	**100**

Table 4.7 (contd…..)

Advertisement		**Gender**			
		Male		**Female**	
		Frequency	**%**	**Frequency**	**%**
Milano	None	249	44.2	200	45.8
	Biscuits	314	55.8	237	54.2
Total		**563**	**100**	**437**	**100**
Glucose	None	94	16.7	76	17.4
	Biscuits	103	18.3	100	22.9
	Health drinks	247	43.9	190	43.5
	Both	119	21.1	71	16.2
Total		**563**	**100**	**437**	**100**
Nestle	None	58	10.3	60	13.7
	Gems	112	19.9	102	23.3
	Chocolates	162	28.8	151	34.6
	Both	231	41.0	124	28.4
Total		**563**	**100**	**437**	**100**
Coca cola	None	116	20.6	100	22.8
	Soft drinks	288	51.2	238	54.4
	Soda	46	8.1	41	9.4
	Both	113	20.1	58	13.4
Total		**563**	**100**	**437**	**100**
Priya gold	None	253	44.9	215	49.2
	Biscuits	310	55.1	222	50.8
Total		**563**	**100**	**437**	**100**
Pepsi	None	145	25.8	123	28.1
	Soft drinks	291	51.7	227	52.0
	Soda	39	6.9	31	7.1
	Both	88	15.6	56	12.8
Total		**563**	**100**	**437**	**100**
Slice	None	147	26.1	131	30.0
	Soft drinks	416	73.9	306	70.0
Total		**563**	**100**	**437**	**100**
Limca	None	178	31.0	158	35.6
	Soft drinks	385	69.0	279	64.4
Total		**563**	**100**	**437**	**100**
Kissan	None	88	15.6	75	17.2
	1)Jam	213	37.9	185	42.4
	2)Squash	25	4.4	18	4.1
	3)Sauce	65	11.5	46	10.5
	1,2	13	2.3	12	2.7
	1,3	80	14.2	50	11.4
	2,3	13	2.4	3	.7
	All	66	11.7	48	11.0
Total		**563**	**100**	**437**	**100**
Kurkure	None	169	30.0	140	32.0
	Wafers	394	70.0	297	68.0
Total		**563**	**100**	**437**	**100**
Lays	None	165	29.3	150	34.3
	Wafers	398	70.7	287	65.7
Total		**563**	**100**	**437**	**100**
Balaji	None	187	33.2	172	39.4
	Wafers	376	66.8	265	60.6
Total		**563**	**100**	**437**	**100**
Uncle chips	None	170	30.2	139	31.8
	Chips	393	69.8	298	68.2
Total		**563**	**100**	**437**	**100**
Tang	None	150	26.6	139	31.8
	Sweet drinks	413	73.4	298	68.2
Total		**563**	**100**	**437**	**100**
Rasna	None	139	24.7	117	26.8
	Sweet drinks	424	75.3	320	73.2

Total		**563**	**100**	**437**	**100**
Act II	None	110	19.5	110	25.2
	Popcorn	453	80.5	327	74.8
Total		**563**	**100**	**437**	**100**
Foodles	None	201	35.7	175	40.1
	Noodles	362	64.3	262	59.9
Total		**563**	**100**	**437**	**100**

Gender wise analysis has been undertaken in table 4.7 to study children's demand for advertised product. In case of Dominos and KFC it can be seen that Domino's pizza and burgers had 43% and 12.5% demand among boys (male) and 43.9% and 14.9% demand among girls (female). KFC French fries were very popular among boys with 25.4% demand as against girls with 24.3%. Maximum demand is for Dominos product as compared to KFC.

Moving to chocolates Alpaliebe chocolates are more demanded by girls (females) i.e. 52.9% as against boys (males) 43.2%. Cadbury chocolates have 89% demand among boys and 89.2% among girls. Kinder joy chocolates have 82.8% demand among girls and 81.9% demand among boys. Amul chocolates are more demanded by boys i.e. 1.8% as against girls i.e. 1.4%.

Demand for Nestle chocolates is 28.8% among boys and 34.6% among girls. Similarly Gems chocolates have 19.9% demand among boys and 23.3% among girls. Overall analysis shows that boys and girls love to consume chocolates but it is girls who demand more of chocolates than boys. Cadbury chocolates are leading in their sale followed by Alpaliebe, Nestle and Amul gender wise.

In case of noodles Maggie noodles have 72.5% demand among boys and 70.7% among girls. Yippie noodles have 71% demand among boys and 68% among girls. Foodles have 64.3% demand among boys and 59.9% among girls. Hence it can be seen that noodles are more demanded by boys as compared to girls. Maggie is the leader of the market with 72.5% demand followed by Yippie with71% and Foodles with 64.3% demand.

Taking a look at health drinks we find that Horlicks have 48.3% demand among boys and 44.5% among girls. Boost have 68.9% demand among boys and 66.4% among girls. Complan on the other hand have 65% demand among boys and 58.1% among girls. Bournvita has have 69.3% demand among boys and 64.8% demand among girls. Similarly Glucose has43.9% demand among boys and 43.5% demand among

girls. From the analysis it can be seen that boys as well as girls love to consume health drinks.

Now taking a look at butter and cheese we find that Go cheese has 21.4% demand among boys and24.3% demand among girls and butter has 20.6% demand among boys and 19.7% demand among girls. While Amul butter has 2.7% demand among boys and 3.2% among girls. While Amul cheese have 1.4% demand among boys and 1.1% among girls. Boys and girls were found to consume butter and cheese regularly.

Moving to ice creams we find Baskin Robbins with 77.4% demand among boys and 76.5% among girls. Kwality walls have 72.3% demand among boys and 67.9% among girls. Amul ice creams have 9.6% demand among boys and 9.2% among girls. Amul ice cream is equally preferred by children. The table 4.7 shows a range of Amul products out of which the above mentioned percentage is the individual demand out of the range of products.

From the analysis we find that there is not much difference in the demand for ice cream by boys and girls. Speaking about biscuits it can be seen that Sunfeast biscuits have almost equal demand among boys and girls i.e. 27.5% and 27.9%. Milano biscuits have 55.8% demand among boys and 54.2% among girls.

Glucose biscuits have 18.3% demand among boys and 22.9% among girls. Horlicks biscuits have 14.4% demand among boys and 14.5% among girls. Priya Gold biscuits have 55.1% demand among boys and 50.8% among girls. Cadbury Oreo have 77.4% demand among boys and 78.3% among girls.

From the above analysis it can be seen that there is not much difference in the demand of biscuits by boys and girls. Both sexes are found to have a liking for biscuits which may their regular snack item. Among all the brand Cadbury Oreo is the top most leader with 77.4% demand followed by Milano biscuits with 55.8%, Priya Gold with 55.1%, Sunfeast with 27.9%, Glucose with 22.9% and Horlicks with 14.5% demand.

Taking a look at soft drinks we find that Coca cola have 51.2% demand among boys and 54.4% among girls .Pepsi have 51.7% demand among boys and 52% among girls. Slice have 73.9% demand among boys and 70% among girls.

Limca have 69% demand among boys and 64.4% among girls. Tang has 73.4% demand among boys and 68.2% among girls. Rasna have 75.3% demand among boys and 73.2% among girls. Kissan squash have 4.4% demand among boys and 4.1% among girls.

From the analysis we find that there is not much difference in the demand for soft drinks among boys and girls. Both sexes prefer to drink soft drinks. They like to consume at any time of the day and at any location and are highly influenced by advertisements, friends and peers. Among the various brands Slice has maximum demand 73.9% followed by Rasna 75.3%, Tang with 73.4%, and Limca with 69%, Pepsi with 51.7%, Coke with 51.2%, and Kissan squash with 4.4% demand. Kissan has a range of products out of which squash is one of the products.

Moving on to wafers and chips we find Kurkure wafers having 70% demand among boys and 68% among girls. Balaji has 66.8% demand among boys and 60.6% among girls. Uncle Chips have 69.8% demand among boys and 68.2% among girls. Lays has 70.7% demand among boys and 65.7% among girls.

From the analysis it can be seen boys love to eat wafers and have high demand as compared to girls. Among the various brands there is stiff competition between Lays and Kurkure wafers with Lays having 70.7% demand and Kurkure with 70% followed by Uncle Chips with 69.8% and Balaji with 66.8%.

Table 4.8
Ads influencing purchase of various food and beverages age wise in Goa

Advertisements		Age					
		6-7 years		8-9 years		10-12 years	
		frequency	%	frequency	%	Frequency	%
Alpaliebe	None	14	10.4	50	12.6	67	12.0
	Cream fills	24	18.0	53	13.7	71	16.9
	Chocolates	63	47.0	193	50.0	218	45.6
	Both	33	24.6	92	23.7	122	25.5
Total		**134**	**100**	**388**	**100**	**478**	**100**
Dominos	None	22	16.5	50	12.9	58	12.1
	Pizza	52	38.8	180	46.4	202	42.3
	Burgers	14	10.4	52	13.4	68	14.2
	Both	46	34.3	106	27.3	150	31.4
Total		**134**	**100**	**388**	**100**	**478**	**100**
KFC	None	16	11.9	64	16.5	81	16.9
	1)Pizza	5	3.7	34	8.8	28	5.9
	2)Burgers	10	7.5	20	5.2	27	5.6
	3)French fries	39	29.2	94	24.2	116	24.3
	4)Crunch	10	7.5	46	11.9	41	8.6
	1,2	4	3.0	10	2.6	10	2.1
	1,3	2	2.2	10	2.6	19	4.0
	1,4	3	2.2	8	2.1	20	4.2
	2,3	5	3.7	15	3.9	14	2.9
	2,4	2	2.2	8	2.0	8	1.6
	3,4	13	9.7	19	4.9	30	6.3
	1,2,3	6	4.5	17	4.4	15	3.2
	2,3,4	6	3.0	7	1.8	8	1.6
	All	13	9.7	36	9.1	61	12.8
Total		**134**	**100**	**388**	**100**	**478**	**100**
Maggie	None	40	29.8	126	32.5	120	25.1
	Noodles	94	70.2	262	67.5	358	74.9
Total		**134**	**100**	**388**	**100**	**478**	**100**
Yippie	None	36	26.9	123	31.8	145	30.3
	Noodles	98	73.1	265	68.2	333	69.7
Total		**134**	**100**	**388**	**100**	**478**	**100**
Cadbury	None	8	6.0	42	10.9	60	12.5
	Chocolates	126	94.0	346	89.1	418	87.5
Total		**134**	**100**	**388**	**100**	**478**	**100**
Cadbury Oreo	None	28	20.9	89	23.0	108	22.6
	Biscuits	106	79.1	299	77.0	370	77.4
Total		**134**	**100**	**388**	**100**	**478**	**100**
Kinder joy	None	32	23.9	61	15.7	87	18.2
	Chocolates	102	76.1	327	84.3	391	81.8
Total		**134**	**100**	**388**	**100**	**478**	**100**
Horlicks	None	27	20.1	73	18.9	107	22.3
	Health drinks	64	47.8	192	49.6	211	44.1
	Biscuits	17	12.7	60	15.4	70	14.7
	Both	26	19.4	63	16.1	90	18.9
Total		**134**	**100**	**388**	**100**	**478**	**100**
Boost	None	42	31.3	130	33.5	150	31.4
	Health drinks	92	68.7	258	66.5	328	68.6
Total		**134**	**100**	**388**	**100**	**478**	**100**
Complan	None	43	32.1	154	39.7	183	38.3
	Health drinks	91	67.9	234	60.3	295	61.7
Total		**134**	**100**	**388**	**100**	**478**	**100**

Bournvita	None	42	31.3	137	35.3	149	31.2
	Health drinks	92	68.7	251	64.7	329	68.8
Total		**134**	**100**	**388**	**100**	**478**	**100**
Quaker oats	None	80	59.7	195	50.3	257	53.8
	Oats	54	40.3	193	49.7	221	46.2
Total		**134**	**100**	**388**	**100**	**478**	**100**
Kellogg's	None	66	49.3	182	46.9	207	43.3
	Cornflakes	68	50.7	206	53.1	271	56.7
Total		**134**	**100**	**388**	**100**	**478**	**100**

Source: Primary data

Table 4.8 (contd…..)

Advertisement		**Age**					
		6-7 years		**8-9 years**		**10-12 years**	
		Frequency	**%**	**Frequency**	**%**	**Frequency**	**%**
Dabur	None	30	22.4	74	19.1	83	17.4
	1)Chavanprash	16	11.9	52	13.3	67	14.0
	2)Honey	27	20.3	92	23.7	105	22.0
	3)Glucose	19	14.2	64	16.5	58	12.1
	1,2	3	2.2	18	4.6	16	3.4
	1,3	9	6.7	13	3.4	21	4.4
	2,3	14	10.4	30	7.8	48	10.0
	All	16	11.9	45	11.6	80	16.7
Total		**134**	**100**	**388**	**100**	**478**	**100**
Go cheese	None	39	29.1	115	29.6	127	26.6
	Cheese	36	26.9	86	22.1	103	21.5
	Butter	35	26.1	115	29.6	143	29.9
	Both	24	17.9	72	18.7	105	22.0
Total		**134**	**100**	**388**	**100**	**478**	**100**
Amul	None	4	3.0	14	3.6	17	3.6
	1)Milk	4	3.0	13	3.4	11	2.3
	2)Butter	4	3.0	11	2.8	14	2.9
	3)Cheese	2	1.5	4	1.0	7	1.5
	4)Ice cream	9	6.7	38	9.8	47	9.8
	5)Sweet drinks	2	1.5	5	1.3	1	.2
	6)Chocolates	1	.7	5	1.3	10	2.1
	7)Shrikhand	5	3.7	7	1.8	13	2.7
	All	20	14.9	59	15.2	82	17.2
	1,4	2	1.5	16	4.1	24	5.0
	4,7	3	2.2	13	3.4	10	2.1
	4,5	2	1.5	6	1.5	10	2.1
	4,6	9	6.7	17	4.4	15	3.1
	3,4	3	2.2	6	1.5	4	.8
	2,3,4,6,7	2	1.5	6	1.5	4	.8
	2,4	4	3.0	7	1.8	4	.8
	3,4,7	2	1.5	7	1.8	9	1.9
	1,4,7	1	.7	8	2.1	7	1.5
	1,4,5	2	1.5	4	1.0	6	1.3
	1,3,7	4	3.0	5	1.3	5	1.0
	4,6,7	2	1.5	6	1.5	16	3.3
	4,5,6	1	.7	5	1.3	7	1.5
	1,2,6	2	1.5	8	2.1	6	1.3
	1,2,3,4	3	2.2	9	2.3	16	3.3
	1,2,3,7	10	7.5	18	4.6	18	3.8
	1,4,6,7	1	.7	11	2.8	14	2.9
	1,4,5,6	2	1.5	5	1.3	5	1.0
	1,2,3,4,7	1	.7	7	1.8	12	2.5
	1,2,4,5,6	2	1.5	6	1.5	5	1.0
	1,2,4,6,7	3	2.2	2	.5	10	2.1
	2,4,5,6,7	5	3.7	9	2.3	15	3.1
	1,2,4,5,6	2	1.5	6	1.5	9	1.9
	1,4,5,6,7,	6	4.5	6	1.5	8	1.7
	3,7	2	1.5	15	3.9	11	2.3
	1,2,3,4,5,6,	2	1.5	9	2.3	5	1.0
	3,4,5,6,7	2	1.5	6	1.5	8	1.7
Total		**134**	**100**	**388**	**100**	**478**	**100**
Baskin Robbins	None	34	25.3	88	22.7	112	23.4
	Ice cream	100	74.7	300	77.3	366	76.6
Total		**134**	**100**	**388**	**100**	**478**	**100**
Kwality walls	None	38	28.4	110	28.4	150	31.4
	Ice cream	96	71.6	278	71.6	328	68.6
Total		**134**	**100**	**388**	**100**	**478**	**100**
Sunfeast	None	28	20.9	87	22.4	100	20.9
	Biscuits	36	26.8	114	29.4	128	26.8
	Noodles	40	29.9	98	25.3	146	30.5

	Both	30	22.4	89	22.9	104	21.8
Total		**134**	**100**	**388**	**100**	**478**	**100**
Milano	None	67	50.0	172	44.3	216	45.2
	Biscuits	67	50.0	216	55.7	262	54.8
Total		**134**	**100**	**388**	**100**	**478**	**100**
Glucose	None	19	14.2	77	19.8	74	15.5
	Biscuits	32	23.8	80	20.7	91	19.0
	Health drinks	58	43.3	163	42.0	216	45.2
	Both	25	18.7	68	17.5	97	20.3
Total		**134**	**100**	**388**	**100**	**478**	**100**

Table 4.8 (contd…..)

Advertisement		**Age**					
		6-7 years		**8-9 years**		**10-12 years**	
		Frequency	**%**	**Frequency**	**%**	**Frequency**	**%**
Nestle	None	16	11.9	49	12.6	53	11.1
	Gems	27	20.1	80	20.6	107	22.4
	Chocolates	33	24.6	122	31.4	157	32.8
	Both	58	43.4	137	35.4	161	33.7
Total		**134**	**100**	**388**	**100**	**478**	**100**
Coca cola	None	29	21.5	84	21.7	103	21.5
	Soft drinks	69	51.5	210	54.0	247	51.7
	Soda	11	8.5	35	9.2	40	8.3
	Both	25	18.5	59	15.1	88	18.5
Total		**134**	**100**	**388**	**100**	**478**	**100**
Priya gold	None	66	49.3	175	45.1	234	48.9
	Biscuits	68	50.7	213	54.9	244	51.1
Total		**134**	**100**	**388**	**100**	**478**	**100**
Pepsi	None	32	23.9	110	28.4	126	26.4
	Soft drinks	72	53.7	194	50.0	252	52.7
	Soda	10	7.5	30	7.7	30	6.3
	Both	20	14.9	54	13.9	70	14.6
Total		**134**	**100**	**388**	**100**	**478**	**100**
Slice	None	29	21.6	108	27.8	141	29.5
	Soft drinks	105	78.4	280	72.2	337	70.5
Total		**134**	**100**	**388**	**100**	**478**	**100**
Limca	None	44	32.8	120	30.9	170	35.5
	Soft drinks	90	67.2	268	69.1	308	64.5
Total		**134**	**100**	**388**	**100**	**478**	**100**
Kissan	None	25	18.7	60	15.5	78	16.4
	1)Jam	53	39.6	166	42.8	177	37.0
	2)Squash	5	3.7	13	3.4	25	5.2
	3)Sauce	10	7.5	42	10.8	55	11.5
	1,2	2	1.5	10	2.6	14	2.9
	1,3	20	14.9	50	12.7	61	12.8
	2,3	5	3.7	7	1.8	7	1.4
	All	14	10.4	40	10.4	61	12.8
Total		**134**	**100**	**388**	**100**	**478**	**100**
Kurkure	None	43	32.1	120	31.0	145	30.3
	Wafers	91	67.9	268	69.0	333	69.7
Total		**134**	**100**	**388**	**100**	**478**	**100**
Lays	None	28	20.9	127	32.7	160	33.5
	Wafers	106	79.1	261	67.3	318	66.5
Total		**134**	**100**	**388**	**100**	**478**	**100**
Balaji	None	38	28.4	135	34.8	186	38.9
	Wafers	96	71.6	253	65.2	292	61.1
Total		**134**	**100**	**388**	**100**	**478**	**100**
Uncle chips	None	40	29.9	116	29.9	153	32.0
	Chips	94	70.1	272	70.1	325	68.0
Total		**134**	**100**	**388**	**100**	**478**	**100**
Tang	None	39	29.1	111	28.6	139	29.1
	Sweet drinks	95	70.9	277	71.4	339	70.9
Total		**134**	**100**	**388**	**100**	**478**	**100**
Rasna	None	34	25.4	87	22.4	135	28.2
	Sweet drinks	100	74.6	301	77.6	343	71.8
Total		**134**	**100**	**388**	**100**	**478**	**100**
Act II	None	32	23.9	84	21.6	104	21.8
	Popcorn	102	76.1	304	78.4	374	78.2
Total		**134**	**100**	**388**	**100**	**478**	**100**
Foodles	None	47	35.1	146	37.6	186	38.9
	Noodles	87	64.9	242	62.4	292	61.1
Total		**134**	**100**	**388**	**100**	**478**	**100**

Source: Primary data

Age wise analysis has been undertaken in Table 4.8. Children's demand for various advertised products have been examined. In case of products like Dominos, KFC it has been found that Domino's pizza are very much preferred by 46.4% children who are 8-9 years old followed by 42.3% children in the age group of 10-12 years and 38.8% in the age group of 6-7 years. 83

Dominos burgers are liked by 14.2% children who are 10-12 years old followed by 13.4% children in the age group of 8-9 years and 10.4% in the age group of 6-7 years.

KFC pizzas are demanded more by 8.8% children in the age group of 8-9 years followed by 5.9% children in the age group of 10-12 years and 3.7% children in the age group of 6-7 years.

KFC burgers are demanded by 7.5% children in the age group of 6-7 years, 5.6% children in the age group of 10-12 years and 5.2% children in the age group of 8-9 years.

KFC French fries are demanded by 29.2% children in the age group of 6-7 years, 24.3% children in the age group of 10-12 years and 24.2% children in the age group of 8-9 years.

From the analysis it can be seen that in case of pizza Dominos is leading player and in case of KFC French fries has a bigger share of the market. Different age groups have different choices and hence the demand varies from one age group to the other.

Moving on to chocolates it can be seen that Alpaliebe cream fills are preferred more by 18% children in the age group of 6-7 years followed by 16.9% children in the age group of 10-12 years and 13.7% children in the age group of 8-9 years.

On the other hand Alpaliebe chocolates are a craze among 50% children in the age group of 8-9 years, 47% children in the age group of 6-7 years and 45.6% children in the age group of 10-12 years.

Nestle Gems has 22.4% demand among children in the age group of 10-12 years, 20.6% demand among children in the age group of 8-9 years and 20.1% demand among children in the age group of 6-7 years.

Nestle chocolates have 32.8% demand among children in the age group of 10-12 years, 31.4% demand among children in the age group of 8-9 years and 24.6% demand among children in the age group of 6-7 years.

Cadbury chocolates are highly preferred by 94% children in the age group of 6-7 years followed by 87.5% children in the age group of 10-12 years and 89.1% children in the age group of 8-9 years.

Kinder joy chocolates are a favourite among kids and it has been found that 8-9 year old children bring about 84.3% demand followed by 10-12 year old projecting 81.8% demand and smaller children who are 6-7 years bring about 76.1% demand.

Amul chocolates are demanded by 2.1% children in the age group of 10-12 years, 1.3% children in the age group of 8-9 years and .7% children in the age group of 6-7 years.

From the analysis it can be seen that all children love to eat chocolates. The demand varies according to taste and price. It can be seen that Cadbury chocolates have highest demand followed by kinder joy, Alpaliebe, Nestle and Amul.

Taking Noodles into consideration it can be seen that Maggie noodles are more preferred by 74.9% children in the age group of 10-12 years followed by 70.2% children in the age group of 6-7 years and 67.5% children in the age group of 8-9 years.

Yippie noodles are demanded by 73.1% children in the age group of 6-7 years followed by 69.7% children in the age group of 10-12 years and 68.2% children in the age group of 8-9 years.

Foodles are demanded by 64.9% children in the age group of 6-7 years, 62.4% children in the age group of 8-9 years and 61.1% children in the age group of 10-12 years.

Sun feast noodles are demanded by 30.5% children in the age group of 10-12 years, 29.9% children in the age group of 6-7 years and 25.3% children in the age group of 8-9 years. It can be seen from the analysis that children in the age group of 6-7 years are the main consumers of noodles. The effect of advertising, taste, celebrities all

have an effect on children in this age group. Among the different players we find Maggie leading followed by Yippie, Foodles and sun feast.

Moving on to health drinks we find that Horlicks is preferred by 49.6% children in the age group of 8-9 years, 47.8% children in the age group of 6-7 years and 44.1% children in the age group of 10-12 years.

Boost is demanded by 68.7% children in the age group of 6-7 years followed by 68.6% children in the age group of 10-12 years and 66.5% children in the age group of 8-9 years.

Complan is preferred by 67.9% children in the age group of 6-7 years followed by 60.3% children in the age group of 8-9 years and 61.7% children in the age group of 10-12 years.

Glucose is demanded by 45.2% children in the age group of 10-12 years followed by 43.3% children in the age group of 6-7 years and 42% children in the age group of 8-9 years.

Bournvita is preferred by 68.8% children in the age group of 10-12 years followed by 68.7% children in the age group of 6-7 years and 64.7% children in the age group of 8-9 years.

From the analysis it can be found that all children irrespective of age groups love to consume health drink. Their choice depends on the influence of advertisements, celebrities, taste etc. undertaken by marketers. It can be seen that Bournvita and Boost are moreover in demand followed by Complan, Horlicks and Glucose.

Moving on to butter and cheese we find Go cheese has 26.9% demand among children in the age group of 6-7 years followed by 22.1% children in the age group of 8-9 years and 21.5% demand among children in the age group of 10-12 years.

Go cheese butter has 29.9% demand among children in the age group of 10-12 years, 29.6% demand among children in the age group of 8-9 years and 26.1% demand among children in the age group of 6-7 years.

Amul has a variety of products and the demand is shared among the various products. Since it is purchased as a combination among the range of products the demand for each individual item may not show a high demand.

It can be seen that Amul butter is preferred by 3% children in the age group of 6-7 years, 2.9% children in the age group of 10-12 years and 2.8% children in the age group of 8-9 years.

Amul cheese is preferred equally by 1.5% children in the age group of 6-7 years and 10-12 years and 1% children in the age group of 8-9 years.

It can be seen that butter and cheese are more consumed by children in the age group of 6-7 and 10-12 years. Speaking about ice creams it can be seen that Baskin Robbins is preferred by 77.3% in the age group of 8-9 years, followed by 76.6% children in the age group of 10-12 years, 74.7% children in the age group of 6-7 years.

Kwality Walls is preferred by 71.6% children in the age group of 6-7 years and 8-9 years and 68.6% children in the age group of 10-12 years.

Amul ice cream is preferred by 9.8% children in the age group of 8-9 years and 10-12 years and 6.7% children in the age group of 6-7 years.

From the analysis we find that though all children enjoy eating ice creams and it is one of their favourite food items we find that children in the age group of 8-9 years are highly motivated and consume it the highest. Baskin Robbins is found to have a high demand followed by Kwality walls and Amul.

Speaking about biscuits it can be seen that Sunfeast biscuits are consumed by 29.4% children in the age group of 8-9 years, 26.8% children in the age group of 10-12 years and 6-7 years.

Milano biscuits are consumed by 54.4% children in the age group of 8-9 years, 54.2% children in the age group of 10-12 years and 47.8% children in the age group of 6-7 years.

Glucose biscuits are consumed by 23.8% children in the age group of 6-7 years, 20.7% children in the age group of 8-9 years, 19% children in the age group of 10-12 years.

Priya gold biscuits are consumed by 54.9% children in the age group of 8-9 years, 51.1% children in the age group of 10-12 years and 50.7% children in the age group of 6-7 years.

Cadbury Oreo biscuits have 79.1% demand among children in the age group of 6-7 years, 77.4% demand among children in the age group of 10-12 years and 77% among 8-9 years old.

From the analysis it can be seen that biscuits are consumed by all children irrespective of age. The type of biscuits consumed varies depending on the taste, influence of advertisements, price, sales promotion etc. Among the various brands we find that Cadbury Oreo has highest (79.1%), followed by Priya gold (54.9%), Milano (55.7%), Sunfeast (29.4%) and Glucose (45.2%).

Taking a look at soft drinks we find that Coca cola has 54% demand among children in the age group of 8-9 years, 51.7% demand among children in the age group of 10-12 years and 51.5% children in the age group of 6-7 years.

Pepsi has 53.7% children in the age group of 6-7 years, 52.7% demand among children in the age group of 10-12 years and 50% demand among children in the age group of 8-9 years.

Slice has 78.4% children in the age group of 6-7 years, 72.2% demand among children in the age group of 8-9 years and 70.5% demand among children in the age group of 10-12 years.

Limca has 69.1% demand among children in the age group of 8-9 years, 67.2% children in the age group of 6-7 years and 64.5% demand among children in the age group of 10-12 years.

Kissan squash has a variety of products and its demand is moreover a combination of more than one product in its range of products. Individually it is demanded by 10-12 year old children and the demand is 5.2% while for those who are 6-7 years of age the demand is 3.7% and further for 8-9 year old children it is 3.4%.

Tang is moreover demanded by children of 8-9 years of age with 71.4% demand while those kids who are 6-7 years of age and big ones who are 10-12years old show a demand of 70.9%.

Rasna has 77.6% demand among children in the age group of 8-9 years, 74.6% children in the age group of 6-7 years and 71.8% demand among children in the age group of 10-12 years.

Soft drinks are consumed by all children but the intensity of consumption is more among 6-7 and 8-9 years old. Hence Slice is found to be having maximum demand (78.4%) followed by Limca (69.1%), Coca cola (54%), Pepsi (53.7%) and Kissan squash (5.2%).

Moving to wafers and chips it can be seen that Kurkure wafers have more or less similar demand among 8-9 and 10-12 years old i.e. 69% and 69.7%followed by 67.9% demand among children in the age group of 6-7 years.

Lays has 79.1% demand among children in the age group of 6-7 years, 67.3% demand among children in the age group of 8-9 years and 66.5% demand among children in the age group of 10-12 years.

Balaji has 71.6% demand among children in the age group of 6-7 years, 65.2% demand among children in the age group of 8-9 years and 61.1% demand among children in the age group of 10-12 years.

Uncle chips has 70.1% demand among children in the age group of 6-7 years and 8-9 years old followed by 68% demand among children in the age group of 10-12 years. From the analysis it can be seen that children in the age group of 6-7 years and 8-9 years old are the greatest consumers of wafers and chips. They comprise the tender age and like to eat what is tasty and marketed the most without thinking of the after

effects. We find that Lays has captured the market (79.1%) followed by Balaji (70.1%), Uncle Chips (70.1%) and Kurkure (69.7%).

Table 4.9

Area wise test result of advertisements that influence children's purchase of food and beverages in Goa

Advertisements	Area wise				
	Chi square test			Fishers exact test	
	Value	Df	p value	value	p value
Alpaliebe	9.308	4	.054		
Dominos	25.900	5	.000*		
KFC				28.587	.000*
Maggie				1.626	.298
Yippie				5.295	.656
Cadbury				2.310	.232
Cadbury Oreo				10.738	.406
Kinder joy				12.592	.052
Horlicks				9.825	.094
Boost				5.232	.386
Complan				5.787	.371
Bournvita				1.896	.563
Quaker oats				5.645	.405
Kellogg's				7.430	.582
Dabur				18.227	.012*
Go cheese				15.764	.044*
Amul				6.722	.106
Baskin Robbins				1.487	.412
Kwality walls				7.331	.660
Sunfeast				5.328	.067
Milano				9.406	.012*
Glucose	11.773	3	.008		
Nestle	13.027	4	.011		
Coco cola	14.473	3	.002		
Priya gold				9.577	.507
Pepsi	6.843	3	.077		
Slice				3.183	.097
Limca				4.235	.622
Kissan				25.623	.000*

Kurkure				7.938	.089
Lays				18.682	.009*
Balaji				7.564	.016*
Uncle chips				4.342	.346
Tang	3.042	1	.081		
Rasna	2.541	1	.111		
Act II				7.462	.250
Knor soups				4.922	504
Foodles				3.107	.446

Source: Primary data, * Significant at 5% level of significance

The classified and cross tabulated data is given in Table 4.9 .Based on cross tabulation it is observed that some advertisements have greater influence on children leading to more purchases of certain products in urban areas while some advertisements lead to more purchases in rural areas. From Table 3.1.5 it can be observed that Domino's pizza has more demand in urban areas (i.e. 50.6%) as compared to rural area (i.e. 36.2%) while Dominos burgers have more demand in rural areas (i.e. 13.8%) while it is less in urban areas (i.e. 12.8%). KFC french-fries have more demand in urban areas (i.e. 29%) as compared to rural areas (i.e. 20.8%).
Chi square test was applied to find out if there is any significant relationship with

Dominos advertisements on children's purchase areas wise. It was found that there is significantly high relationship as the p values for both are .000 which is less than 0.01 at 5% level of significance.
KFC french-fries have more demand in urban areas (i.e. 29%) as compared to rural areas (i.e. 20.8%). Kissan jam which is more popular among children has 45.2% demand in urban area and 34% demand in rural area while sauce has more demand in rural area with 11% demand as against 10.4% demand in urban area. Lays has considerable demand in rural areas (72.4%) as compared to urban areas (64.6%).
Fisher's exact test was applied to find out if there is any significant relationship between KFC, Kissan and Lays advertisements on children's purchase area wise. It was found that there is a significantly high relationship as the p value of KFC and Kissan are .000 and Lays is .009 which is less than 0.01 at 5% level of significance. Dabur honey has 23% demand Dabur Chavanprash has 15.8% demand in urban areas while in rural areas Dabur honey has 21.8% demand and Chavanprash has 11.2% demand .Go cheese which has butter and cheese has more demand in rural areas as compared to urban areas. Demand for butter is 29.4% and cheese is 22.2% in rural areas as compared to 29% and 21.6% in urban areas. On the other hand Milano

biscuit has 58% demand in urban areas and 48.8% demand in rural areas. . Similarly Balaji wafers are more in demand in rural areas (67.8%) as compared to urban areas (60.4%).Fisher's exact test was applied to find out if there is any significant relationship between Dabur, Go cheese, Milano and Balaji advertisement on children's purchase and area.

It was found that there is significant relationship as the p vale for Dabur& Milano is .012, Go cheese is .044, and Balaji is .016 which is less than 0.05 at 5% level of significance which shows that there is a significant relationship.

Further study revealed that Glucose as a healthy drink is equally preferred by all children in urban and rural area. The demand is 44.4% in urban area and 43% in rural area. While glucose biscuits have more demand in urban area (i.e. 23.6%) and 17% in rural area .A look into children's craze for chocolates reveal that 33% children in urban areas and 29.4% in rural areas like Nestle chocolates. Similarly 22.8% children in urban areas and 20% in rural areas liked Gems chocolates. Another fascination for children is soft drinks. Coca cola was found to play a dominant role in this market. It was found that 50% children in urban areas and 49% children in rural areas consume Cola. Chi square was undertaken to find out the association between Glucose, Nestle & Coca cola advertisements on children's purchase and area. It was found that there is significant relationship as p values of Glucose were found to be .008 while for Coco cola it is .002 which is less than 0.01 at 5% level of significance while for Nestle it is .011 which is less than 0.05 at 5% level of significance.

Chi square test was further applied on Alpaliebe, Pepsi, Tang and Rasna while Fisher's exact was applied on remaining advertisements namely Maggie, Yippie, Cadbury, Cadbury Oreo, Kinder joy, Horlicks, Boost, Complan, Bourn vita, Quaker oats, Kellogg's, Amul, Baskin Robbins, Quality walls, Sunfeast, Milano, Priya gold, Slice, Limca, Kurkure, Lays, Uncle chips. Act II, Knor soups and Foodles. It was found that there is no association between influence of various advertisements on children's purchase of food products and area as all the p values are greater than 0.05 at 5% level of significance.

Table 4.10

District wise test result of advertisement that influence children's purchase of food products in Goa

Source: Primary data, * Significant at 5% level of significance

	Chi square test			Fishers exact test	
	Value	Df	p value	value	p value
Alpaliebe	4.413	4	.353		
Dominos				9.497	.056
KFC				36.648	.009*
Maggie				2.129	.960
Yippie				2.408	.465
Cadbury				1.355	.970
Cadbury Oreo				2.571	.608
Kinder joy				2.095	.641
Horlicks				6.355	.457
Boost				4.151	.171
Complan				3.928	.157
Bournvita				2.762	.362
Quaker oats				2.068	.677
Kellogg's				5.141	.339
Dabur				14.942	.182
Go chees				8.368	.477
Amul	57.948	38	.020*		
Baskin Robbins				5.742	.616
Kwality walls				4.460	.176
Sunfeast	7.418	4	.115		
Milano	4.722	3	.193		
Glucose	8.769	3	.033*		
Nestle	6.875	4	.002*		
Coco cola	15.743	3	.001*		
Priya gold				1.131	.942
Pepsi	9.428	3	.024*		
Slice				4.412	.243
Limca				5.235	.535
Kissan				11.708	.340
Kurkure				5.898	.149
Lays				1.570	.450
Balaji				7.100	.014*
Uncle chips				1.024	.787
Tang	.238	1	.625		
Rasna	.756	1	.385		
Act ll				1.374	.513
Knor soups				5.287	.187
Foodles					.708

Further district wise analysis was under taken in Table 3.1.7. Amul ice creams were more in demand in south Goa (i.e. 11%) while Shrikhand was more in demand in north Goa (i.e. 3.4%). Further Glucose was more in demand in North Goa (i.e.

47.4%) as compared to South Goa (i.e. 19.6%). Pepsi was more demanded in South Goa (53%) than North Goa (50.6%).

Chi square was performed to see whether there is any association between Amul, Glucose and Pepsi advertisements on children's purchase and region. It was found that there is a significant relationship as p values was found to be .020 for Amul, .033 for Glucose and .024 for Pepsi which are less than 0.05 at 5% level of significance.

Similarly it was found that in case of Nestle the demand is more in South Goa (38%) than in North Goa (33%) while for Coco cola the demand in South Goa is 20.4% and in North Goa it is 14%. Chi square was performed to see whether there is any association between Nestle and Coco cola ads on children's purchase and region wise. It was found that there is a significantly high relationship as p values were found to be .002 and .001 which is less than 0.01 at 5% level of significance. This shows that there is a significantly high relationship between children's purchase of Nestle, Coco cola and district.

On the other hand it was observed that KFC French fries were more in demand in South Goa (i.e. 27.2%) as compared to North Goa (i.e. 22.6%). Data also revealed that Balaji wafers were more popular in South Goa (i.e. 67.8%) as compared to North Goa (i.e. 60.4%).

Fisher's exact test was performed to see whether there is any association between KFC advertisements and Balaji on children's purchase and region. It was found that in case of KFC there is a significantly high relationship as p value was found to be .009 which is less than 0.01 at 5% level of significance and in case of Balaji there is a significant relationship as the p value was found to be .014 which is less than 0.05 at 5% level of significance. This shows that there is a significant relationship between children's purchase of KFC and Balaji products and district.

Chi square test was further applied on Alpaliebe, Sunfeast, Milano, Tang and Rasna while Fisher's exact test was applied on advertisements like Dominos, Maggie, Yippie, Cadbury, Cadbury Oreo, Kinder joy, Horlicks, Boost, Complan, Bournvita, Quaker oats, Kellogg's, Dabur, Go cheese, Baskin robins, Quality walls, Priya gold,

Slice, Limca, Kissan, Kurkure, Lays, Uncle chips, Act II , Knor soups and Foodles. It was found that there is no association between influence of various advertisements on children's purchase of food products and district as all the p values are greater than 0.05 at 5% level of significance.

Hence it can be seen that in spite of advertisements like KFC, Amul, Glucose, Pepsi, Coca cola and Balaji showing significant relationship between influence of advertisements on children's purchase of food products and district, as a whole chi square test value is less than 0.05 at 5% level of significance and hence it can be concluded that there is a significant relationship between impact of advertisements on food and beverage preferences of children and district.

Table 4.11

Age wise test result of advertisements that influence children's purchase of food products in Goa

Advertisements	Chi square test			Fishers exact test	
	Value	Df	p value	value	p value

Alpaliebe	4.939	8	.764		
Dominos				10.096	.421
KFC				48.170	.163
Maggie				12.557	.051
Yippie				4.754	.637
Cadbury				6.061	.373
Cadbury Oreo				2.684	.948
Kinder joy				10.903	.038*
Horlicks				11.123	.756
Boost				5.080	.538
Complan				5.776	.467
Bournvita				5.347	.535
Quaker oats				7.272	.242
Kellogg's				8.807	.513
Dabur				26.996	.249
Go cheese				14.070	.755
Amul				66.720	.738
Baskin Robbins				15.262	.267
Kwality walls				5.580	.425
Sunfeast	9.734	8	.284		
Milano				9.136	.147
Glucose	5.738	6	.453		
Nestle	7.073	8	.529		
Coco cola	1.966	6	.923		
Priya gold				9.973	.088
Pepsi	2.030	6	.917		
Slice				9.552	.210
Limca				10.777	.476
Kissan				18.873	.656
Kurkure				6.983	.928
Lays				9.827	.025*
Balaji				6.745	.108
Uncle chips				1.946	.898
Tang	0.26	2	.987		
Rasna	3.813	2	.149		
Act II				4.033	.364
Knor soups				8.332	.325
Foodles				8.263	.162

Source: Primary data

Significant at 5% level of significance

A look at age wise analysis shows that Kinderjoy advertisements has a great influence on children in various age categories considered for this study. It was found that 76.1% of the children in the age group of 6-7 years, 84.3% of the children

in the age group of 8-9 years and 81.8% of the children in the age group of 10-12 years liked to purchase kinder joy chocolates.

Similarly in case of Lays advertisements, the demand was relatively high among children in the age group of 6-7 years (79.1%), while it was 67.3% among children in the age of 8-9 years and for 10-12 years it was found to be 66.5%.

Fisher's exact test was undertaken to find out if there is any significant relationship between kinder joys and Lays advertisements on children's purchase of various products age wise. The p value was found to be .038 in case of kinder joy and 0.25 in case of Lays ad which is less than 0.05 at 5% level of significance. This shows that there is a significant relationship between kinder joy and Lays advertisements on children's purchase of various products age wise.

Chi square test was applied on advertisements like Alpaliebe, Sunfeast, Glucose, Nestle ,Coco cola, Pepsi, Tang and Rasna while Fisher's exact test was applied on advertisements like KFC, Maggie, Yippie, Cadbury, Cadbury Oreo, Horlicks, Boost, Complan, Bourn vita, Quaker oats, Kellogg's, Dabur, Go cheese, Amul, Baskin Robbins, Kwality Walls, Milano, Priya Gold, Slice, Limca, Kissan, Kurkure, Balaji, Uncle chips, Act II, Knor soups and Foodles. It was found that there is no association between influence of various advertisements on children's purchase of food products and age as all the p values are greater than 0.05 at 5% level of significance

Table 4.12

Gender wise test results of advertisements that influence children's purchase of food products in Goa

Advertisements	Chi square test	Fishers exact test

	Value	Df	p value	value	p value
Alpaliebe	13.363	4	.010*		
Dominos				3.789	.594
KFC				25.685	.173
Maggie				2.064	.935
Yippie				2.901	.330
Cadbury				2.014	.624
Cadbury Oreo				2.978	.370
Kinder joy				1.717	.703
Horlicks				8.672	.177
Boost				4.006	.211
Complan				6.845	.025*
Bournvita				4.006	.141
Quaker oats				2.443	.530
Kellogg's				6.299	.200
Dabur				15.598	.152
Go cheese				10.073	.269
Amul	48.100	38	.126		
Baskin Robbins				4.330	.972
Kwality walls				2.644	.479
Sunfeast	3.635	4	.458		
Milano	3.924	3	.270		
Glucose	5.726	3	.126		
Nestle	18.490	4	.001*		
Coco cola	7.836	3	.050		
Priya gold	9.623	3	.022*		
Pepsi	1.893	3	.595		
Slice				4.986	.171
Limca				9.577	.059
Kissan				11.778	.338
Kurkure				4.069	.629
Lays	9.827			3.919	.093
Balaji				5.068	.041*
Uncle chips				1.469	.481
Tang	3.194	1	.074		
Rasna	.561	1	.454		
Act II				.087	.059
Knor soups				.180	.081
Foodles				.486	.470

Source: Primary data

Significant at 5% level of significance

Gender wise analysis showed that though all children like to have chocolates it has been found that girls consumed more of Alpaliebe chocolates (52.9%) whereas boys preferred Cream fills (i.e. 16.9%). Further it was found that girls preferred more of

Nestle chocolates (i.e. 34.6%) and Gems (i.e. 23.3%) as against boys who had low preference for Nestle Chocolates (i.e. 28.6%) and Gems (i.e. 19.9%). On the other hand Biscuit like Priya Gold was more popular among boys (i.e. 53.5%) and low among girls (i.e. 50.6%).

Chi square was undertaken to find out the association between Alpaliebe, Nestle and Priya Gold advertisements on children's purchase and gender. It was found that there is significant relationships as p values were found to be .010 for Alpaliebe and .022 for Priya Gold which are less than 0.05 at 5% level of significance while it is .001 for Nestle which is less than 0.01 at 5% level of significance. This shows that there is a significant relationship between Alpaliebe and Priya gold and gender while there is a significantly high relationship between Nestle product and gender.

In case of Complan advertisement it was found that 65% of the boys and 58.1% of the girls preferred to consume Complan. Similarly Balaji product was more in demand among boys (66.8%) as compared to girls (60.6%). Fisher's exact test was applied to find out the association between children's purchase and gender. The p value of Complan is found to be .025 while for Balaji it is .041 which was less than 0.05 at 5% level of significance. Hence it can be said that there is a significant relationship between children's purchase of Complan and Balaji products and gender.

Chi square test was further applied on advertisements like Amul, Sun feast, Milano, Glucose, Coca cola and Pepsi, Tang and Rasna while Fisher's exact test was applied on advertisements like Dominos, KFC, Maggie, Yippie, Cadbury, Cadbury Oreo, Kinder joy, Horlicks, Boost, Bourn vita, Quaker oats, Kellogg's, Dabur, Go cheese, Baskin Robbins, Quality Walls, Slice, Limca, Kissan, Kurkure, Lays, Uncle chips, Act II, Knor soups and Foodles. It was found that there is no association between influence of various advertisements on children's purchase of food products and gender as all the p values are greater than 0.05 at 5% level of significance.

4.3.1 Children's frequency of consumption of food and beverages

Further an attempt has been made to find out the interval at which children consume various food and beverages. Information was gathered by asking respondents to state the frequency of consumption of various food and beverages on a scale of 5 (One being every day, two 4-6 times a week, three 1-3 times a week, four being once a week, and five being never)

Table 4.13

Frequency of consumption of various food & beverages by children in the state of Goa

Food and Beverages	Never		Once a week		1-3times a week		4-6 times a week		Everyday		Total	
	freq	%	freq	%	freq	%	freq	%	freq	%	freq	%
Branded burger	616	61.6%	278	27.8%	24	2.4%	69	6.9%	13	1.3%	1000	100.0%
Ordinary burger	609	60.9%	286	28.6%	20	2.0%	79	7.9%	6	.6%	1000	100.0%
Branded pizza	511	51.1%	361	36.1%	27	2.7%	88	8.8%	13	1.3%	1000	100.0%
Ordinary pizza	606	60.6%	291	29.1%	23	2.3%	68	6.8%	12	1.2%	1000	100.0%
French fries	380	38.0%	372	37.2%	58	5.8%	167	16.7%	23	2.3%	1000	100.0%
Pasta	483	48.3%	331	33.1%	46	4.6%	115	11.5%	25	2.5%	1000	100.0%
Branded biscuit	58	5.8%	176	17.6%	119	11.9%	387	38.7%	260	26.0%	1000	100.0%
Ordinary biscuit	152	15.2%	200	20.0%	113	11.3%	316	31.6%	219	21.9%	1000	100.0%
Branded chocolate	48	4.8%	282	28.2%	135	13.5%	388	38.8%	147	14.7%	1000	100.0%
Ordinary chocolate	128	12.8%	307	30.7%	113	11.3%	316	31.6%	136	13.6%	1000	100.0%
branded wafers	204	20.4%	358	35.8%	80	8.0%	294	29.4%	64	6.4%	1000	100.0%
ordinary wafers	312	31.2%	313	31.3%	86	8.6%	214	21.4%	75	7.5%	1000	100.0%
Branded chips	175	17.5%	341	34.1%	99	9.9%	320	32.0%	65	6.5%	1000	100.0%
Ordinary chips	230	23.0%	325	32.5%	110	11.0%	271	27.1%	64	6.4%	1000	100.0%
Cakes	63	6.3%	478	47.8%	113	11.3%	301	30.1%	45	4.5%	1000	100.0%
Noodles	93	9.3%	374	37.4%	107	10.7%	369	36.9%	57	5.7%	1000	100.0%
Branded ice-cream	96	9.6%	525	52.5%	84	8.4%	248	24.8%	47	4.7%	1000	100.0%
Ordinary ice-cream	295	29.5%	387	38.7%	81	8.1%	191	19.1%	46	4.6%	1000	100.0%
Butter & cheese	206	20.6%	227	22.7%	154	15.4%	275	27.5%	138	13.8%	1000	100.0%
Cornflakes	393	39.3%	250	25.0%	88	8.8%	173	17.3%	96	9.6%	1000	100.0%
Oats	489	48.9%	223	22.3%	75	7.5%	140	14.0%	73	7.3%	1000	100.0%
Branded soft-drinks	112	11.2%	421	42.1%	88	8.8%	320	32.0%	59	5.9%	1000	100.0%
Ordinary soft-drinks	262	26.2%	340	34.0%	95	9.5%	236	23.6%	67	6.7%	1000	100.0%
Health drinks	148	14.8%	151	15.1%	89	8.9%	187	18.7%	425	42.5%	1000	100.0%
Sugar sweetened drink	419	41.9%	317	31.7%	83	8.3%	129	12.9%	52	5.2%	1000	100.0%
squash	549	54.9%	243	24.3%	69	6.9%	98	9.8%	41	4.1%	1000	100.0%
popcorn	259	25.9%	468	46.8%	69	6.9%	175	17.5%	29	2.9%	1000	100.0%
Nuts	222	22.2%	311	31.1%	93	9.3%	265	26.5%	109	10.9%	1000	100.0%

Source: Primary data.

Significant at 5% level of significance

Table4.13 shows 'how often' children consume various food and beverages in the state of Goa. The products advertised on TV from November 2013 to February 2015 and which are popular among children were considered for the study.

It can be seen that 57-61% of the children do not consume burgers and pizzas (whether branded or ordinary) while 27-36% consumes it once a week. French fries and pasta are consumed once a week by 33-37% of the children. Biscuits and chocolates have a high consumption. 31-38% consumes 4-6 times a week and 13.6-26.0% consume every day. 27-32% of the children consume wafers and chips 4-6 times a week and 31-35% consume once a week. Cakes being expensive are consumed by 47.8% once a week and 30% 4-6 times a week.
Noodles are children's favourite. 37.4% consume it once a week and 36.9% consume it 4-6 times a week. Ice creams have the highest demand. 38.7-52.5% consumes ice cream once a week while 19-24.8% consumes it 4-6 times a week.

Soft drinks are preferred by all children. 34-42% consume once a week while 23.6-32% consume 4-6 times a week. Health drinks are consumed by 42.5% of the children every day. It has been found to be the compulsory regular drink before going to school. Butter and cheese is also consumed by 13.8% every day while 15.4% consume 1-3 times a week. Sugar and sweetened drink, squash, popcorn and nuts are consumed by 24.3-46.8% children once a week.

Table no. 4.14

Descriptive statistics for reliability	
Cronbach's Alpha	No. of items
.801	28

Table4.14 shows the value of Cronbach Alpha to be .801, and as it comes out to be greater than 0.06, it implies that the data collected was reliable.

Table no. 4.15

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.855
Bartlett's Test of Sphericity	Approx. Chi-Square	7130.492
	df	378
	Sig.	.000

Bartlett's test of Sphericity shows a significant value that depicts that there is a significant relationship among the variables considered for factor analysis. The KMO measure of sampling adequacy is .855 which is more than the recommended value of 0.60 that can be considered as sufficient while Bartlett's test of Sphericity reached statistical significance. (Approximate Chi-Square value=7130.492, DF=378 and significance=.000), which puts forth that the data was good enough for undertaking factor analysis (Kaiser, H.F. 1963, Bartlett, M.S., 1950). The 28 items were subjected to principal component analysis (PCA) with varimax rotation to test the suitability of the data for factor analysis.

The variables that had a larger loading on same factors were put together. Initially there were 28 scaled variables that were measured. 23 of the variables were removed after factor analysis and 5 factors were created. These factors were branded eatables, ordinary eatables, ordinary drinks, branded drinks and others and sweets. The factor analysis produced a total of 5 factors with Eigen value greater than one. The cumulative percentage of variance explained was 45.953. These factors with respective loading levels are presented in Table 4.17.

Table 4.16

Rotated Component Matrix[a]

	Component				
	1	2	3	4	5
Branded burger	.674				
Ordinary burger	.731				
Branded pizza	.733				
Ordinary pizza	.738				
Frenchfries	.594				
Pasta	.574				
Branded biscuit					.649
Ordinary biscuit					.567
Branded chocolate					.593
Ordinary chocolate					.591
branded wafers		.675			
ordinary wafers			.543		
Branded chips		.631			
Ordinary chips			.516		
Cakes		.577			
Noodles		.528			
Branded ice-cream		.532			
Ordinary ice-cream			.604		
Butter & cheese				.527	
Cornflakes				.670	
Oats				.616	
Branded soft-drinks			.502		
Ordinary soft-drinks			.653		
Healthdrinks					
Sugar sweetened drink			.531		
squash				.477	
popcorn				.419	
Nuts				.572	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 13 iterations.

Table 4.17

Factor extraction results from the items in component matrix

Sr. no	Components	Factor Loads	Eigen Value	% of Variance
1	Branded eatables	.738	6.080	11.039
2	Ordinary eatables	.675	2.535	10.061
3	Ordinary drinks, ice creams	.653	1.582	10.044
4	Branded drinks, ice creams	.670	1.393	8.315
5	Others and sweets	.649	1.277	6.494
	Total percentage of variance	45.953		

Source: SPSS Output

The study presents an exploratory factor analytic model to explain the advertised products influencing food and beverage preference of children. As shown in Table 4.17,five factors have been identified namely branded eatables, ordinary eatables, ordinary drinks and ice creams, branded drinks and ice creams, others and sweets. All the 5 factors are found to be highly influencing food and beverage preferences of children.

Factor 1- This factor consists of branded burgers, ordinary burgers, branded pizza, ordinary pizza, and french-fries and pasta. The factors are positively loaded. Hence factor 1 is identified and named as ‘branded eatables’.

Factor 2- This factor consists of branded wafers, branded chips, cakes, noodles and branded ice cream. The factors are positively loaded. Hence factor 2 is identified and named as ‘ordinary eatables’.

Factor 3- This factor consists of ordinary wafers, ordinary chips, ordinary ice cream, branded soft drinks, and sugar sweetened drink. Hence factor 3 is identified and named as ‘ordinary drinks and ice creams’.

Factor 4- The fourth factor consists of butter and cheese, cornflakes, oats, squash, popcorn and nuts. Hence factor 4 is identified and named as ‘branded drinks and ice creams.

Factor 5- The fifth factor consists of branded biscuits, ordinary biscuits, branded chocolates, ordinary chocolates. Hence factor 5 is identified and named as ‘others and sweets’.

Table 4.18

Overall frequency of consumption of eatables and drinks by children in the state of Goa

	Less		Moderate		High		Total	
	frequency	%	Frequency	%	frequency	%	frequency	%
Branded eatables	334	33.4	317	31.7	349	34.9	1000	100
Ordinary eatables	371	37.1	332	33.2	297	29.7	1000	100
Ordinary drinks, ice creams	360	36.0	264	26.4	376	37.6	1000	100
branded drinks, ice creams	321	32.1	295	29.5	384	38.4	1000	100
Others snacks and sweets	398	39.8	237	23.7	365	36.5	1000	100

Source: Primary data

Table 4.18 shows the frequency of consumption of branded eatables and drinks, ordinary eatables and drinks and other snacks and sweets by children. It has been found that in case of branded eatables the frequency of consumption is high while it is low for ordinary eatables. In case of soft drinks whether branded or ordinary the frequency of consumption is high while consumption of other snacks and sweets is relatively less. Hence we can see that children have a craze for soft drinks whether branded or ordinary and high preference for consuming branded eatables.

To throw more light on this an area wise, region wise, age wise and gender wise analysis has been undertaken. This is shown in the below Tables 4.19, 4.20, 4.21 and Table 4.22.

Area wise analysis shows that children in urban and rural areas show high level of consumption for ordinary eatables (i.e.37.4% and 36, 8%) and branded drinks and ice creams (i.e. 36.2% and 40.6%) and low level of consumption for other snacks and sweets (i.e.38.6% and 41%). Similarly it can be seen that children in urban areas show high level of consumption for branded eatables (35.6%) while those in rural areas show high level of consumption for ordinary drinks (40.8%)

District wise analysis shows that children in North Goa and South Goa show high level of consumption for branded eatables (i.e. 34.8% and 35%) and branded drinks and ice creams (i.e.39.8% and 37%) while there is low level of consumption for ordinary eatables (i.e. 38.2% and 36%).

On the other hand it may be noted that children from North Goa show low level of consumption for ordinary drinks (39.8%) and other sweets and snacks (43%) while children in South Goa show high level of consumption for ordinary drinks (37.4%) and for other snacks and sweets (40.4%).

Age wise analysis shows that children in the age group of 6-7, 8-9 and 10-12 show high level of consumption for branded drinks (i.e. 36.6%, 35.6% and 41.2%) , ordinary drinks (i.e. 41%,37.9% and 38.3%) and for other sweets and snacks (i.e. 38.8%, 41.8% and 40%) and low level of consumption for ordinary eatables (i.e. 35.1%,39.7% and 35.6%)

Gender wise analysis shows that male (boys) and females (girls) show high demand for branded eatables (i.e.39.4% and 37.1%) and show low level of consumption for other snacks and sweets (i.e. 38.5% and 41.4%). It can also be noticed that girls exhibit low level of consumption in case of branded eatables, ordinary eatables and ordinary drinks (i.e. 37.5%, 41.9% and 37.8%) while boys show high consumption for branded eatables and ordinary drinks and moderate consumption for ordinary eatables (i.e. 38.5%, 40.3% and 35.5%).

Table 4.19

Area wise children's frequency of consumption of eatables and drinks in the state of Goa

Products	Level of consumption	Frequency and percentage	Urban	Rural
Branded eatables	Less	frequency	162	172
		%	32.4%	34.4%
	Moderate	frequency	160	157
		%	32%	31.4%
	High	frequency	178	171
		%	35.6%	34.2%
	Total	frequency	500	500
		%	100%	100%
Ordinary eatables	Less	frequency	187	184
		%	37.4%	36.8%
	Moderate	frequency	155	177
		%	31%	35.4%
	High	frequency	158	139
		%	31.6%	27.8%
	Total	frequency	500	500
		%	100%	100%
Ordinary drinks, ice creams	Less	frequency	191	169
		%	38.2%	33.8%
	Moderate	frequency	137	127
		%	27.4%	25.4%
	High	frequency	172	204
		%	34.4%	40.8%
	Total	frequency	500	500
		%	100%	100%
Branded drinks, ice creams	Less	frequency	173	148
		%	34.6%	29.6%
	Moderate	frequency	146	149
		%	29.2%	29.8%
	High	frequency	181	203
		%	36.2%	40.6%
	Total	frequency	500	500
		%	100%	100%
Other snacks and sweets	Less	frequency	193	205
		%	38.6%	41.0%
	Moderate	frequency	121	116
		%	24.2%	23.2%
	High	frequency	186	179
		%	37.2%	35.8%
	Total	frequency	500	500
		%	100%	100%

Source: Primary data

Table 4.20

District wise children's frequency of consumption of eatables and drinks in the state of Goa

Products	Level of consumption	Frequency and percentage	North Goa	South Goa
Branded eatables	Less	frequency	165	169
		%	33%	33.8%
	Moderate	frequency	161	156
		%	32.2%	31.2%
	High	frequency	174	175
		%	34.8%	35%
	Total	frequency	500	500
		%	100%	100%
Ordinary eatables	Less	frequency	191	180
		%	38.2%	36.0%
	Moderate	frequency	152	180
		%	30.4%	36%
	High	frequency	157	140
		%	31.4%	28.0%
	Total	frequency	500	500
		%	100%	100%
Ordinary drinks, ice creams	Less	frequency	199	161
		%	39.8%	32.2%
	Moderate	frequency	112	152
		%	22.4%	30.4%
	High	frequency	189	187
		%	37.8%	37.4%
	Total	frequency	500	500
		%	100%	100%
Branded drinks, ice creams	Less	frequency	171	150
		%	34.2%	30.0%
	Moderate	frequency	130	165
		%	26%	33%
	High	frequency	199	185
		%	39.8%	37%
	Total	frequency	500	500
		%	100%	100%
Other snacks and sweets	Less	frequency	215	183
		%	43%	36.6%
	Moderate	frequency	122	115
		%	24.4%	23%
	High	frequency	163	202
		%	32.6%	40.4%
	Total	frequency	500	500
		%	100%	100%

Source: Primary data

Table 4.21

Age wise children's frequency of consumption of eatables and drinks in the state of Goa

Products	Level of consumption	Frequency and percentage	6-7 years	8-9 years	10-12 years
Branded eatables	Less	frequency	44	134	156
		%	32.8%	34.5%	32.6%
	Moderate	frequency	49	130	138
		%	36.6%	33.5%	28.9%
	High	frequency	41	124	184
		%	30.6%	32%	38.5%
	Total	frequency	134	388	478
		%	100%	100%	100%
Ordinary eatables	Less	frequency	47	154	170
		%	35.1%	39.7%	35.6%
	Moderate	frequency	46	129	157
		%	34.3%	33.2%	32.8%
	High	frequency	41	105	151
		%	30.6%	27.1%	31.6%
	Total	frequency	134	388	478
		%	100%	100%	100%
Ordinary drinks, ice creams	Less	frequency	45	147	168
		%	33.6%	37.9%	35.1%
	Moderate	frequency	34	103	127
		%	25.4%	26.5%	26.6%
	High	frequency	55	138	183
		%	41%	35.6%	38.3%
	Total	frequency	134	388	478
		%	100%	100%	100%
Branded drinks, ice creams	Less	frequency	46	113	162
		%	34.3%	29.1%	33.9%
	Moderate	frequency	39	137	119
		%	29.1%	35.3%	24.9%
	High	frequency	49	138	197
		%	36.6%	35.6%	41.2%
	Total	frequency	134	388	478
		%	100%	100%	100%
Other snacks and sweets	Less	frequency	45	162	191
		%	33.6%	41.8%	40.0%
	Moderate	frequency	37	84	116
		%	27.6%	21.6%	24.3%
	High	frequency	52	142	171
		%	38.8%	36.6%	35.8%
	Total	frequency	134	388	478
		%	100%	100%	100%

Source: Primary data

Table 4.22

Gender wise children's frequency of consumption of eatables and drinks in the state of Goa

Products	Level of consumption	Frequency and percentage	Male	Female
Branded eatables	Less	frequency	170	164
		%	30.2%	37.5%
	Moderate	frequency	176	141
		%	31.3%	32.3%
	High	frequency	217	132
		%	38.5%	30.2%
	Total	frequency	563	437
		%	100%	100%
Ordinary eatables	Less	frequency	188	183
		%	33.4%	41.9%
	Moderate	frequency	200	132
		%	35.5%	30.2%
	High	frequency	175	122
		%	31.1%	27.9%
	Total	frequency	563	437
		%	100%	100%
Ordinary drinks, ice creams	Less	frequency	195	165
		%	34.6%	37.8%
	Moderate	frequency	141	123
		%	25%	28.1%
	High	frequency	227	149
		%	40.3%	34.1%
	Total	frequency	563	437
		%	100%	100%
Branded drinks, ice creams	Less	frequency	168	153
		%	29.8%	35%
	Moderate	frequency	173	122
		%	30.7%	27.9%
	High	frequency	222	162
		%	39.4%	37.1%
	Total	frequency	563	437
		%	100%	100%
Other snacks and sweets	Less	frequency	217	181
		%	38.5%	41.4%
	Moderate	frequency	131	106
		%	23.3%	24.3%
	High	frequency	215	150
		%	38.2%	34.3%
	Total	frequency	563	437
		%	100%	100%

Source: Primary data

Table 4.23
Overall impact of consuming advertised eatables and drinks on children

Particulars	Frequency	Percentage
Less	353	35.3
Moderate	327	32.7
High	320	32.0
Total	1000	100

Table 4.23 shows overall impact of consuming advertised eatables and drinks on children. It can be seen that overall the frequency of consumption of branded and ordinary food and beverages is less (i.e. 35.3%) among children in Goa.

Table 4.24
Correlation showing impact of TV viewing on food habits

T.V viewing score

Products	Pearson Correlation – r	R square	P value	Significant
Branded eatables	.673(**)	0.453	.000*	sig
Ordinary eatables	.633(**)	0.401	.000*	sig
Ordinary drinks, ice creams	.494(**)	0.244	.000*	sig
Branded drinks, ice creams	.468(**)	0.219	.000*	sig
Others and sweets	.480(**)	0.230	.000*	sig
Overall impact on eating	.716(**)	0.513	.000*	sig

** Correlation is significant at the 0.01 level
*Significant at 5% level of significance

Impact of T.V viewing on food habits has been studied. It can be seen from the table 3.16 that good correlation exists between branded eatables, ordinary eatables and T.V viewing .T.V viewing has 45.3% impact on branded eatables, 40.1% impact on ordinary eatables. On the other hand there is moderate correlation between ordinary drinks, branded drinks, others and sweets and T.V viewing. In this case T.V viewing has 24.4%, 21.9% and 23.0% impact on ordinary drinks, branded drinks and sweets.

Overall the impact on eating habits has good correlation (.716) and the impact of T.V viewing is 51.3%. There is a high significant relationship among all the eatables as p value for all is .000 which is less than 0.01 at 5% level of significance.

4.4 DISCUSSION AND CONCLUSION

From the study it can be concluded that children are very much influenced by advertisements. They keep in mind what they see on television and buy various food products with their pocket money. Those children who are too small and do not get pocket money ask their parents to buy it for them. In today's world with both parents working they compensate the lack of time by buying whatever their children ask them.

Children in urban areas have high preference for branded eatables and branded drinks and sweets. While children in rural areas prefer all types of drinks but have less liking for branded eatables. This could be because branded eatables are very expensive and available only in cities and are unaffordable to those in rural areas.

Similarly children in North Goa prefer branded eatables and branded drinks while those in South Goa have high preference for branded eatables and all types of drinks.

It can also be seen that children in all the 3 age groups like to drink soft drinks whether ordinary or branded are moreover preferred while they are less attracted to eatables. Children in age group of 6-7 eat a lot of sweets while those in the age group of 10-12 years prefer branded eatables.

Boys prefer branded eatables and all types of soft drinks while girls have less liking for eatables and more liking for soft drinks. Overall impact on eating in table shows the preference for food and beverages to be low (35.3%) among children in Goa.

Similarly it can be seen that Ordinary biscuits are consumed by 21.9% children every day and 20% children once in a week whereas branded biscuits are consumed by 26% children every day and 17.6% children once in a week. Branded chocolates are consumed by 147 children every day and 282 children once in a week while ordinary chocolates are consumed by 136 children every day and 307 children once in a week. Branded ice creams are consumed by 525 children once in a week and 248 children 4-6 times a week while ordinary ice creams are consumed by 387 children once in a week and 191 children 4-6 times a week.

Health drinks are consumed by 42.5% children every day. Noodles are consumed by 374 children once in a week and 369 children 4-6 times a week. Advertised products like Cadbury chocolates (89.4%), Rasna (76.6%) and Lays (72.4%) have high demand in rural areas and products like Dominos pizza (72.4%), Bournvita (66.2%), Cadbury Oreo (78.4%) and Uncle Chips (70.6%) have high demand in urban areas. 2.2% children in the age group of 6-7 years, 3.4% children in the age group of 8-9 years and 5% children in the age group of 10-12 years get Rs. 200-400 as pocket money. There is high demand for branded eatables (34.9%), branded drinks (38.4%) and ordinary drinks (37.6%) among children in Goa. There is low demand for ordinary eatables (37.1%) and other snacks and sweets (39.8%) among children in Goa. 266 boys (males) and 180 girls (females) ate while watching T.V. T.V viewing has 51.3% overall impact on eating.

Further analysis on advertised products consumed by children area wise reveal the following: Among expensive fast food items Domino's pizza has 50.6% demand in urban areas and 36.2% demand in rural areas. Among noodles Maggie has 72.45 demands in urban areas and 70% demand in rural areas. Among chocolates Cadbury has 89.4% demand in rural areas and 88.6% demand in urban areas. Among health drinks Bournvita has 68.2% demand in urban areas and 66.2% demand in rural areas. Among biscuits Cadbury Oreo has 78.4% demand in urban areas and 76.6% demand in rural areas. Among ice creams and butter and cheese Amul is the leader of the market. Among soft drinks Rasna has high demand in rural areas (i.e. 76.6%) and 72.2% in urban areas. Lastly among wafers and chips Uncle Chips has 70.8% demand in urban areas and Lays has 72.4% demand in rural areas.

Hereafter the overall analysis of T.V advertisements that influence purchase of food and beverages are shown in Table 4.25.

Table 4.25

Overall analysis of T.V advertisements that influence purchase of food and

	Area U / R	District N / S	Age 6-7, 8-9, 10-12	Gender M / F
	Accept	Accept	Accept	Accept

beverages

Advertisements	p value	p value	p value	p value
Alpaliebe	.054	.353	.764	.010*
Dominos	.000*	.056	.421	.594
KFC	.000*	.009*	.163	.173
Maggie	.298	.960	.051	.935
Yippie	.656	.465	.637	.330
Cadbury	.232	.970	.373	.624
Cadbury Oreo	.406	.608	.948	.370
Kinder joy	.052	.641	.038*	.703
Horlicks	.094	.457	.756	.177
Boost	.386	.171	.538	.211
Complan	.371	.157	.467	.025*
Bournvita	.563	.362	.535	.141
Quaker oats	.405	.677	.242	.530
Kellogg's	.582	.339	.513	.200
Dabur	.012*	.182	.249	.152
Go cheese	.044*	.477	.755	.269
Amul	.106	.020*	.738	.126
Baskin Robbins	.412	.616	.267	.972
Kwality walls	.660	.176	.425	.479
Sunfeast	.067	.115	.284	.458
Milano	.012*	.193	.147	.270
Glucose	.008*	.033*	.453	.126
Nestle	.011*	.002*	.529	.001*
Coco cola	.002*	.001*	.923	.050
Priya gold	.507	.942	.088	.022*
Pepsi	.077	.024*	.917	.595
Slice	.097	.243	.210	.171
Limca	.622	.535	.476	.059
Kissan	.000*	.340	.656	.338
Kurkure	.089	.149	.928	.629
Lays	.009	.450	.025*	.093
Balaji	.016*	.014*	.108	.041*
Uncle chips	.346	.787	.898	.481
Tang	.081	.625	.987	.074
Rasna	.111	.385	.149	.454
Act II	.250	.513	.364	.059
Knor soups	.504	.187	.325	.081
Foodles	.446	.708	.162	.470

Source: Primary data

* Significant at 5% level of significance

From the above Table 4.25 it can be seen that children are moreover attracted to all the advertised products with the difference in the intensity. Of the 39 ads, 11 ads showed significant relationship area wise, 8 ads showed significant relationship district wise, 2 ads showed age wise and 5 ads showed gender wise significant

relationship. All other ads show no significant relationship. Hence from Table 4.25 we can conclude that overall there is no significant difference in the influence of T.V advertisements on food and beverage preferences of children on the basis of area, district, age and gender, and thus H01, H02, H03 and H04 are accepted.

CHAPTER 5

FACTORS INFLUENCING CONSUMPTION OF ADVERTISED PRODUCTS

CHAPTER FIVE

FACTORS INFLUENCING CONSUMPTION OF ADVERTISED PRODUCTS

5.1 Introduction:

Advertised food or fast food as commonly called is consumed by all children. T.V advertising plays an important role in influencing children's food purchase. Without realising the consequences children relish the taste of it. Marketers selling intent is not understood by all children, therefore parents play an important role in choosing and purchasing the right type of food for them.

Junk foods are normally high in fats and low in other nutrients. The most common junk food consists of fast food, chips, candy, sweet desserts and other alcoholic beverages. (Philips SM, Bandini LG, Naumova. N et al. 2004). Consumption of sweet beverages like fruit drinks soft drinks that are carbonated and energy drinks can lead to type 2 diabetes and cardiovascular problems (Hu FB, Malik US, 2010). The bad habits of consuming excess salt include blood pressure increase and decrease in calcium absorption. High salt content food has therefore become a vital issue in a modern society. Many times additives are added to junk food to increase the shelf life, improve the taste and to protect it from microbial contamination (Barre LK, Ferron JC, Davis KE, Whitley R, 2011). High salt content food contains additive substances that ignite the dopamine receptors of the brain, which brings about craving and hunger. This leads to appetite increase, consumption of calories, overeating, obesity and other sickness. (James A. Cocores, Mark S. Gold, 2008). One of the factors that bring about consumption of junk food is television viewing which highly increase unhealthy dietary habits among children (Helen. G. Dixon, Maree. L. Scully, Melanie. A, Wakefield et al 2007).

Unhealthy eating habits are the main cause of children's obesity (Harrison and Marske 2005).

Some of the factors that influence eating habits of children are children's innate preferences (Young 2003), peer and siblings (Benton 2004), food preferences and beliefs of parents (Campbell and Crawford 2001), behaviour of adults (Harper and Sanders 1975) and exposure to various media (Caroli, Argentieri, Cardone and Masi

2004), various studies and media reports have pointed out children's increased exposure to TV food advertising as one of the prominent factors that affects children's eating habits and causing obesity to children (Boynton – Jarrett, Thomas, Peterson, WiechaSobol, and Gortmaker 2003, Henderson and Kelly 2005, Kaiser Family Foundation 2004). Besides childhood obesity, unhealthy eating habits and exposure to TV food advertising causes conflict that erupts between parent and child. These conflicts not only create negative impact on children's relationship but also effects within the family (Buizen and Valkenburg 2003)

5.2 METHODOLOGYANDHYPOTHESIS

The aim of this research is to analyse factors influencing consumption of advertised products .Data was gathered from 1000 children by asking respondents to rank the statements on likert scale (1=Strongly disagree, 2=Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree). Information received was statistically tested by using factor analysis, multiple regression, Mannwhitney test and Kruskal Wallis test.

The following hypothesis were framed:

H01: There is no significant difference in the impact of various factors on consumption of advertised products in urban and rural areas of Goa.

H02: There is no significant difference in the impact of various factors on consumption of advertised products in North and South Goa.

H03: There is no significant difference in the impact of various factors on consumption of advertised products in relation to their age.

H04: There is no significant difference in the impact of various factors on consumption of advertised products in relation to their gender.

The above hypothesis were analysed and further tested on the basis of area, district, age and gender.

5.3 ANALYSIS

This section gives the analysis on the basis of area (urban and rural), district (North and South Goa), age (6-7, 8-9, 10-12 years) and gender (male and female). In order to analyse the factors influencing consumption of advertised products factor analysis

and multiple regression is used while in order to assess the impact of the factors on consumption of fast food Mannwhitney test and Kruskal Wallis test is used.

Table 5.1

Descriptive statistics for reliability	
Cronbach's Alpha	No. of items
.892	45

Table 5.1depicts that the value of the Cronbach Alpha is .892, and as it comes out to be greater than 0.6, it implies that the data collected was reliable. Cronbach Alpha can take any value less than or equal to 1, including negative values, although only positive values make sense. Higher values of Alpha are more desirable. (Cronbach, L.J.,1951).

Table 5.2
Descriptive statistics for Mean, Standard deviation and Median

Statements	N	Mean	Std. Deviation	Median(IQR)
I like advertised products with free offers	1000	3.3890	1.23661	4
I love to use advertised products with cartoon characters	1000	3.3590	1.36087	4
I like to eat only branded products	1000	3.4340	1.23983	4
I buy products that show my favourite hero	1000	2.8260	1.24389	3
I prefer advertised food for its taste	1000	3.1610	1.17833	3
I like fast food as they are available in different varieties	1000	3.0670	1.20663	3
You get impressed by attractive presentation of advertised products	1000	3.3060	1.19908	4
I like advertised products due to the attractive package	1000	2.9180	1.17331	3
Like fast food for its freshness & taste	1000	2.9110	1.25246	3
Meal at fast food restaurant is as nutritious as a meal prepared at home	1000	1.9880	1.12655	2
I think that fast food is delicious	1000	2.9920	1.22206	3
Noodles & cornflakes constitute a nutritious breakfast	1000	3.0190	1.23943	3
Fast food is cheaper & convenient to buy	1000	2.7520	1.17638	2
I prefer eating at fast food outlets than eating at home	1000	2.2580	1.17678	2

Table 5.2 (contd...)

Statements	N	Mean	Std. Deviation	Median (IQR)
I like to eat at any way side outlet	999	2.0621	1.01499	2
I eat advertised food while watching T.V	1000	2.7250	1.20782	2
Soft drinks are convenient to buy	1000	3.3030	1.16900	4
Drinking soft drinks makes me feel good	1000	2.9760	1.24939	3

Soft drinks are usually available in my home	1000	2.3700	1.17919	2
Soft drink is good value for money	1000	2.2140	1.15219	2
I usually choose soft drinks instead of water or milk	1000	2.1860	1.21362	2
I choose the soft drinks with the best T.V advertisements	1000	2.6050	1.20600	2
Advertisements showed on television influence me to buy advertised products	1000	3.1960	1.21370	4
I like to eat burgers & pizzas advertised on television	999	2.6296	1.24983	2
I eat out as there is no time for my mother to cook	1000	2.0280	1.36348	2
I eat out quite often as my parents are both working	1000	2.1100	1.16587	2
I go out to eat fast food only on special occasions	1000	3.5790	1.15286	4
I eat a lot of advertised food when my parents are not at home	1000	2.1540	1.13736	2
'I go out for dinner with my parent's at least once a week	1000	2.7530	1.38777	2
I buy the same snacks & soft drinks as my friends	999	2.6166	1.19877	2
Consumption of fast food with your family & friends is a form of entertainment for you	999	3.0551	1.23004	3
I visit fast food restaurants with my parents & relatives	1000	3.3990	1.16325	4
I do not consult my parents in buying advertised food & beverages	1000	2.2800	1.24223	2
I eat a lot of advertised food as I don't have my breakfast	1000	1.9630	1.10583	2
I can afford to buy advertised products	1000	2.6330	1.18984	2
I buy advertised products with my pocket money	1000	2.2020	1.15348	2
I spend maximum of my pocket money to buy fast food items	1000	1.9490	1.07590	2
There are plenty of fast food outlets available all around my school	1000	2.7130	1.27603	2
There are many shops around my school that sell advertised products	1000	3.1490	1.31016	4
Fast food stores are clean and safe	1000	2.2630	1.32347	2
I prefer to visit fast food restaurants that provide good atmosphere and parking facilities	1000	3.2700	1.20106	4
Fast food restaurants provide fast service and friendly atmosphere	1000	3.1720	1.13124	3
I like to visit fast food restaurants as they are open throughout the day	1000	2.565	1.1615	2
I like to eat advertised food though I know it is unhealthy	1000	2.6440	1.22995	2
Eating fast food occasionally does no harm to your health	1000	2.8750	1.79906	3

Source: Primary data

Table 5.2 shows the mean, standard deviation and median of the various variables used in this study. The mean has the highest value for the statement" I go out to eat fast food only on special occasions" and the lowest for "I spend maximum of my

pocket money to buy fast food items'. In the next step, factor analysis was conducted on the observations collected, as a result, first of all, KMO and Bartlett's test was conducted, and the results are shown in table5.3.

Table 5.3

KMO and Bartlett's Test		
Kaiser – Meyer – Olkin Measure of Sampling Adequacy		.913
Bartlett's Test of Sphericity	Approximate Chi Square	10092.872
	Df	990
	Sig.	.000

Bartlett's test of Sphericity shows that the relationshipis significant among the variables that are used for factor analysis. The KMO measure of sampling adequacy is .913 for more than the recommended value of 0.60, which is sufficient enough while Bartlett's test of Sphericity has reached the point of statistical significance. (Approximate Chi-Square value=10092.872, df=990 and significance=.000), which shows that the data was good for doing the factor analysis (Kaiser, H.F. 1963, Bartlett, M.S., 1950). The 45 items were put to principal component analysis (PCA) with varimax rotation to check whether the data is fit for factor analysis.

Table 5.4

Descriptive statistics for rotated component matrix

Rotated component matrix(VARIMAX) Variables	Component										
	1	2	3	4	5	6	7	8	9	10	11
Soft drink is good value for money	.410										
I usually choose soft drink instead of water or milk	.523										
I eat out as there is no time for my mother to cook	.688										
I eat out quite often as my parents are both working	.690										
I eat a lot of advertised food as I don't have my breakfast	.593										
I buy the same snacks & soft drinks as my friends	.443										
I prefer advertised food for its taste.		.426									
I like fast food as they are available in different varieties.		.594									
I like fast food for its freshness and taste.		.573									
Meal at fast food restaurant is as nutritious as meal prepared at home.		.411									
I think that fast food is delicious.		.501									
I preferred eating at fast food outlet than eating at home.		.601									
I like to eat at any wayside outlet.		.407									
I like to eat burgers & pizzas.		.423									
I like advertised products with free offers.			.716								
I love to use advertised products with cartoon characters.			.732								
I buy products that show my favourite hero.			.554								
You get impressed by attractive presentation of advertised product.			.598								
I like advertised products due to attractive package.			.527								
I eat a lot of advertised food as I do not have my breakfast.				.448							
I can afford to buy advertised products.				.623							
I buy advertised products with my pocket money.				.624							
I spend maximum of my pocket money to buy fast food.				.616							
I like to visit fast food rest. As they are open throughout the day.				.462							

Source: SPSS output

Table 5.4 (Contd...)

Rotated component matrix (VARIMAX) Variables	Component										
	1	2	3	4	5	6	7	8	9	10	11
Soft drinks are convenient to buy.					.678						
Drinking soft drinks makes me feel good.					.629						
I choose the soft drink with the best TV advertisements.					.479						
I go out to eat fast food only on special occasions.						.550					
I go out for dinner at least once a week.						.442					
Consumption of fast food with your family and friends is a form of entertainment for you.						.560					
I visit fast food restaurants with my parents & relatives.						.726					
I prefer to visit fast food restaurants that provide good atmosphere.						.439					
There are plenty of fast food outlets all around my school.							.766				
There are many shops around my school that sell advertised products.							.796				
I like to eat advertised food though I know it is unhealthy.								.468			
Eating fast food occasionally does no harm to your health.								.715			
Fast food is cheaper and convenient to buy.									.597		
Advertisements had shown on television influence me to buy advertised products.										.641	
I like to eat only branded products.											.822

Source: SPSS output

Table 5.5
Factor extraction results from component matrix

Sr. no	Components	Factor Loads	Eigen Value	% of Variance
1	Working parents	.690	8.701	7.240
2	Taste	.601	2.426	6.418
3	Product characteristics	.732	1.787	6.379
4	Availability of pocket money	.624	1.574	5.475
5	Convenience	.678	1.395	5.254
6	Outing with parents	.726	1.334	4.650
7	Availability of fast food outlets around school	.796	1.159	3.807
8	Casual attitude for homemade food	.715	1.131	2.997
9	Cheapness of fast food	.597	1.113	2.874
10	Attractive promotion	.641	1.056	2.728
11	Preference for branded products	.822	1.002	2.573
	Total percentage of variance	50.395		

Source: SPSS output

The objective here was to get lowest dimensions that showed what the relationships among the related variables are. Greater than one rule for Eigen value was implemented in identifying the number of factors. The variables that had a bigger loading on same factors were put together. 45 specific questions were asked to children using 5 point likert scale. (1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree) Initially there were 45 scaled variables that were measured. 33 of the variables were removed after factor analysis and 11 factors were created.

The factor analysis produced a total of 11 factors with Eigen value greater than one. These factors were: Working parents, tasty food, product characteristics, money, home-made food, cheapness of fast food, attractive promotion, and preference for branded products. The availability of convenience, outing with parents, availability of fast food outlets around school, casual attitude for pocket cumulative percentage of variance explained was 50.395. These 11 factors with respective loading levels are presented in Table 5.5.

All the variables having factor loadings less than 0.4 are not shown, then the obtained results from the table shows that variables like “I usually choose soft drinks instead of water or milk, soft drinks is a good value for money, I eat a lot of advertised food when my parents are not at home ,I eat out as there is no time for my mother to cook ,I eat out quite often as my parents are both working and I buy the same snacks and soft drinks as my friends have the highest loadings at first component. Hence they are grouped under the factor named “working parents”.

Variables like I prefer advertised food for its taste, I like fast food as they are available in different varieties, I like fast food for its freshness and taste, Meal at fast food restaurant is as nutritious as a meal prepared at home, I think that fast food is delicious, I prefer eating at fast food outlets than eating at home, I like to eat at any wayside outlet, I like to eat burgers and pizzas have the highest loadings at the second component, so they are grouped under the factor called “tasty food ”.

Variables like “I love to use advertised product with cartoon characters, I like advertised products with free offers, I buy products that show my favourite hero, You get impressed by attractive presentation of advertised products, I like advertised products due to the attractive package have the highest loadings at the third component, so they are grouped under the factor called “product characteristics”.

Variables like I eat a lot of advertised food as I don’t have my breakfast, I can afford to buy advertised products, I buy advertised products with my pocket money, I spend maximum of my pocket money to buy fast food and I like to visit fast food restaurants as they are open throughout the day have the highest loadings at the fourth component and so they are grouped under the factor named “Availability of pocket money”.

Variables like soft drinks are convenient to buy, drinking soft drinks makes me feel good, I choose soft drinks with the best T.V advertisements have the highest loadings at the fifth component, so they are grouped under the factor called “convenience”

Variables like I go out to eat fast food only on special occasions, I go out for dinner at least once a week, Consumption of fast food with your family and friends is a form of entertainment for you, I visit fast food restaurants with my parents and relatives,
I prefer to visit fast food restaurants that provide good atmosphere and parking facilities have the highest loading at the sixth component so they are grouped under the factor called “outing with parents”.

Variables like there are plenty of fast food outlets available all around my school, there are many shops around my school that sell advertised products have the highest loading at the seventh component, so they are grouped under the factor called “availability of fast food outlets around school”.

Variables like “I like to eat advertised food though I know it is unhealthy ,Eating fast food occasionally does no harm to your health, have the highest loadings at the eighth component , so they are grouped under the factor called “Casual attitude for homemade food”.

Variable like fast food is cheaper and convenient to buy have the highest loading at the ninth component, so it is grouped under the factor called “cheapness of fast food”.

Variables like advertisements shown on television influence me to buy advertised products have the highest loading at the tenth component so they are grouped under the factor called “attractive promotion”.
Variable like I like to eat only branded products have the highest loading at the eleventh component, so it is grouped under the factor “preference for branded products”.

Table 5.6
Correlation

Unhealthy food habits

Sr. no	Factors	Pearson's Correlation **	P value	Signi-ficant
1.	Working parents	.492**	.000*	Sig
2.	Tasty food	.509**	.000*	Sig
3.	Product characteristics	.419**	.000*	Sig
4.	Availability of pocket money	.523**	.000*	Sig
5.	Convenience	.476**	.000*	Sig
6.	Outing with parents	.415**	.000*	Sig
7.	Availability of fast food outlets around school	.324**	.000*	Sig
8.	Casual attitude for home-made food	.526**	.000*	Sig
9.	Cheapness of fast food	.456**	.000*	Sig
10.	Attractive promotion	.472**	.000*	Sig
11.	Preference for branded products	.320**	.000*	Sig
12.	Overall impact of the factors	.779**	.000*	Sig

** Correlation is significant at the 0.01 level (2-tailed)
*Significant at 5% level of significance

Pearson's correlation was used to find the correlation in the research hypothesis. Table 5.6 shows the results. The hypothesis states that there is a correlation between the various factors and unhealthy food habits. The results show that tasty food, availability of pocket money, casual attitude for home- made food have good positive (r=.509,523,.526) and highly significant (p=.000 level) correlation with unhealthy food habits. The remaining factors showed a moderate, positive(r=.492,.419,.476,.415,.324,.456,.472 and .320) and highly significant correlation with unhealthy food habits (p=.000) which is below 0.01 at 5 % level of significance. The overall impact of factors showed a good correlation (.779) and significantly high relationship with p value = .000.

The result of the study was then examined using multiple regressions to assess the relationship between all the 11 independent variables and unhealthy food habits. As seen from Table 5.7 the value of R is .779 and R square is .607. The value of R shows a positive relationship between variables. Table 5.8 shows the sum of squares for regression residual and the total. The regression sum of square value is 223852.6 and residual sum of square is 145184.0. The value of F test is 126.561 significant at α 0.000. This shows the model has a good fit in explaining the variations with moderately high values of R^2 (.607).

Therefore the model shows that the factors (11 factors) explain 60.7% variance towards unhealthy food habits. Table 5.9 shows the beta values of constant and the variables in the model. It has been found that 10 factors have a significantly high relationship as all p values are below 0.01 at 5% level of significance. The standard coefficient is highest at .147 and the main factor that influences unhealthy food habit is availability of fast food counters around school followed by availability of pocket money (Beta=.146), and product characteristics (Beta=142).

Table 5.7
Regression Analysis: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.779(a)	.607	.602	12.14063

a Predictors: (Constant), Preference for branded food, Working parents, Cheapness of fast food, Product characteristics, Outing with parents, Tasty food, working parents, Availability a of fast food outlets around school, Convenience, Attractive promotion, Casual attitude for home- made food, Availability of pocket money.

Table 5.8
ANOVA[b]

Model	Sum of squares	df	Mean squares	F	Sig.
Regression	223852.6	12	18654.383	126.561	.000 a
Residual	145184.0	985	147.395		
Total	369036.6	997			

a Predictors: (Constant), Preference for branded products, Availability of fast food outlets around school, Cheapness of fast food, Product characteristics, Outing with parents, taste, Working parents, Convenience, Attractive promotion, Casual attitude for home- made food, Availability of pocket money.

b. Dependent variable: Unhealthy food habits.

Table 5.9

Multiple regression results showing coefficients [a]

Model	Factors	Unstandardized Coefficients		Standardized Coefficients	t	p value
		B	Std. Error	Beta		
1	(Constant)	-44.122	2.360		-18.698	.000*
1.	Working parents	.727	.812	.029	.896	.371
2.	Availability of pocket money	3.736	.846	.146	4.417	.000*
3.	Availability and convenience of fast food counters	3.305	.628	.128	5.261	.000*
4.	Product characteristics	2.793	.458	.142	6.100	.000*
5.	Taste	2.637	.607	.111	4.345	.000*
6	Casual attitude for home-made food	2.295	.664	.091	3.454	.001*
7.	Attractive promotion	1.814	.566	.081	3.208	.001*
8.	Outing with parents	2.053	.338	.136	6.073	.000*
9.	Availability of fast food counters around the school	2.557	.362	.147	7.070	.000*
10.	Cheapness of the food	2.909	.500	.135	5.817	.000*
11.	Preference for branded food	2.860	.444	.134	6.446	.000*

A .Dependent variable: Unhealthy food habits.

Source: SPSS output.

Significant at 5% level of significance

Further we attempted to evaluate the impact of the eleven factors that influence purchase of fast food using multiple regression model in which unhealthy food habits is dependent variable while preference for branded products, outing with parents, convenience, casual attitude for homemade food , working parents, availability of pocket money, tasty food, availability of fast food outlets around school, product characteristics, cheapness of fast food, attractive promotion are independent variables. All the eleven factors independently show correlation with unhealthy food habits. The multiple regression method is considered to find out the relationship between the above eleven factors which are in terms of independent variables and unhealthy food habit as dependent variable. Results show serial numbers 2-11 to show highly significant relationship between various factors and unhealthy food habits as all the p values are below 0.01 at 5% level of significance while working parents show no significant relationship as p value is 0.371. Hence we can note that working parents is not a striking factor for unhealthy food consumption.

It is the other factors that play a major role. All these independent variables show 60.7% influence on unhealthy food habits among children. It has been found that availability of fast food counters around the school has the highest influence on purchase of fast food (Beta=.147), followed by availability of pocket money (Beta =.146), product characteristics (Beta=.142) and outing with parents (Beta=.136).

The impact of various factors have been studied area wise, district wise, age wise and gender wise.

Table 5.10

Area wise distribution of factors influencing consumption of advertised food in Goa

Factors	Area	Mean	Standard Deviation	Median (IQR)	Mannwhitney test z value	P value
Working parents	Urban	2.0965	.81128	2	1.00	.318
	Rural	2.1182	.73476	2		
Taste	Urban	2.8051	.81694	2.75	1.11	.268
	Rural	2.8642	.80034	2.75		
Product characteristics	Urban	3.0908	1.01362	3.33	3.34	.001*
	Rural	3.2912	.93127	3.33		
Pocket money	Urban	2.1202	.77061	2	.73	.466
	Rural	2.1433	.73352	2		
Convenience	Urban	3.0494	.80508	3	3.04	.002*
	Rural	3.2064	.78808	3.3		
Outing with parents	Urban	2.7555	1.25804	2	.50	.619
	Rural	2.7194	1.29931	2		
Availability near school	Urban	2.9649	1.07559	3	.94	.346
	Rural	2.9048	1.13163	3		
Casual attitude for home-made food	Urban	2.3798	.72469	2.25	2.30	.021*
	Rural	2.4955	.79554	2.25		
Cheapness of fast food	Urban	2.7305	.91835	3	1.46	.143
	Rural	2.6543	.86500	2.5		
Attractive promotion	Urban	2.9953	.87185	3	.36	.717
	Rural	3.0187	.85474	3		
Preference for branded products	Urban	3.2365	.90469	3.5	.51	.610
	Rural	3.2184	.90202	3		
Overall impact of factors	Urban	2.7824	.50724	2.7	1.04	.300
	Rural	2.8208	.51833	2.8		

Source: Primary data

* Significant at 5% level of significance

The classified and cross tabulated data is given in Table 5.10. Based on cross tabulation it can be observed that:

Working parents have become an integral part of all society. With both parents working and less time to cook children have developed liking for fast food. From the table it can be seen that the impact of working parents is more in rural areas as mean value is 2.11 compared to urban areas where it is 2.09. This shows that the numbers of working parents have increased in rural areas too and children here are also getting used to fast food. The Mannwhitney test has been applied and the p value was found to be .318 which is greater than 0.05 at 5% level of significance which shows that there is no significant association between impact of working parents and area.

Most children like to consume fast food due to its taste. The sweet, salty, spicy, delicious taste attracts children towards it. From the table 5.10 it can be seen that the mean value is 2.86 for rural and 2.80 in urban areas which shows that there is a higher impact in rural areas as compared to urban areas. In other words children in rural areas are more attracted to new taste and thereby purchase fast food. The p value is .268 which is greater than 0.05 at 5% level of significance which shows that there is no significant association between impact of taste and area.

Children love advertised products with free offers, cartoon characters, favourite hero and attractive package. From table 6 it can be seen that product characteristics have a high impact on urban and rural areas. The impact is more in rural areas as mean value is 3.29 and lower in urban area with mean value 3.09 which shows that children in rural areas are more influenced by product characteristics. Mannwhitney test was applied and the p value was found to be .001 which is less than 0.01 at 5% level of significance which shows that there is a significantly high association between impact of product characteristics and area.

As both parents start working income in the family increases. Parents compensate for lack of time by buying whatever children demand. They also give pocket money to their children so that they can purchase whatever they want.

From the table 5.10 it can be seen that pocket money has more impact in rural than urban area as mean value is 2.14 in rural areas and 2.12 in urban area. The p value is .466 which is greater than 0.05 at 5% level of significance which shows that there is no significant association between impact of pocket money and area.

Convenience in buying fast food is the main element that attracts children to purchase it. Soft drinks are available in smaller pet bottles and chips, biscuits and chocolates are available in smaller packs. All this attracts children to buy them. The above table shows a very high impact of convenience on rural and urban areas. The mean value in rural area is 3.20 while in urban area it is 3.04 which show that the impact is higher in rural areas.

Mannwhitney test result shows p value to be .002 which is less than 0.01 at 5% level of significance which shows that there is a significantly high association between impact of convenience and area.

With families becoming nuclear and both parents working the income and standard of living has slowly increased. Children go for outings with their parents where they consume a lot of fast food. The trend was more in urban areas but is now slowly moving to rural areas too. Table 1 shows the impact to be more in urban areas with mean value 2.75 as compared to rural area with mean value 2.71. The p value is .619 which is greater than 0.05 at 5% level of significance which shows that there is no significant association between impact of outing with parents and area.

With shops selling several fast food items near school premises, children are tempted to buy various advertised products. Table 6 shows this impact to be more in urban areas with mean value 2.96 as compared to rural area with mean value 2.90. Mannwhitney test shows p value to be .346 which is greater than 0.05 at 5% level of significance which shows that there is no significant association between impact of availability of fast food near school and area.

Children are influenced by their friends, peers and advertising towards consumption of fast food. Since fast food is easily available in their own homes they prefer it to eat them and avoid home-made food. Their attitude is to eat junk food at the cost of nutritious home-made food.

Table 5.10 shows that today rural children also have developed this trend of consuming fast food more than urban children as mean value is 2.49 in rural areas and 2.37 in urban areas. The p value is .021 which is less than 0.05 at 5% level of significance which shows that there is a significant association between impact of casual attitude for home-made food and area.

One of the main factors that influence children towards fast food is its price. Fast food and beverages are found to be cheaper. They are available in small packs/ bottles worth Rs. 5/- on wards which make it affordable to children from urban and rural areas. From table 6 it can be seen that the impact is more in urban areas with mean value 2.73 as compared to rural areas with mean value2.65. The p value is .143 which is greater than 0.05 at 5% level of significance which shows that there is no significant association between impact of cheapness of fast food and area.

Advertising also plays a major role in children's preference for fast food. The attractive presentation, music, slogan and presence of their favourite celebrity influence children in purchasing fast food. From the table it can be seen that children in rural areas are more influenced by advertising as mean value is 3.01 as compared to urban area where mean value is 2.99. This shows that children in rural areas are attracted more towards promotion. The p value is .717 which is greater than 0.05 at 5% level of significance which shows that there is no significant association between impact of attractive promotion and area.

Children today have become brand conscious. They like to eat and drink branded products advertised on TV. This is evident from table 6. It can be seen that children in urban areas prefer more of branded products as mean value is 3.23 as compared to rural areas where mean value is 3.21. Mannwhitney test results show p value to be .610 which is greater than 0.05 at 5% level of significance which shows that there is no significant association between impact of preference for branded products and area. Lastly an analysis of the overall impact of factors shows that children in rural areas were more influenced by the various factors as mean value is 2.82 while in urban areas it is m=2.78.The p value was found to be .300 which is greater than 0.05 at 5% level of significance which shows that there is no significant association between the various factors and area.

Similarly region, age and gender has been analysed.

Table 5.11

Region wise distribution of factors influencing consumption of advertised food in Goa

Factors	District	Mean	Standard Deviation	Median (IQR)	Mannwhitney test z value	P value
Working parents	North Goa	2.1333	.77995	2	.87	.383
	South Goa	2.0815	.76721	2		
Taste	North Goa	2.8146	.83411	2.75	1.11	.268
	South Goa	2.8547	.78303	3		
Product characteristics	North Goa	3.2265	.96047	3.3	1.08	.278
	South Goa	3.1556	.99488	3.3		
Pocket money	North Goa	2.1443	.75354	2	.47	.636
	South Goa	2.1192	.75101	2		
Convenience	North Goa	3.1490	.80982	3.3	.54	.591
	South Goa	3.1069	.79049	3.3		
Outing with parents	North Goa	2.7535	1.28685	2	.40	.692
	South Goa	2.7214	1.27083	2		
Availability near school	North Goa	2.7525	1.12625	3	5.15	.000*
	South Goa	3.1172	1.05081	3		
Casual attitude for home-made food	North Goa	2.4494	.77425	2.5	.17	.868
	South Goa	2.4259	.75168	2.5		
Cheapness of fast food	North Goa	2.7415	.91578	3	1.66	.097
	South Goa	2.6433	.86661	2.5		
Attractive promotion	North Goa	3.0107	.87550	3	.02	.982
	South Goa	3.0033	.85114	3		
Preference for branded products	North Goa	3.2234	.89883	3	.11	.915
	South Goa	3.2315	.90793	3		
Overall impact of factors	North Goa	2.8044	.52564	2.81	.05	.957
	South Goa	2.7988	.50038	2.79		

Source: Primary data, * Significant at 5% level of significance

Further Table 5.11 gives the district wise cross tabulation and it can be observed that: The various factors that have a greater impact in North Goa are working parents (m=2.13), product characteristics (m=3.22), pocket money (m=2.14), convenience (m=3.14), outing with parents (m=2.75), attractive promotion (m=3.01) while those that have a greater impact in South Goa are taste (m=2.85), availability of fast food outlets around school (m=1.05), casual attitude for home-made food (m=2.74), preference for branded products (m=3.23) and overall impact of factors (m=2.80). There is no significant relationship between the impact of various factors and district as all the p values are greater than 0.05 at 5% level of significance except for availability of fast food near school where in the p value is .000 which is less than 0.01 at 5% level of significance which show that there is a significantly high association between impact of availability near school and district.

As a result it can be concluded that although availability near school and district show a significant association, the overall impact of factors show no significant association between the remaining factors and district. As a result it can be concluded that there is no significant association between various factors influencing consumption of fast food and district.

Table 5.12

Age wise distribution of factors influencing consumption of advertised food in Goa

Factors	Age	Mean	Standard Deviation	Median (IQR)	Mannwhitney test z value	P value
Working parents	6-7 years	2.0522	.73390	2	6.711	.035*
	8-9 years	2.0460	.76124	2		
	10-12 years	2.1730	.79064	2		
Taste	6-7 years	2.7910	.80541	2.75	6.670	.036*
	8-9 years	2.7758	.83796	2.75		
	10-12 years	2.8950	.78254	3		
Product characteristic	6-7 years	3.2338	1.02437	3.3	2.126	.345
	8-9 years	3.2165	.96364	3.3		
	10-12 years	3.1583	.97725	3.3		
Pocket money	6-7 years	2.0585	.67422	2	9.687	.008*
	8-9 years	2.0709	.78076	2		
	10-12 years	2.2020	.74400	2.16		
Convenience	6-7 years	3.0796	.84583	3	1.358	.507
	8-9 years	3.1048	.82483	3.3		
	10-12 years	3.1604	.76607	3.3		
Outing with parents	6-7 years	2.4627	1.16113	2	8.724	.013*
	8-9 years	2.7139	1.29922	2		
	10-12 years	2.8340	1.28300	2		
Availability near school	6-7 years	2.8060	1.09666	3	2.171	.338
	8-9 years	2.9549	1.12634	3		
	10-12 years	2.9548	1.08703	3		
Casual attitude for home-made food	6-7 years	2.4160	.79999	2.25	2.417	.299
	8-9 years	2.3924	.74613	2.5		
	10-12 years	2.4806	.76469	2.5		
Cheapness of fast food	6-7 years	2.5261	.86127	2.5	7.794	.020*
	8-9 years	2.6611	.87998	2.5		
	10-12 years	2.7647	.90573	3		
Attractive promotion	6-7 years	3.0149	.90378	3	.799	.671
	8-9 years	2.9751	.85310	3		
	10-12 years	3.0308	.86029	3		
Preference for branded products	6-7 years	3.1567	.92464	3	1.146	.564
	8-9 years	3.2320	.88794	3		
	10-12 years	3.2437	.90987	3		
Overall impact of factors	6-7 years	2.7246	.50592	2.75	7.665	.022*
	8-9 years	2.7783	.52371	2.77		
	10-12 years	2.8423	.50328	2.85		

Source: Primary data, * Significant at 5% level of significance

In table 5.12 study has also been undertaken age wise with the following observations. The various factors that have a greater impact on children in the age group of 6-7 years are product characteristics (m=3.23), while those with greater impact on children in age group of 8-9 years are availability of fast food near school (m=2.95). On the other hand factors that have greater impact on children in the age group of 10-12 years are working parents (m=2.17), taste (2.89), pocket money (m=2.20), convenience (m=3.16), outing with parents (m=2.83), casual attitude for home-made food (m=2.48), cheapness of fast food (m=2.76), attractive promotion (m=3.03), preference for branded products (m=3.24), overall impact of factors (m=2.84).

Further it can be seen that in case of pocket money the p value is .008 which is less than 0.01 at 5% level of significance which show that there is a significantly high association between impact of pocket money and age.

In case of other factors like working parents, taste, outing with parents, cheapness of fast food, the p values are .035, .036, .013, .020 which is less than 0.05 at 5% level of significance which shows that there is a significant association between impact of working parents, taste, outing with parents, cheapness of fast food and age of children.

In case of all the remaining factors namely product characteristics, convenience, availability of fast food near school, casual attitude for home-made food, attractive promotion, preference for branded products, the p values are greater 0.05 at 5% level of significance which shows that there is no significant relationship between the impact of various factors influencing consumption of fast food and age of children.

As a result it can be concluded that although working parents, taste, pocket money, outing with parents, cheapness of fast food and overall impact of factors show a significant association between them and age, there is no significant association between the remaining factors and age.

Hence it can be stated that there is no significant association between various factors influencing consumption of fast food and age.

Table 5.13

Gender wise distribution of factors influencing consumption of advertised food in Goa

Factors	Gender	Mean	Standard Deviation	Median (IQR)	Mannwhitney test z value	P value
Working parents	Male	2.0986	.75256	2	.23	.822
	Female	2.1186	.80065	2		
Taste	Male	2.8146	.82966	2.75	.75	.452
	Female	2.8604	.78143	2.75		
Product characteristics	Male	3.2210	.99874	3.3	1.20	.228
	Female	3.1526	.95041	3.3		
Pocket money	Male	2.1227	.71662	2	.13	.896
	Female	2.1434	.79581	2		
Convenience	Male	3.1361	.80691	3.3	.49	.625
	Female	3.1175	.79206	3		
Outing with parents	Male	2.7914	1.28216	2	1.51	.132
	Female	2.6682	1.27150	2		
Availability near school	Male	2.9866	1.08080	3	1.57	.116
	Female	2.8684	1.13046	3		
Casual attitude for home-made food	Male	2.4265	.77449	2.5	.78	.435
	Female	2.4519	.74807	2.5		
Cheapness of fast food	Male	2.6809	.88175	2.5	.57	.572
	Female	2.7071	.90679	3		
Attractive promotion	Male	2.9917	.89039	3	.40	.687
	Female	3.0267	.82707	3		
Preference for branded products	Male	3.1898	.89695	3	1.43	.154
	Female	3.2757	.90933	3		
Overall impact of factors	Male	2.8017	.51625	2.8	.51	.609
	Female	2.8015	.50920	2.7		

Source: Primary data Significant at 5% level of significance

The various factors that have a greater impact on male are product characteristics (3.22), convenience (m=3.13), outing with parents (m=2.79), availability of fast food near school (m=2.98), overall impact of factors (m=2.80).While those with greater impact on females are working parents (m=2.11), taste(m=2.86), pocket money (m=2.14), casual attitude for home-made food (m=2.45), cheapness of fast food (m=2.70), attractive promotion (m=3.02), preference for branded products (m=3.27).Hence it can be seen that females are influenced by more number of factors as compared to males though the overall impact shows a higher impact of factors on male. Table5.13 gives the gender wise analysis with following observations. It can be seen that all the factors have p values greater than 0.05 at 5% level of significance which show that there is no significant association between the impact of various factors influencing consumption of fast food and gender.

5.4 DISCUSSION AND CONCLUSION

The current research along with past studies has brought to light the fact that there is a good association between T.V viewing and consumption of unhealthy food. Those who excessively watch television eat a lot of non- nutritious food and beverages. Gerbner, Morgan and Signorielli (1982) in their research found that eating in front of television increases with age.

From the analysis it has been found that working parents, taste, product characteristics, availability of pocket money, convenience, outing with parents, availability of fast food outlets around school, casual attitude for home- made food, cheapness of fast food, attractive promotion and preference for branded products are factors that influence children to consume fast food. Out of these availability of fast food outlets around school and availability of pocket money are the prominent factors that have the highest impact on purchase of unhealthy food. Table 5.14 gives the overall analysis of various factors influencing consumption of advertised food.

Table 5.14

Overall analysis of factors influencing consumption of advertised food in Goa

Sr. No	**Factors**	**Area U / R**	**District N / S**	**Gender M / F**	**Age 6-7, 8-9, 10-12 years**
		Accepted	**Accepted**	**Accepted**	**Rejected**
1	Working parents	.318	.383	.822	.035*
2	Taste	.268	.268	.452	.036*
3	Product characteristics	.001*	.278	.228	.345
4	Pocket money	.466	.636	.896	.008*
5	Convenience	.002*	.591	.625	.507
6	Outing with parents	.619	.692	.132	.013*
7	Availability of fast food outlets around school	.346	.000*	.116	.338
8	Casual attitude for homemade food	.021*	.868	.435	.299
9	Cheapness of fast food	.143	.097	.572	.020*
10	Attractive promotion	.717	.982	.687	.671
11	Preference for branded products	.610	.915	.154	.564
12	Overall impact of factors	.300	.957	.609	.022*

Source: Primary data

* Significant at 5% level of significance

From the analysis it can be concluded that all the factors have an influence of children's fast food consumption with a difference in the intensity of impact. Area wise analysis brings to light the fact that today the impact is more in rural areas (m=2.82) than urban areas (m=2.78). Both parents have started working even in rural areas as a result of which the standard of living, spending capacity in rural areas has improved and are on par with urban areas. They can also afford to give sufficient amount of pocket money to their children which have increased their spending capacity. This finding is similar to that of Crocket & Sims (1995) who states that the status of the job of the mother is the key factor affecting lifestyle and food intake of the family.

It has been found that free offers, cartoon characters, favourite hero and other product characters influence children in rural areas towards advertised products. Since most of these products are now available in smaller and economical packages in rural areas they are easily purchased by rural children. With their friends and peers eating different types of junk food, rural children also have developed liking for such food and ignore the nutritious food prepared by their mothers. This casual attitude towards home-made food is another factor for rural children's consumption of advertised food (m=3.29, p=.021)

Similarly region wise analysis shows an overall higher impact in North Goa (m=2.80) as compared to South Goa (m=2.79). The availability of fast food outlets in and around schools make a lot of difference in the purchase attitude of children. The prevalence of shops, stores or fast food centres around school gives immense opportunity for children to purchase fast food items. In fact they long for the school bell to ring so that they can rush and buy various fast food items. From the analysis it can be seen that there is high prevalence of outlets around school in South Goa as compared to North Goa. As a result there is a significantly high relationship between availability of fast food around school and the 2 districts (p=.000).

An age wise analysis shows that children in the age group of 10-12 years are more influenced by the various factors (m=2.48). They are quite mature at this age, they know the intent of advertising, have pocket money, prefer branded products, like to experiment new products as compared to the other two age groups.

On the other hand it can also be seen that cheapness of fast food initiates children in all age groups to undertake purchase of fast food though the influence is greatest on 10-12 year olds (m=2.76, p=.020) who are equally influenced due to availability of sufficient pocket money as compared to other two age groups. The significantly high association between impact of pocket money and age adds value to this point (p=.008).

From the analysis it can also be seen that working parents (p=.035) and outing with parents (p=.013) influences consumption of fast food. With less time available with them parents themselves are found to either take their children out or feed them with a variety of fast food or even buy various advertised food for their children. The impact is highest among 10-12 year old (m=2.84) followed by 8-9 (m=2.77) and finally 6-7 year old (m=2.72). The crave to eat something different than what is cooked every-day or in other words the taste factor is what drives parents and their children to go for an outing.

Gender wise analysis shows an overall higher impact on male (m=2.8017) than female (m=2.8015) as males are found to be outgoing, impatient and ready to experiment on anything new as compared to female.

From the study it has been found that children like to consume unhealthy food and therefore a check is required on the consumption pattern and also their T.V viewing. Since boys were high consumers of advertised food a strict vigil is required on them. Pocket money has added in this process. Children who are financially well off are found to spend more money to purchase advertised food. Advertising has played a positive role though the relationship is not very strong.

Factors that influence fast food consumption contribute to 60.7% of the food habits (R2=.607).The impact of the various factors that influence fast food consumption is more in rural areas (mean=2.82) than urban areas (mean=2.78).

Factors like working parents (m=2.11), taste (m=2.86), product characteristics (m=3.29) and convenience (m=3.20) has a higher impact in rural areas while pocket money (m=2.14), outing with parents (m=2.75), availability near school (m=2.96), casual attitude for home- made food (m=2.49), price (m=2.73),advertising (m=3.01) and preference for branded products (m=3.23) have a higher impact in urban areas.

Hence from the Table 5.14 we find that area wise there is a significant relationship as product characteristics, convenience and casual attitude for home made food show significant difference while the other factors show no significant difference. In case of district availability of fast food outlets around school and cheapness of fast food show significant difference while the other factors show no significant relationship. In case of gender all the factors show no significant difference while in case of age working parents, taste, pocket money, outing with parents and cheapness of fast food show significant difference. In addition the overall impact of factors also show a significant difference.

Hence from the above analysis we can conclude that overall there is no significant difference as far as impact of various factors on consumption of advertised products and area, district, and gender are concerned. On the other hand there is a significant difference as far as impact of various factors on consumption of advertised products and age is concerned. As a result hypothesis H01, H02 and H03 are accepted while H04 is rejected.

CHAPTER 6

PARENTS ATTITUDE TOWARDS ADVERTISING, T.V VIEWINGANDCONSUMPTION OF ADVERTISED PRODUCTS

CHAPTER SIX

PARENTS ATTITUDE TOWARDS ADVERTISING, T.V VIEWINGAND CONSUMPTION OF ADVERTISED PRODUCTS

6.1 INTRODUCTION

Parents are the guardians of their children. They know what is good and bad for their children. It is they who could control unwanted T.V viewing and consumption of unhealthy food .Since parents themselves watches television and advertisements they are able to analyse the products and guide their children in making the right choice.

6.2 HYPOTHESIS AND METHODOLOGY

This chapter deals with the fourth objective i.e. to examine parent's attitude towards advertising and consumption of advertised products. It is conducted in 2 parts. The first part of the chapter deals with parents interest in T.V advertisements and their T.V viewing behaviour while the second part deals with what parents have to say about their children's behaviour regarding T.V viewing, advertisements, food advertising, child nutrition, parental mediation and conflict.
The following hypothesis were framed:

H01: There is no significant difference in parent's attitude towards advertising, T.V viewing and consumption of advertised products in urban and rural areas of Goa.

H02: There is no significant difference in parent's attitude towards advertising, T.V viewing and consumption of advertised products in North and South districts of Goa.

H03: There is no significant difference in parent's attitude towards advertising, T.V viewing and consumption of advertised products in relation to their age.

H04: There is no significant difference in parent's attitude towards advertising, T.V viewing and consumption of advertised products in relation to their gender.

In order to collect information on the first part 1000 parents from all over Goa were surveyed. The data was classified into Area (urban and rural), District (North and South Goa), Age (6-7, 8-9, 10-12 years), and Gender (male and female). Information on various areas related to parents own viewership of television, parents watching advertisements, parents frequency in accompanying children while watching T.V, frequency in making intent of ad clear to children, parental control on T.V programmes of children, children's behaviour while watching advertisements, effects due to T.V watching were collected. The data was then cross tabulated with the help of percentages and chi square and statistically tested.

To collect information on the second part questionnaire was framed which consisted of 8 statements about parents attitude towards advertisements, 4 statements about children's capacity to understand advertisements, 6 statements about children's behaviour regarding advertisements, 2 statements about regulation of advertising to children, 4 statements about conflict, 5 statements about food advertising, 3 statements regarding influence of advertising on children, 9 statements about parental concern with child nutrition and 12 statements about parental restrictive mediation.

Since parents are children's caretakers, they were the prime respondents for this study. Parents of 1000 children who were 6-12 years old were approached through the schools. A take home questionnaire was given to the children and they were instructed to give it to any one of the parent. Parents were asked to respond to a group of questions regarding T.V viewing, advertising, consumption of advertised food in connection with the child who has brought the questionnaire. Respondents were told to rate the items on a 5 point likert scale (1=strongly disagree, 2=disagree, 3=Neutral, 4=Agree, 5=strongly disagree). The mean formed the measure of attitudes towards advertising and consumption with higher scores indicating higher level of impact.

6.3 Analysis

Data was collected randomly from the various primary and high schools in the two districts North and South Goa and classified area, district, age and gender wise. For the first part chi square test was used while for the second part Mannwhitney test, Kruskal Wallis test, Correlation and Multiple regression were used.

Table 6.1
Number of Parents watching TV in the state of Goa

Category		Yes/No	Number of parents	Percentage
Area wise	Urban	Yes	456	91.2
		No	44	8.8
		Total	500	100
	Rural	Yes	450	90
		No	50	10
		Total	500	100
District wise	North Goa	Yes	468	93.6
		No	32	6.4
		Total	500	100
	South Goa	Yes	438	87.6
		No	62	12.4
		Total	500	100
Age wise	6-7 years	Yes	120	89.6
		No	14	10.4
		Total	134	100
	8-9 years	Yes	343	88.4
		No	45	11.6
		Total	388	100
	10-12 years	Yes	443	92.7
		No	35	7.3
		Total	478	100
Gender wise	Male	Yes	510	90.6
		No	53	9.4
		Total	563	100
	female	Yes	396	90.6
		No	41	9.4
		Total	437	100

Source: Primary data.

Table 6.2
Pearson's Chi Square Test showing number of Parents watching T.V

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	.423	1	.516
District wise	10.568	1	.001*
Age wise	4.797	2	.091
Gender wise	.000	1	.986

Source: Primary data *Significant at 5% level of significance

The classified and cross tabulated data is given in Table 6.1 and the chi square test result is shown in table 6.2.

From the table 6.1 it can be seen that around 90% of the parents have a great interest in watching TV whether area wise, region wise, age wise and gender wise. A large number of parents from South Goa were found to be low T.V viewers.

Chi square test was applied to see whether there is any association between parents watching TV and the various categories i.e. area wise, region wise, age wise and gender wise. All the p values were found to be greater than 0.05 at 5% level of significance showing no significant association between parents T.V watching, except district wise where the p value is .001 which is less than 0.01 at 5% level of significance which shows that there is a significantly high association between parents watching TV and region.

Table 6.3

Number of Parents watching advertisements in the state of Goa

Category		Yes/No	Number of parents	Percentage
Area wise	Urban	Yes	378	75.6
		No	122	24.4
		Total	500	100
	Rural	Yes	360	72.0
		No	140	28.0
		Total	500	100
District wise	North Goa	Yes	377	75.4
		No	123	24.6
		Total	500	100
	South Goa	Yes	361	72.2
		No	139	27.8
		Total	500	100
Age wise	6-7 years	Yes	93	69.4
		No	41	30.6
		Total	134	100
	8-9 years	Yes	292	75.3
		No	96	24.7
		Total	388	100
	10-12 years	Yes	353	73.8
		No	125	26.2
		Total	478	100
Gender wise	Male	Yes	420	74.6
		No	143	25.4
		Total	563	100
	Female	Yes	318	72.8
		No	119	27.2
		Total	437	100

Source: Primary data

Table 6.4

Pearson's Chi Square Test showing number of Parents watching advertisements

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	1.676	1	.196
District wise	1.324	1	.250
Age wise	1.767	2	.413
Gender wise	.427	1	.514

Source: Primary data Significant at 5% level of significance

The classified and cross tabulated data is given in Table 6.3 along with the chi square test result in Table 6.4. From the Table 6.3 it can be seen that around 75% of the parents like to watch advertisements. Advertisements that are shown in between programmes are viewed by them with interest. While a small section of around 25% of the parents do not watch advertisements.

Chi square test was applied to see whether there is any association between parents watching TV and the various categories i.e. area wise, region wise, age wise and gender wise. As all p values are greater than 0.05 at 5% level of significance it can be stated that there is no significant association between parent watching TV and area, district, age and gender.

Table 6.5

Parent's frequency in accompanying children while watching TV in the state of Goa

Category		Frequency	Number of parents	Percentage
Area wise	Urban	Often	253	50.6
		Occasionally	206	41.2
		Never	41	8.2
		Total	500	100
	Rural	Often	267	53.4
		Occasionally	195	39.0
		Never	38	7.6
		Total	500	100
District wise	North Goa	Often	268	53.6
		Occasionally	201	40.2
		Never	31	6.2
		Total	500	100
	South Goa	Often	252	50.4
		Occasionally	200	40.0
		Never	48	9.6
		Total	500	100

Table 6.5 (contd……)

Category		Frequency	Number of parents	Percentage
Age wise	6-7 years	Often	69	57.5
		Occasionally	58	43.3
		Never	07	5.2
		Total	134	100
	8-9 years	Often	199	57.3
		Occasionally	156	40.2
		Never	33	8.5
		Total	388	100
	10-12 years	Often	252	52.7
		Occasionally	187	39.1
		Never	39	8.2
		Total	478	100
Gender wise	Male	Often	285	50.6
		Occasionally	236	41.9
		Never	42	7.5
		Total	563	100
	Female	Often	235	53.8
		Occasionally	165	37.8
		Never	37	8.5
		Total	437	100

Source: Primary data

Table 6.6

Pearson's Chi Square Test showing Parents frequency in accompanying children while watching T.V

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	.793	2	.673
District wise	4.153	2	.125
Age wise	1.981	4	.739
Gender wise	1.849	2	.397

Source: Primary data Significant at 5% level of significance

The Table 6.5 above shows whether parents accompany their children while watching TV or not. It can be seen that 50% of the parents 'often' view TV with their children while 40% of the parents 'occasionally' view and the remaining 'never' view TV with their children. Chi square test as shown in Table 6.6 was applied to see whether there is any association between accompanying children while watching TV and the various categories i.e. area wise, region wise, age wise and gender wise. As all p values are greater than 0.05 at 5% level of significance it can be stated that there is no significant association between parents accompany their children while watching TV and area, district, age and gender.

Table 6.7
Frequency of Parent making intent of advertisement clear to children in Goa

Category		Frequency	No of parents	Percentage
Area wise	Urban	Often	189	37.8
		Occasionally	253	50.6
		Never	58	11.6
		Total	500	100
	Rural	Often	204	40.8
		Occasionally	219	43.8
		Never	77	15.4
		Total	500	100
District wise	North Goa	Often	206	41.2
		Occasionally	238	47.6
		Never	56	11.2
		Total	500	100
	South Goa	Often	187	37.4
		Occasionally	234	46.8
		Never	79	15.8
		Total	500	100
Age wise	6-7 years	Often	53	39.6
		Occasionally	62	46.3
		Never	19	14.2
		Total	134	100
	8-9 years	Often	162	41.8
		Occasionally	188	48.5
		Never	38	9.8
		Total	388	100
	10-12 years	Often	178	37.2
		Occasionally	222	46.4
		Never	78	16.3
		Total	478	100
Gender wise	Male	Often	232	41.2
		Occasionally	256	45.5
		Never	75	13.3
		Total	563	100
	Female	Often	161	36.8
		Occasionally	216	49.4
		Never	60	13.7
		Total	437	100

Source: Primary data.

Table 6.8

Pearson's Chi Square Test showing frequency of parent making intent of ads clear to children

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	5.696	2	.058
District wise	4.871	2	.088
Age wise	8.130	4	.087
Gender wise	2.040	2	.361

Source: Primary data Significant at 5% level of significance

The Table 6.7 above shows the frequency of making intent of advertising clear to children. It can be seen that around 40% of the parents often make the intent of ad clear to their children while around 45% of the parents 'occasionally' make the intent of advertising clear to children while the remaining 'never' bother to make the intent of advertising clear to children.

Chi square test as shown in Table 6.8 was applied to see whether there is any association between frequency of making intent of advertising clear to children and the various categories i.e. area wise, region wise, age wise and gender wise. As all p values are greater than 0.05 at 5% level of significance it can be stated that there is no significant association between making intent of advertising clear to children and area, district, age and gender.

Table 6.9

Parental control on T.V programmes of children in the state of Goa

Category		Frequency	Number of parents	Percentage
Area wise	Urban	Often	284	56.8
		Occasionally	165	33
		Never	57	10.2
		Total	500	100
	Rural	Often	300	60
		Occasionally	150	30
		Never	50	10
		Total	500	100
District wise	North Goa	Often	293	58.6
		Occasionally	167	33.4
		Never	40	8
		Total	500	100
	South Goa	Often	291	58.2
		Occasionally	148	29.6
		Never	61	12.2
		Total	500	100
Age wise	6-7 years	Often	83	61.9
		Occasionally	37	27.6
		Never	14	10.4
		Total	134	100
	8-9 years	Often	239	61.6
		Occasionally	122	31.4
		Never	27	7.0
		Total	388	100
	10-12 years	Often	262	54.8
		Occasionally	156	32.6
		Never	60	12.6
		Total	478	100

Table 6.9 (contd……)

Category		Frequency	Number of parents	Percentage
Gender wise	Male	Often	331	58.8
		Occasionally	175	31.1
		Never	57	10.1
		Total	563	100
	Female	Often	253	57.9
		Occasionally	140	32.0
		Never	44	10.1
		Total	437	100

Source: Primary data

Table 6.10

Pearson's Chi Square Test showing Parental control on T.V programmes of children

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	1.163	2	.559
District wise	5.519	2	.063
Age wise	9.513	4	.049*
Gender wise	.106	2	.949

Source: Primary data *Significant at 5% level of significance

The classified and cross tabulated data is given in Table 6.9 and the chi square test result is shown in table 6.10. From the table 6.9 it can be seen that 50-60% of the parents 'often' control the TV viewing of their children. They keep a strict vigil and also stop them from watching too long. 27-33% of the parents control 'occasionally' while the remaining 'never' control their children.

Chi square test was applied to see whether there is any association between parental control on TV programmes of children and the various categories i.e. area wise, district wise, age wise and gender wise. As all p values except for age are greater than 0.05 at 5% level of significance it can be stated that there is no significant association between parental control on TV programmes of children and area, district, and gender. While for age wise classification the p value is .049 which is less than 0.05 at 5% level of significance which shows that there is a significant relationship between parental control on TV programmes of children and age.

Table 6.11

Children's behaviour while watching advertisements in the state of Goa

Category		Frequency	Number of parents	Percentage
Area wise	Urban	Watches with attention	140	28
		Watches for few minutes	118	23.6
		Looks from time to time	45	9
		Does not care	66	13.2
		Makes comments about product	78	15.6
		Wants the product	53	10.6
		Total	500	100
	Rural	Watches with attention	122	24.4
		Watches for few minutes	134	26.8
		Looks from time to time	39	7.8
		Does not care	61	12.2
		Makes comments about product	83	16.6
		Wants the product	61	12.2
		Total	500	100
District wise	North Goa	Watches with attention	128	25.6
		Watches for few minutes	113	22.6
		Looks from time to time	36	7.2
		Does not care	71	14.2
		Makes comments about product	89	17.8
		Wants the product	63	12.6
		Total	500	100
	South Goa	Watches with attention	134	26.8
		Watches for few minutes	139	27.8
		Looks from time to time	48	9.6
		Does not care	56	11.2
		Makes comments about product	72	14.4
		Wants the product	51	10.2
		Total	500	100
Age wise	6-7 years	Watches with attention	29	21.6
		Watches for few minutes	31	23.1
		Looks from time to time	10	7.5
		Does not care	17	12.7
		Makes comments about product	29	21.6
		Wants the product	18	13.4
		Total	134	100
	8-9 years	Watches with attention	113	29.1
		Watches for few minutes	80	20.6
		Looks from time to time	32	8.2
		Does not care	43	11.1
		Makes comments about product	59	15.2
		Wants the product	61	15.7
		Total	388	100

Table 6.11 (contd……)

Category		Frequency	Number of parents	Percentage
Age wise	10-12 years	Watches with attention	120	25.1
		Watches for few minutes	141	29.5
		Looks from time to time	42	8.8
		Does not care	67	14.0
		Makes comments about product	73	15.3
		Wants the product	35	7.3
		Total	478	100
Gender wise	Male	Watches with attention	147	26.1
		Watches for few minutes	132	23.4
		Looks from time to time	44	7.8
		Does not care	67	11.9
		Makes comments about product	100	17.8
		Wants the product	73	13
		Total	563	100
	Female	Watches with attention	115	26.3
		Watches for few minutes	120	27.5
		Looks from time to time	40	9.2
		Does not care	60	13.7
		Makes comments about product	61	14
		Wants the product	41	9.4
		Total	437	100

Source: Primary data

Table 6.12

Pearson's Chi Square Test showing children's behaviour while watching ads

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	3.595	5	.609
District wise	9.364	5	.095
Age wise	27.965	10	.002*
Gender wise	7.733	5	.172

Source: Primary data *Significant at 5% level of significance

Parents were also asked how their children behaved while watching advertisements. The classified and cross tabulated data is given in Table 6.11 and the chi square test result is shown in Table 6.12. From the Table 6.11 it can be seen that maximum of the children i.e. 28% in urban areas watch advertisements with attention while maximum of the children in rural areas i.e. 26.8% watch for few minutes. Similarly 25.6% of the children in North Goa watch advertisements with attention while 27.8% from South Goa watch for few minutes.

Children in the age of 6-7 are very immature and distracted while children in age of 8-9 observe things very minutely. As a result we find that 23.1% children in the age group of 6-7 years watch for few minutes, 29.1% children in the age group of 8-9 years watch advertisements with attention while 29.5% children in the age group of 10-12years watch for few minutes.

It can also be seen that 26.1% boys (male) watch advertisements with attention while 27.5% girls (female) watch for few minutes. Chi square test was applied to see whether there is any association between children's behaviour while watching advertisements and the various categories i.e. area wise, district wise, age wise and gender wise. As all p values are greater than 0.05 at 5% level of significance except in case of age it can be stated that there is no significant association between children's behaviour while watching advertisements and area, district and gender. In case of age the p value is .002 which is less than 0.01 at 5% level of significance which shows that there is a significantly high relationship between children's behaviour while watching ads and age.

Table 6.13

Effects on children due to TV watching in the state of Goa

Category		**Frequency**	**Number of parents**	**Percentage**
Area wise	Urban	Lack of initiative	51	10.2
		Effect on studies	182	36.4
		Reduced physical activity	166	33.2
		Become demanding	101	20.2
		Total	500	100
	Rural	Lack of initiative	55	11
		Effect on studies	191	38.2
		Reduced physical activity	151	30.2
		Become demanding	103	20.6
		Total	500	100
District wise	North Goa	Lack of initiative	55	11.0
		Effect on studies	188	37.6
		Reduced physical activity	163	32.6
		Become demanding	94	18.8
		Total	500	100
	South Goa	Lack of initiative	51	10.2
		Effect on studies	185	37.0
		Reduced physical activity	154	30.8
		Become demanding	110	22.0
		Total	500	100

Table 6.13 (contd……)

Category		Frequency	Number of parents	Percentage
Age wise	6-7 years	Lack of initiative	7	5.2
		Effect on studies	51	38.1
		Reduced physical activity	44	32.8
		Become demanding	32	23.9
		Total	134	100
	8-9 years	Lack of initiative	45	11.6
		Effect on studies	136	35.1
		Reduced physical activity	129	33.2
		Become demanding	78	20.1
		Total	388	100
	10-12 years	Lack of initiative	54	11.3
		Effect on studies	186	38.9
		Reduced physical activity	144	30.1
		Become demanding	94	19.7
		Total	478	100
Gender wise	Male	Lack of initiative	65	11.5
		Effect on studies	208	36.9
		Reduced physical activity	177	31.4
		Become demanding	113	20.1
		Total	563	100
	Female	Lack of initiative	41	9.4
		Effect on studies	165	37.8
		Reduced physical activity	140	32.0
		Become demanding	91	20.8
		Total	437	100

Source: Primary data

Table 6.14

Pearson's Chi Square Test showing effects due to T.V watching

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	1.097	3	.778
District wise	1.685	3	.640
Age wise	6.777	6	.342
Gender wise	1.226	3	.747

Source: Primary data Significant at 5% level of significance

In the table 6.13 effects due to TV watching on children have been studied. The classified and cross tabulated data is given in table 6.13 and the chi square test result is shown in table 6.14. From the table 6.13 it can be seen that TV watching has an effect on 35-38% of the children's studies.

There is reduced physical activity among 30-33% of the children, 20-23% of the children become demanding and there is lack of initiative among 10-11% of the children.

Chi square test was applied to see whether there is any association between effects on children due to TV watching and the various categories i.e. area wise, district wise, age wise and gender wise. As all p values are greater than 0.05 at 5% level of significance it can be stated that there is no significant association between effects on children due to TV watching and area, district, age and gender.

Table 6.15

Parents general attitude towards advertising, TV viewing and consumption of advertised products

Category		Parent's attitude	Number of parents	Percentage
Area wise	Urban	Less favourable	169	33.8
		Moderate	191	38.2
		Highly favourable	140	28
		Total	500	100
	Rural	Less favourable	162	32.4
		Moderate	176	35.2
		Highly favourable	162	32.4
		Total	500	100
District wise	North Goa	Less favourable	158	31.6
		Moderate	187	37.4
		Highly favourable	155	31.0
		Total	500	100
	South Goa	Less favourable	173	34.6
		Moderate	180	36.0
		Highly favourable	147	29.4
		Total	500	100
Age wise	6-7 years	Less favourable	42	31.3
		Moderate	51	38.1
		Highly favourable	41	30.6
		Total	134	100
	8-9 years	Less favourable	126	32.5
		Moderate	157	40.5
		Highly favourable	105	27.1
		Total	388	100
	10-12 years	Less favourable	163	34.1
		Moderate	159	33.3
		Highly favourable	156	32.6
		Total	478	100

Table 6.15 (contd……)

Category		Parent's attitude	Number of parents	Percentage
Gender wise	Male	Less favourable	170	30.2
		Moderate	214	38
		Highly favourable	179	31.8
		Total	563	100
	Female	Less favourable	161	36.8
		Moderate	153	35
		Highly favourable	123	28.1
		Total	437	100

Source: Primary data.

Table 6.16

Pearson's Chi Square Test showing Parents general attitude towards advertising, T.V viewing and consumption of advertised products

Category	Chi square value	Df	Asymp sig (2 sided)
Area wise	2.364	2	.307
District wise	1.025	2	.596
Age wise	5.63	4	.229
Gender wise	4.971	2	.083

Source: Primary data Significant at 5% level of significance

In the Table 6.15 parents attitude towards advertising, TV viewing and consumption of advertised products have been studied. The classified and cross tabulated data is given in Table 6.15 and the chi square test result is shown in Table 6.16.

From the Table 6.15 it can be seen that parents have a moderate attitude towards advertising, TV viewing and consumption of advertised products.

Chi square test was applied to see whether there is any association between parents attitude towards advertising, TV viewing and consumption of advertised products and the various categories i.e. area wise, district wise, age wise and gender wise. As all p values are greater than 0.05 at 5% level of significance it can be stated that there is no significant association between parent's attitude and area, district, age and gender

6.3.1 Parents attitude

In a battery of statements used to measure parents attitude towards advertising, TV viewing and consumption of advertised products, statements A1-A8 measure parental attitude towards advertisements, statements B1-B4 measure children's capacity to understand advertisements, statement C1-C6 measure children's behaviour regarding advertisements, statements D1-D2 measure regulation of advertising to children, statements E1-E4 measure conflict, statements F1-F5 measures food advertisements, statements G1-G3 measures influence of advertising on children, statement H1-H9 measure parental concern with child nutrition, statement I1-I12 measure parental restrictive mediation. The responses were drawn on a 5 point scale (Strongly agree, Agree, Undecided, Disagree, Strongly disagree). The statements along with p values are given in table 6.17.

Table 6.17

Area wise distribution of Parent's attitude towards advertising, T.V viewing and consumption of advertised products using Mannwhitney test

St. no.	Statements	Area	No. of respo-ndents	Mean	S.D	Me-an	Mannwhitney test z value	p value
A1	Advertisement is a valuable source of information for consumers	urban	500	3.76	1.03	4	2.94	.003*
		rural	500	3.94	.94	4		
A2	Children's are exposed to too many advertisement messages on T.V	urban	500	3.91	.86	4	.43	.670
		rural	500	3.86	.94	4		
A3	Advertisements are generally misleading	urban	500	3.51	.99	4	1.23	.217
		rural	500	3.56	1.06	4		
A4	T.V ads contribute to children's understanding of the world around them	urban	500	3.52	1.02	4	.26	.792
		rural	500	3.53	1.04	4		
A5	T.V ads to children are full of tricks & deceits	urban	500	3.70	.97	4	.64	.523
		rural	500	3.72	1.02	4		
A6	Advertisements do not always tell the truth	urban	500	4.06	.91	4	.12	.902
		rural	500	4.05	.96	4		
A7	Purpose of ads is to sell products	urban	500	4.32	.79	4	.08	.935
		rural	500	4.33	.75	4		
A8	Ad creates awareness of new products that have arrived in the market	urban	500	4.11	.81	4	.70	.486
		rural	500	4.15	.78	4		
	Parents attitude towards advertisements	urban	500	3.86	.47	3.8	1.19	.235
		rural	500	3.89	.49	3.9		

Table 6.17 (contd……)

St. no.	Statements	Area	No. of respondents	Mean	S.D	Mean	Mannwhitney test z value	p value
B1	Children are more influenced by ads then grown up people	urban	500	4.01	.90	4	.25	.804
		rural	500	4.01	.94	4		
B2	Children aged between 10-12 understand advertising's communication intent	urban	500	3.73	.92	4	.59	.558
		rural	500	3.76	.92	4		
B3	Children are able to distinguish between programmes & ads	urban	500	3.94	.91	4	.25	.802
		rural	500	3.93	.89	4		
B4	By age of 5 children acquire ability to differentiate between commercials & programmes but did not know the intent	urban	500	3.57	1.04	4	.09	.932
		rural	500	3.59	1.01	4		
	Children's capacity to understand advertisements	urban	500	3.81	.62	4	.32	.749
		rural	500	3.86	.89	4		
C1	T.V advertising to children encourages them to desire products they don't really need	urban	500	3.94	.91	4	.31	.758
		rural	500	3.95	.94	4		
C2	Children usually look for advertised products	urban	500	3.75	.96	4	1.10	.272
		rural	500	3.83	.90	4		
C3	Children could recollect advertised products more quickly & demanded them	urban	500	3.76	1.02	4	.18	.858
		rural	500	3.82	1.64	4		
C4	T.V advertising to children encourages them to put pressure on their parents to buy goods	urban	500	3.75	1.09	4	.51	.608
		rural	500	3.78	1.09	4		
C5	Children demanded products endorsed by celebrities	urban	500	3.40	1.13	4	1.78	.075
		rural	500	3.27	1.14	4		
C6	Children get disappointed on not being able to buy new advertised products	urban	500	3.69	1.02	4	.21	.832
		rural	500	3.66	1.08	4		
	Children's behaviour regarding advertisements	urban	500	3.74	.81	3.8	.51	.612
		rural	500	3.72	.69	3.8		
D1	T.V advertising to children should be banned	urban	500	3.23	1.07	3	1.38	.168
		rural	500	3.32	1.16	3		
D2	T.V advertising to children less than 12 years should be restricted	urban	500	3.43	1.08	4	1.11	.267
		rural	500	3.49	1.15	4		
	Regulation of advertising to children	urban	500	3.33	.95	3.5	1.41	.159
		rural	500	3.41	1.03	3.5		
E1	T.V advertising is an important cause of my children pestering me for advertised products	urban	500	3.38	1.09	4	.00	.997
		rural	500	3.37	1.14	4		

Table 6.17 (contd……)

St. no.	Statements	Area	No. of respondents	Mean	S.D	Mean	Mannwhitney test z value	p value
E2	T.V advertising encourages my children to want products they don't need	urban	500	3.59	1.07	4	.10	.918
		rural	500	3.58	1.12	4		
E3	T.V advertising leads to family conflict	urban	500	2.96	1.10	3	2.06	.039*
		rural	500	3.11	1.15	3		
E4	Children argue when request for advertised product is denied	urban	500	3.45	1.11	4	.53	.596
		rural	500	3.42	1.11	4		
	Conflict	urban	500	3.34	.81	3.5	.67	.503
		rural	500	3.37	.84	3.5		
F1	There are too many additives in food products advertised in T.V progr. directed at children	urban	500	3.86	.89	4	1.97	.049*
		rural	500	3.96	.89	4		
F2	All advertised foods are not fit to be consumed	urban	500	3.82	1.03	4	.50	.615
		rural	500	3.79	1.02	4		
F3	Advertisement depicts food products as better than they really are	urban	500	3.68	1.07	4	.24	.809
		rural	500	3.68	1.05	4		
F4	Food advertisements influence children's eating habits	urban	500	3.84	.97	4	.62	.536
		rural	500	3.91	.86	4		
F5	Food ads usually shown on T.V were for breakfast cereals, confectionery & used more animation ,humour & promotion	urban	500	3.75	.90	4	.03	.979
		rural	500	3.74	.93	4		
	Food advertisement	urban	500	3.81	.70	3.8	.56	.573
		rural	500	3.82	.58	3.8		
G1	Children are influenced by ads in children's programmes	urban	500	4.01	.84	4	1.23	.220
		rural	500	3.94	.88	4		
G2	Children are influenced by ads in other programmes (adult programmes).	urban	500	3.45	1.05	4	.21	.837
		rural	500	3.44	1.04	4		
G3	Children below 8 years get easily influenced by T.V commercials	urban	500	3.86	.97	4	.46	.648
		rural	500	3.86	.93	4		
	Influence of advertising on children	urban	500	3.77	.67	4	.45	.649
		rural	500	3.75	.69	3.6		
H1	I am concerned about getting my children to eat good food	urban	500	4.25	.91	4	.71	.476
		rural	500	4.25	.85	4		
H2	Children should be allowed to eat whatever they want	urban	500	2.30	1.20	2	.21	.832
		rural	500	2.31	1.24	2		
H3	Children like to eat whatever they want	urban	500	2.77	1.25	2	.36	.719
		rural	500	2.74	1.25	2		
H4	Children like to eat & drink while watching T.V	urban	500	3.78	1.10	4	.67	.505
		rural	500	3.72	1.14	4		

Table 6.17 (contd……)

St. no.	Statements	Area	No. of respo-ndents	Mean	S.D	Me-an	Mannwhitney test z value	p value
H5	Advertised food are generally not good for health	urban	500	3.92	1.05	4	.07	.946
		rural	500	3.92	1.07	4		
H6	Consumption of food in front of T.V has brought about unhealthy food habits in children	urban	500	4.06	.94	4	.05	.958
		rural	500	4.08	.90	4		
H7	Excessive intake of fast food results into obesity	urban	500	4.12	.89	4	.56	.574
		rural	500	4.09	.92	4		
H8	Some advertised food products create health problems	urban	500	4.07	.87	4	.07	.946
		rural	500	4.06	.91	4		
H9	Children eating too much of advertised food develop more body weight	urban	500	3.90	1.08	4	.28	.778
		rural	500	3.96	.99	4		
	Parental concern with child nutrition	urban	500	3.70	.55	3.6	.57	.571
		rural	500	3.68	.50	3.6		
I1	I determine how much T.V my children can watch	urban	500	3.91	.86	4	1.33	.185
		rural	500	3.96	.91	4		
I2	I decide when my children can watch T.V	urban	500	3.89	.94	4	1.93	.053
		rural	500	4.00	.90	4		
I3	I control which programmes my children watch	urban	500	4.01	.87	4	1.73	.083
		rural	500	4.10	.83	4		
I4	I limit the amount of T,V my child watches in one sitting	urban	500	4.04	.79	4	.16	.870
		rural	500	4.05	.78	4		
I5	I insist that my child play outside rather than watch T.V	urban	500	4.14	.91	4	.36	.716
		rural	500	4.13	.89	4		
I6	I do not allow T.V to be on during meal time	urban	500	3.67	1.10	4	3.03	.002*
		rural	500	3.87	1.05	4		
I7	I allow our child to watch any T.V show that he/she chooses	urban	500	2.86	1.21	2	.36	.716
		rural	500	2.89	1.25	2.5		
I8	When I feel my child watched T.V long enough I tell to switch it off	urban	500	4.19	.87	4	.05	.957
		rural	500	4.20	.88	4		
I9	My child is not allowed to watch T.V until homework is done	urban	500	4.11	.90	4	.39	.693
		rural	500	4.14	.88	4		
I10	I actively encourage my child to do other things than watch T.V	urban	500	4.09	.91	4	.39	.700
		rural	500	4.14	.82	4		
I11	I check to see what my child is watching	urban	500	4.25	.79	4	.40	.693
		rural	500	4.27	.77	4		

Table 6.17 (contd……)

St. no.	Statements	Area	No. of respo-ndents	Mean	S.D	Me-an	Mannwhitney test z value	p value
I12	Parents should play active role in monitoring children's T.V viewing	urban	500	4.38	.84	5	.61	.545
		rural	500	4.41	.82	5		
	Parental restrictive mediation	urban	500	3.96	.45	4	2.28	.022*
		rural	500	4.02	.50	4		

Source: Primary data Significant at 5% level of significance

1) Parent's attitude towards advertisements: From the Table 6.17 it can be seen that, as far as parent's attitude towards advertising is concerned, except in case of statements A2 and A6 all other statements show the impact to be greater in rural areas than urban areas. Statement A1 shows a significantly high relationship between parent's attitude towards advertisements and area as p value is .003 which is less than 0.01 at 5% level of significance while the other statements show no significant relationship. Hence over all it can be seen that impact of parents attitude towards advertisements is higher in rural areas (mean=3.89) as compared to urban areas (mean=3.86)

2) Children's capacity to understand advertisements: Statement B1 shows equal impact in urban and rural areas (m=4.01). Statement B2 and B4 show higher impact in rural areas (mean=3.76 and 3.57) while statement B3 shows higher impact in urban area (m=3.94). There is no significant relationship between children's capacity to understand advertisements and area as all p values are greater than 0.05 at 5% level of significance. Hence overall it has been found that impact of children's capacity to understand ads is greater in rural areas (m=3.86) as compared to urban areas (m=3.81).

3)Children's behaviour regarding advertisements: Statements C1, C3 and C 4 show greater impact in rural areas as seen from the mean values 3.95, 3.82 and 3.78 while in case of remaining statements the impact is greater in urban areas. Over all it can be seen that impact is higher in urban areas (m=3.74) as compared to rural areas (m=3.72).

There is no significant relationship between children's behaviour regarding advertisements and area as all p values are greater than 0.05 at 5% level of significance.

4) Regulation of advertising to children: Statements D1 and D2 shows greater impact in rural areas (mean= 3.32 and 3.49) as compared to urban areas (m=3.23 and 3.43). The overall impact also shows greater influence in rural area (m=3.41). There is no significant relationship between regulation of advertising to children and area as all p values are greater than 0.05 at 5% level of significance.

5)Conflict: Statements E1, E2 and E4 show greater impact in urban areas as seen from the mean values 3.38, 3.59 and 3.45 while in case of statement E3 the impact is higher in rural areas(3.11). There is a significant relationship between TV leading to family conflict and area as the p value is .039 which is less than 0.05 at 5% level of significance. Over all it can be seen that impact is greater in rural areas (mean= 3.37) as compared to urban areas (m=3.34).

6) Food advertising: Statement F3 shows equal impact in urban and rural areas (m=3.68). Statement F1 and F4 show higher impact in rural areas as mean value is 3.96 and 3.91 as compared to urban area with mean=3.86 and 3.84. Statement F5 shows higher impact in urban area (m=3.75) as compared to rural areas (m=3.74). In case of statement F1 there is a significant relationship between additives in food products advertised in TV programmes and area as p value is .049 which is less than 0.05 at 5% level of significance. All other statements show no significant relationship. The overall impact is greater in rural area (m=3.82) as compared to urban area (m=3.81). As a result there is no significant relationship between food advertising and area.

7) Influence of advertising on children: Statement G1 and G2 show greater impact in urban area (m=4.01 and 3.45) while in case of statement G3 the impact is equal in urban and rural areas (m=3.86). Over all the impact is high in urban area (m=3.77) as compared to rural area (m=3.75). There is no significant relationship between influence of advertising on children and area as all p values are greater than 0.05 at 5% level of significance.

8) Parental concern with child nutrition: Statement I1 and I5 shows equal impact in urban and rural areas (mean=4.25 and 3.92). Statement I2, I6 and I9 shows greater impact in rural areas (m=2.31, 4.08 and 3.96) while the remaining statements show greater impact in urban areas (m=2.77, 3.78, 4.12 and 4.07). The overall impact shows greater effect in urban areas (m=3.70) as compared to rural areas (mean= 3.68). The p values are all greater than 0.05 at 5% level of significance and hence there is no significant relationship between parental concern with child nutrition and area.

9) Parental restrictive mediation: Except for statement J5 (m=4.14) all other statements show higher impact in rural areas as compared to urban areas. In case of statement J6 there is a significantly high relationship between TV not allowed to be on during meal time and area as p value is .002 which is less than 0.01 at 5% level of significance. Similarly overall impact is higher in rural areas (mean=4.02) as compared to urban areas (m=3.96) and it also shows that there is a significant relationship between parental restrictive mediation and area as p value is .022 which is less than 0.05 at 5% level of significance. All other statements show no significant relationship.

Conclusion: After analysing the above Table 6.17 it can be seen that in case of the following statements there is a significant relationship between parental attitude towards advertising, TV viewing, and consumption of advertised products and area. While in case of all other statements there is no significant relationship. The statements are Advertisement is a valuable source of information for consumers, T.V advertising leads to family conflict, there are too many additives in food products advertised in T.V programmes directed at children, I do not allow T.V to be on during meal time and overall parental restrictive mediation.

Table 6.18

District wise distribution of parent's attitude towards advertising, T.V viewing and consumption of advertised products

St. no.	Statements	District	No. of respondents	Mean	S.D	Mean	Mannwhitney test z value	p value
A1	Advertisement is a valuable source of information for consumers	North Goa	500	3.89	1.00	4	1.80	.072
		South Goa	500	3.81	.98	4		
A2	Children's are exposed to too many advertisement messages on T.V	North Goa	500	3.91	.88	4	.80	.424
		South Goa	500	3.86	.92	4		
A3	Advertisements are generally misleading	North Goa	500	3.50	1.03	4	1.15	.252
		South Goa	500	3.57	1.02	4		
A4	T.V ads contributes to children's understanding of the world around them	North Goa	500	3.47	1.06	4	1.49	.136
		South Goa	500	3.58	1.00	4		
A5	T.V ads to children are full of tricks & deceits	North Goa	500	3.71	1.02	4	.19	.852
		South Goa	500	3.71	.97	4		
A6	Advertisements do not always tell the truth	North Goa	500	4.12	.89	4	2.08	.037*
		South Goa	500	3.99	.97	4		
A7	Purpose of ads is to sell products	North Goa	500	4.40	.69	4	2.40	.017*
		South Goa	500	4.26	.83	4		
A8	Ad creates awareness of new products that have arrived in the market	North Goa	500	4.10	.83	4	.75	.453
		South Goa	500	4.16	.76	4		
	Parents attitude towards advertisements	North Goa	500	3.89	.46	3.8	.49	.627
		South Goa	500	3.87	.50	3.8		
B1	Children are more influenced by ads then grown up people	North Goa	500	3.98	.96	4	.53	.596
		South Goa	500	4.03	.88	4		
B2	Children aged between 10-12 understand advertising's communication intent	North Goa	500	3.74	.93	4	.06	.951
		South Goa	500	3.75	.90	4		
B3	Children are able to distinguish between programmes & ads	North Goa	500	3.91	.94	4	.20	.841
		South Goa	500	3.96	.86	4		
B4	By age of 5 children acquire ability to differentiate between commercials & programmes but did not know the intent	North Goa	500	3.55	1.06	4	.62	.535
		South Goa	500	3.62	.98	4		
	Children's capacity to understand advertisements	North Goa	500	3.80	.61	4	1.07	.285
		South Goa	500	3.88	.90	4		
C1	T.V advertising to children encourages them to desire products they don't really need	North Goa	500	3.92	.98	4	.08	.936

Table 6.18 (contd……)

St. no.	Statements	District	No. of respondents	Mean	S.D	Mean	Mannwhitney test z value	p value
C1		South Goa	500	3.96	.87	4		
C2	Children usually look for advertised products	North Goa	500	3.76	.96	4	.89	.373
		South Goa	500	3.82	.91	4		
C3	Children could recollect advertised products more quickly & demanded them	North Goa	500	3.80	1.00	4	1.50	.133
		South Goa	500	3.77	1.65	4		
C4	T.V advertising to children encourages them to put pressure on their parents to buy goods	North Goa	500	3.78	1.12	4	.83	.407
		South Goa	500	3.75	1.07	4		
C5	Children demanded products endorsed by celebrities	North Goa	500	3.34	1.12	4	.13	.900
		South Goa	500	3.33	1.16	4		
C6	Children get disappointed on not being able to buy new advertised products	North Goa	500	3.65	1.05	4	.55	.582
		South Goa	500	3.69	1.05	4		
	Children's behaviour regarding advertisements	North Goa	500	3.73	.80	3.8	.05	.963
		South Goa	500	3.72	.70	3.8		
D1	T.V advertising to children should be banned	North Goa	500	3.21	1.14	3	1.79	.073
		South Goa	500	3.34	1.09	3		
D2	T.V advertising to children less than 12 years should be restricted	North Goa	500	3.50	1.14	4	1.27	.203
		South Goa	500	3.42	1.09	4		
D3	Regulation of advertising to children	North Goa	500	3.35	1.01	3.5	.37	.711
		South Goa	500	3.38	.98	3.5		
D4	T.V advertising is an important cause of my children pestering me for advertised products	North Goa	500	3.35	1.14	4	.47	.641
		South Goa	500	3.39	1.09	4		
D5	T.V advertising encourages my children to want products they don't need	North Goa	500	3.59	1.13	4	.71	.475
		South Goa	500	3.58	1.06	4		
D6	T.V advertising leads to family conflict	North Goa	500	3.03	1.16	3	.13	.897
		South Goa	500	3.04	1.10	3		
D7	Children argue when request for advertised product is denied	North Goa	500	3.40	1.13	4	.79	.432
		South Goa	500	3.46	1.09	4		
	Conflict	North Goa	500	3.34	.84	3.5	.23	.816
		South Goa	500	3.37	.81	3.5		
E1	There are too many additives in food products advertised in T.V progr. directed at children	North Goa	500	3.92	.90	4	.57	.568
		South Goa	500	3.90	.88	4		
E2	All advertised foods are not fit to be consumed	North Goa	500	3.81	1.04	4	.53	.597
		South Goa	500	3.80	1.01	4		

Table 6.18 (contd……)

St. no.	Statements	District	No. of respondents	Mean	S.D	Mean	Mannwhitney test z value	p value
E3	Advertisement depicts food products as better than they really are	North Goa	500	3.68	1.11	4	.51	.612
		South Goa	500	3.68	1.01	4		
E4	Food advertisements influence children's eating habits	North Goa	500	3.88	.93	4	.17	.867
		South Goa	500	3.88	.91	4		
E5	Food ads usually shown on T.V were for breakfast cereals, confectionery & used more animation, humour & promotion	North Goa	500	3.78	.92	4	1.49	.137
		South Goa	500	3.71	.91	4		
	Food advertisement	North Goa	500	3.83	.68	3.8	.73	.464
		South Goa	500	3.79	.60	3.8		
F1	Children are influenced by ads in children's programmes	North Goa	500	4.05	.81	4	2.41	.016*
		South Goa	500	3.90	.90	4		
F2	Children are influenced by ads in other programmes (adult prog.)	North Goa	500	3.45	1.03	4	.29	.774
		South Goa	500	3.45	1.06	4		
F3	Children below 8 years get easily influenced by T.V commercials	North Goa	500	3.91	.91	4	1.60	.110
		South Goa	500	3.81	.98	4		
	Influence of advertising on children	North Goa	500	3.80	.64	4	1.52	.129
		South Goa	500	3.72	.72	3.8		
G1	I am concerned about getting my children to eat good food	North Goa	500	4.32	.84	4	2.80	.005*
		South Goa	500	4.18	.91	4		
G2	Children should be allowed to eat whatever they want	North Goa	500	2.31	1.24	2	.01	.995
		South Goa	500	2.30	1.21	2		
G3	Children like to eat whatever they want	North Goa	500	2.70	1.26	2	1.63	.103
		South Goa	500	2.82	1.24	2		
G4	Children like to eat & drink while watching T.V	North Goa	500	3.84	1.06	4	2.37	.018*
		South Goa	500	3.66	1.17	4		
G5	Advertised food are generally not good for health	North Goa	500	3.96	1.04	4	1.25	.210
		South Goa	500	3.88	1.08	4		
G6	Consumption of food in front of T.V has brought about unhealthy food habits in children	North Goa	500	4.14	.88	4	2.20	.028*
		South Goa	500	4.00	.95	4		
G7	Excessive intake of fast food results into obesity	North Goa	500	4.17	.85	4	1.91	.056
		South Goa	500	4.04	.96	4		
G8	Some advertised food products create health problems	North Goa	500	4.11	.85	4	1.21	.227
		South Goa	500	4.03	.92	4		
G9	Children eating too much of advertised food develop more body weight	North Goa	500	3.88	1.08	4	.98	.326
		South Goa	500	3.98	.99	4		

Table 6.18 (contd……)

St. no.	Statements	District	No. of respondents	Mean	S.D	Mean	Mannwhitney test z value	p value
	Parental concern with child nutrition	North Goa	500	3.72	.52	3.7	1.63	.103
		South Goa	500	3.65	.53	3.6		
H1	I determine how much T.V my children can watch	North Goa	500	3.96	.88	4	.81	.418
		South Goa	500	3.91	.89	4		
H2	I decide when my children can watch T.V	North Goa	500	3.93	.93	4	.67	.505
		South Goa	500	3.96	.91	4		
H3	I control which programmes my children watch	North Goa	500	4.09	.83	4	1.01	.313
		South Goa	500	4.02	.88	4		
H4	I limit the amount of T,V my child watches in one sitting	North Goa	500	4.05	.77	4	.33	.739
		South Goa	500	4.03	.80	4		
H5	I insist that my child play outside rather than watch T.V	North Goa	500	4.16	.89	4	1.18	.239
		South Goa	500	4.10	.90	4		
H6	I do not allow T.V to be on during meal time	North Goa	500	3.78	1.05	4	.00	.997
		South Goa	500	3.76	1.11	4		
H7	I allow our child to watch any T.V show that he/she chooses	North Goa	500	2.83	1.23	2	1.00	.316
		South Goa	500	2.91	1.23	2		
H8	When I feel my child watched T.V long enough I tell to switch it off	North Goa	500	4.20	.86	4	.23	.820
		South Goa	500	4.18	.89	4		
H9	My child is not allowed to watch T.V until homework is done	North Goa	500	4.13	.90	4	.28	.776
		South Goa	500	4.12	.89	4		
H10	I actively encourage my child to do other things than watch T.V	North Goa	500	4.16	.85	4	1.80	.072
		South Goa	500	4.07	.88	4		
H11	I check to see what my child is watching	North Goa	500	4.35	.68	4	2.74	.006*
		South Goa	500	4.17	.86	4		
H12	parents should play active role in monitoring children's T.V viewing	North Goa	500	4.45	.80	5	1.96	.050
		South Goa	500	4.35	.86	5		
	Parental restrictive mediation	North Goa	500	4.01	.45	4	1.38	.169
		South Goa	500	3.97	.51	4		

Source: Primary data * Significant at 5% level of significance

District wise analysis has been undertaken of the 2 districts namely North Goa and South Goa. It can be seen from the table 6.18 that:

1.**Parent's attitude towards advertisements** in Statement A1, A2, A6 and A7 show a higher impact in North Goa as indicated by higher mean values 3.89, 3.91, 4.12 and 4.40 where as in case of remaining statements there is higher impact in South Goa as compared to North Goa (m=3.57, 3.58, 4.16).Statement A5 shows equal impact in North & South Goa (m=3.71). The p values of statement A6 and A7 are found to be .037 and .017 which is less than 0.05 at 5% level of significance which shows there is a significant relationship between advertisements not always telling the truth and district and purpose of ads is to sell products and district. All other statements show no significant relationship. Overall North Goa shows a higher impact (m=3.89) as compared to South Goa (m=3.87 greater than 0.05 at 5% level of significance. Henceit can be stated that there is no significant relationship between parent's attitude towards advertisements and district as all the remaining p values are greater than 0.05 at 5% level of significance.

2. **Children's capacity to understand advertisements** shows that statement B1 to B4 show a higher impact in South Goa as compared to North Goa as seen from higher values of mean (i.e. 4.03, 3.75, 3.96, and 3.62) .The overall impact also shows the same (m=3.88).There is no significant relationship between children's capacity to understand advertisements and district as all p values are found to be greater than 0.05 at 5% level of significance.

3.While assessing **children's behaviour regarding advertisements** it can be seen from statements C1, C2 and C6 that the impact is higher in South Goa (m=3.96, 3.82, and 3.69) while in case of remaining statements the impact is higher in North Goa.(m=3.80, 3.78, 3.34). The overall impact of children's behaviour regarding advertisements show a higher impact in North Goa (m=3.73) as compared to South Goa (m=3.72). There is no significant relationship between children's behaviour regarding advertisements and district as p value is greater than 0.05 at 5% level of significance.

4**. Regulation of advertising** to children has been found to have higher impact in South Goa (m=3.34) in case of statement D1 and higher impact in North Goa (m=3.50) in case of statement D2. The overall impact also shows greater impact in South Goa.

(i.e. m=3.38). There is no significant relationship between regulation of advertising to children and district as all p values were found to be greater than 0.05 at 5% level of significance.

5. As far as **Conflict** is concerned the statement E2 shows higher impact in North Goa (m=3.59) while all the remaining statements show higher impact in South Goa (m=3.39, 3.04, 3.46). The overall impact of conflict also shows higher influence in South Goa (m=3.37). There is no significant relationship between conflict and district as all p values were found to be greater than 0.05 at 5% level of significance.

6. Assessment of **food advertisements** reveal statement F3 and F4 to show equal impact in North Goa & South Goa(m=3.68,3.88) while the other statements show higher impact in North Goa as seen from mean values (i.e. 3.92, 3.81 and 3.78). There is no significant relationship between food advertisements and district as all p values were found to be greater than 0.05 at 5% level of significance. Overall impact shows higher influence of food advertisements in North Goa (m=3.83) as compared to South Goa (m=3.79).

7**. Influence of advertising on children** has been studied by asking 3 statements. Statement G1 and G3 show higher impact in North Goa (m=4.05 and 3.91) while statement G2 shows equal impact in North and South Goa as m=3.45. Statement G1 shows significant relationship between children being influenced by advertisements in children's programmes and district as the p value is .016 which is less than 0.05 at 5% level of significance. All other statements show no significant relationship. The overall impact shows higher influence of advertising in North Goa (m 3.80) as compared to South Goa (m=3.72). Hence it can be stated that there is no significant relationship between influence of advertising on children and district as in all remaining statements p value is found to be greater than 0.05 at 5% level of significance.

8. **Parental concern with child nutrition** has been assessed by asking 9 statements. Statement H3, H4 and H9 show higher impact in South Goa (m=2.82, 3.66 and 3.98) while all the remaining statements show higher impact in North Goa (m=4.32, 2.31, 3.96, 4.14, 4.17 and 4.11).

relationship between parents concern of getting children to eat good food and district as the p value is found to be .005 which is less 0.01 at 0.05 at 5% level of significance. On the other hand statement H4 & H6 show significant relationship between the two statements children liking to eat & drink while watching T.V and consumption of food in front of T.V being unhealthy and district as p values are .018 and .028 which is less than 0.05 at 5% level of significance. All other statements show no significant relationship. Overall parental concern with child nutrition shows higher impact in North Goa (m=3.72) as compared to South Goa (m=3.65).Hence it can be stated that there is no significant relationship between parental concern with child nutrition and district as all the remaining statements show p value to be greater than 0.05 at 5% level of significance.

9. **Parental restrictive mediation** has been assessed. Statements I2 and I7 show a higher impact in South Goa (m=3.96 and 2.91) while all the remaining statements show higher impact in North Goa as revealed by the mean values (3.96, 4.09, 4.05, 4.16, 3.78, 4.20, 4.13, 4.16, 4.35 and 4.45). Statement I11 show a significantly high relationship between checking to see what child is watching and district as p value is .006 which is less than 0.01 at 5% level of significance. All other statements show no significant relationship. Overall parental restrictive mediation shows higher impact in North Goa (m=4.01) as compared to South Goa (m 3.97). Hence it can be stated that there is no significant relationship between parental restrictive mediation and district as all the remaining statements show p value to be greater than 0.05 at 5% level of significance.

From the above Table 6.18 it can be seen that in case of statements Advertisements do not always tell the truth, Purpose of ads is to sell products, Children are influenced by ads in children's programmes there is a significant association between parent's attitude towards advertising, T.V viewing and consumption of advertised products and district while for the remaining statements there is no significant relationship.

Table 6.19

Age wise distribution of Parents attitude towards advertising, T.V viewing and consumption of advertised products using Kruskalwallis test

st no.	Statements	Age	No. of resp.	Mean	S.D	Mean (IQR)	Kruskal wallis test value	p value
A1	Advertisement is a valuable source of information for consumers	6-7 years	134	3.96	.86	4	1.005	.605
		8-9 years	388	3.86	.96	4		
		10-12 years	478	3.81	1.05	4		
A2	Children's are exposed to too many advertisement messages on T.V	6-7 years	134	4.07	.80	4	9.479	.009*
		8-9 years	388	3.92	.85	4		
		10-12 years	478	3.81	.96	4		
A3	Advertisements are generally misleading	6-7 years	134	3.52	1.05	4	.145	.930
		8-9 years	388	3.54	1.09	4		
		10-12 years	478	3.54	.97	4		
A4	T.V ads contributes to children's understanding of the world around them	6-7 years	134	3.50	.99	4	2.975	.226
		8-9 years	388	3.47	1.04	4		
		10-12 years	478	3.58	1.03	4		
A5	T.V ads to children are full of tricks & deceits	6-7 years	134	3.72	.92	4	.080	.961
		8-9 years	388	3.72	1.00	4		
		10-12 years	478	3.70	1.01	4		
A6	Ads does not always tell the truth	6-7 years	134	4.04	.93	4	.148	.928
		8-9 years	388	4.07	.88	4		
		10-12 years	478	4.04	.98	4		
A7	Purpose of ads is to sell products	6-7 years	134	4.41	.59	4	.341	.843
		8-9 years	388	4.31	.81	4		
		10-12 years	478	4.32	.78	4		
A8	Ad creates awareness of new products that have arrived in the market	6-7 years	134	4.24	.58	4	.989	.610
		8-9 years	388	4.14	.76	4		
		10-12 years	478	4.09	.87	4		
	Parents attitude towards advertisements	6-7 years	134	3.93	.43	4	1.546	.462
		8-9 years	388	3.88	.47	3.8		
		10-12 years	478	3.86	.51	3.8		
B1	Children are more influenced by ads then grown up people	6-7 years	134	4.04	.83	4	.225	.893
		8-9 years	388	4.03	.89	4		
		10-12 years	478	3.98	.97	4		
B2	Children aged between 10-12 understand advertising's communication intent	6-7 years	134	3.70	.88	4	1.220	.543
		8-9 years	388	3.79	.86	4		
		10-12 years	478	3.72	.97	4		

Table 6.19 (contd……)

St no.	Statements	Age	No. of resp.	Mean	S.D	Mean IQR	Kruskal wallis test value	p value
B3	Children are able to distinguish between programmes & ads	6-7 years	134	3.90	.92	4	.997	.608
		8-9 years	388	3.99	.84	4		
		10-12 years	478	3.90	.95	4		
B4	By age of 5 children acquire ability to differentiate between commercials & programmes but did not know the intent	6-7 years	134	3.54	.95	4	.627	.731
		8-9 years	388	3.60	1.01	4		
		10-12 years	478	3.58	1.06	4		
	Children's capacity to understand advertisements	6-7 years	134	3.87	1.04	4	1.344	.511
		8-9 years	388	3.88	.80	4		
		10-12 years	478	3.79	.65	3.75		
C1	T.V advertising to children encourages them to desire products they don't really need	6-7 years	134	3.98	.84	4	.017	.991
		8-9 years	388	3.94	.94	4		
		10-12 years	478	3.94	.95	4		
C2	Children usually look for advertised products	6-7 years	134	3.87	.87	4	.955	.620
		8-9 years	388	3.81	.90	4		
		10-12 years	478	3.75	.97	4		
C3	Children could recollect advertised products more quickly & demanded them	6-7 years	134	3.97	.93	4	8.076	.018*
		8-9 years	388	3.82	1.78	4		
		10-12 years	478	3.71	1.05	4		
C4	T.V advertising to children encourages them to put pressure on their parents to buy goods	6-7 years	134	3.91	1.02	4	2.679	.262
		8-9 years	388	3.74	1.10	4		
		10-12 years	478	3.74	1.10	4		
C5	Children demanded products endorsed by celebrities	6-7 years	134	3.27	1.17	4	2.774	.250
		8-9 years	388	3.28	1.14	4		
		10-12 years	478	3.40	1.12	4		
C6	Children get disappointed on not being able to buy new advertised products	6-7 years	134	3.66	1.07	4	.171	.918
		8-9 years	388	3.68	1.06	4		
		10-12 years	478	3.67	1.04	4		
	Children's behaviour regarding advertisements	6-7 years	134	3.78	.64	3.8	1.387	.500
		8-9 years	388	3.74	.85	3.8		
		10-12 years	478	3.70	.69	3.8		

Table 6.19 (contd……)

St. No	Statements	Age	No. of resp.	Mean	S.D	Mean (IQR)	Kruskalwallis test value	p value
D1	T.V advertising to children should be banned	6-7 years	134	3.10	1.08	3	8.028	.018*
		8-9 years	388	3.21	1.14	3		
		10-12 years	478	3.37	1.09	3		
D2	T.V advertising to children less than 12 years should be restricted	6-7 years	134	3.32	1.10	3	6.775	.034*
		8-9 years	388	3.40	1.11	4		
		10-12 years	478	3.55	1.11	4		
	Regulation of advertising to children	6-7 years	134	3.21	.98	3	9.160	.010*
		8-9 years	388	3.31	.99	3.5		
		10-12 years	478	3.46	.99	3.5		
E1	T.V advertising is an important cause of my children pestering me for advertised products	6-7 years	134	3.37	1.09	4	4.097	.129
		8-9 years	388	3.28	1.14	4		
		10-12 years	478	3.44	1.10	4		
E2	T.V advertising encourages my children to want products they don't need	6-7 years	134	3.73	1.00	4	6.032	.049*
		8-9 years	388	3.50	1.09	4		
		10-12 years	478	3.61	1.12	4		
E3	T.V advertising leads to family conflict	6-7 years	134	3.07	1.08	3	5.521	.063
		8-9 years	388	2.93	1.15	3		
		10-12 years	478	3.11	1.12	3		
E4	Children argue when request for advertised product is denied	6-7 years	134	3.41	1.03	4	1.559	.459
		8-9 years	388	3.38	1.13	4		
		10-12 years	478	3.48	1.11	4		
	Conflict	6-7 years	134	3.40	.80	3.5	6.876	.032*
		8-9 years	388	3.27	.82	3.25		
		10-12 years	478	3.41	.83	3.5		
F1	There are too many additives in food products advertised in T.V program directed at children	6-7 years	134	4.01	.88	4	2.815	.245
		8-9 years	388	3.88	.89	4		
		10-12 years	478	3.91	.89	4		
F2	All advertised foods are not fit to be consumed	6-7 years	134	3.84	.98	4	3.903	.142
		8-9 years	388	3.72	1.05	4		
		10-12 years	478	3.86	1.01	4		
F3	Advertisement depicts food products as better than they really are	6-7 years	134	3.72	1.04	4	1.765	.414
		8-9 years	388	3.72	1.07	4		
		10-12 years	478	3.64	1.06	4		

Table 6.19 (contd……)

St. No	Statements	Age	No of resp	Mean	S.D	Mean IQR	Kruskal wallis test value	p value
F4	Food advertisements influence children's eating habits	6-7 years	134	3.92	.85	4	.961	.619
		8-9 years	388	3.91	.89	4		
		10-12 years	478	3.84	.96	4		
F5	Food ads usually shown on T.V were for breakfast cereals, confectionery & used more animation, humour & promotion	6-7 years	134	3.76	.84	4	5.192	.075
		8-9 years	388	3.67	.92	4		
		10-12 years	478	3.80	.93	4		
	Food advertisement	6-7 years	134	3.85	.59	4	1.597	.450
		8-9 years	388	3.80	.71	3.8		
		10-12 years	478	3.81	.60	3.8		
G1	Children are influenced by ads in children's programmes	6-7 years	134	4.04	.76	4	2.598	.273
		8-9 years	388	3.93	.87	4		
		10-12 years	478	4.00	.87	4		
G2	Children are influenced by ads in other programmes (adult prog.)	6-7 years	134	3.42	1.03	4	.395	.821
		8-9 years	388	3.43	1.06	4		
		10-12 years	478	3.47	1.04	4		
G3	Children below 8 years get easily influenced by T.V commercials	6-7 years	134	4.00	.78	4	2.117	.347
		8-9 years	388	3.83	.96	4		
		10-12 years	478	3.84	.98	4		
	Influence of advertising on children	6-7 years	134	3.82	.59	4	1.045	.593
		8-9 years	388	3.73	.70	4		
		10-12 years	478	3.77	.70	4		
H1	I am concerned about getting my children to eat good food	6-7 years	134	4.25	.86	4	.212	.900
		8-9 years	388	4.26	.89	4		
		10-12 years	478	4.24	.88	4		
H2	Children should be allowed to eat whatever they want	6-7 years	134	2.31	1.21	2	.409	.815
		8-9 years	388	2.27	1.21	2		
		10-12 years	478	2.33	1.24	2		
H3	Children like to eat whatever they want	6-7 years	134	2.63	1.20	2	1.711	.425
		8-9 years	388	2.75	1.24	2		
		10-12 years	478	2.80	1.27	2		
H4	Children like to eat & drink while watching T.V	6-7 years	134	3.77	1.05	4	1.691	.429
		8-9 years	388	3.70	1.13	4		
		10-12 years	478	3.79	1.13	4		
H5	Advertised food are generally not good for health	6-7 years	134	3.77	1.04	4	5.105	.078
		8-9 years	388	3.93	1.08	4		

Table 6.19 (contd……)

St. No	Statements	Age	No. of resp.	Mean	S.D	Mean (IQR)	Kruskal wallis test value	p value
H5		10-12 years	478	3.96	1.05	4		
H6	Consumption of food in front of T.V has brought about unhealthy food habits in children	6-7 years	134	4.03	.83	4	1.465	.481
		8-9 years	388	4.09	.93	4		
		10-12 years	478	4.07	.93	4		
H7	Excessive intake of fast food results into obesity	6-7 years	134	3.99	.91	4	11.911	.003*
		8-9 years	388	4.22	.84	4		
		10-12 years	478	4.04	.95	4		
H8	Some advertised food products create health problems	6-7 years	134	4.14	.67	4	.180	.914
		8-9 years	388	4.06	.89	4		
		10-12 years	478	4.06	.94	4		
H9	Children eating too much of advertised food develop more body weight	6-7 years	134	3.80	.98	4	5.562	.062
		8-9 years	388	3.94	1.04	4		
		10-12 years	478	3.96	1.05	4		
	Parental concern with child nutrition	6-7 years	134	3.67	.62	3.6	2.274	.321
		8-9 years	388	3.69	.51	3.6		
		10-12 years	478	3.69	.51	3.6		
I1	I determine how much T.V my children can watch	6-7 years	134	4.00	.79	4	.821	.663
		8-9 years	388	3.95	.87	4		
		10-12 years	478	3.91	.92	4		
I2	I decide when my children can watch T.V	6-7 years	134	4.03	.88	4	10.574	.005*
		8-9 years	388	4.04	.85	4		
		10-12 years	478	3.84	.97	4		
I3	I control which programmes my children watch	6-7 years	134	4.10	.75	4	5.666	.059
		8-9 years	388	4.11	.86	4		
		10-12 years	478	4.00	.88	4		
I4	I limit the amount of T.V my child watches in one sitting	6-7 years	134	4.12	.76	4	3.421	.181
		8-9 years	388	4.07	.78	4		
		10-12 years	478	4.00	.79	4		
I5	I insist that my child play outside rather than watch T.V	6-7 years	134	4.23	.75	4	6.383	.041*
		8-9 years	388	4.20	.85	4		
		10-12 years	478	4.04	.97	4		
I6	I do not allow T.V to be on during meal time	6-7 years	134	3.86	1.00	4	5.294	.071
		8-9 years	388	3.84	1.09	4		
		10-12 years	478	3.69	1.09	4		

Table 6.19 (contd……)

St.No.	Statements	Age	No. of resp.	Mean	S.D	Mean IQR	Kruskal wallis test value	p value
I7	I allow our child to watch any T.V show that he/she chooses	6-7 years	134	2.88	1.21	3	1.623	.444
		8-9 years	388	2.81	1.22	2		
		10-12 years	478	2.92	1.24	2.5		
I8	When I feel my child watched T.V long enough I tell to switch it off	6-7 years	134	4.25	.80	4	1.417	.492
		8-9 years	388	4.22	.85	4		
		10-12 years	478	4.15	.91	4		
I9	My child is not allowed to watch T.V until homework is done	6-7 years	134	3.98	.87	4	7.697	.021*
		8-9 years	388	4.18	.83	4		
		10-12 years	478	4.13	.94	4		
I10	I actively encourage my child to do other things than watch T.V	6-7 years	134	4.17	.76	4	4.136	.126
		8-9 years	388	4.19	.80	4		
		10-12 years	478	4.04	.94	4		
I11	I check to see what my child is watching	6-7 years	134	4.27	.71	4	.744	.689
		8-9 years	388	4.28	.78	4		
		10-12 years	478	4.24	.81	4		
I12	parents should play active role in monitoring children's T.V viewing	6-7 years	134	4.44	.80	5	.923	.630
		8-9 years	388	4.41	.83	5		
		10-12 years	478	4.37	.84	5		
	Parental restrictive mediation	6-7 years	134	4.03	.44	4	4.455	.108
		8-9 years	388	4.03	.46	4		
		10-12 years	478	3.95	.51	4		

Source: Primary data * Significant at 5% level of significance

Age wise analysis has been undertaken for children in age group of 6-7 years, 8-9 years and 10-12 years. It has been found that:

1. In case of **Parents attitude towards advertisements** statement A1, A2, A7 and A8 have a greater impact on children in the age group of 6-7 years (m=3.96, 4.07, 4.41, 4.24). As this is a very tender age children easily get influenced and pester their parents to buy whatever they seen on TV. Statement A3 has greater acceptance on children in the age group of 8-9 and 10-12 years (m=3.54) as these children are more matured and know the intension of advertisements. Statement A4 has greater acceptance on children in the age group of 10-12 years (m=3.58).

Statement A2 shows a highly significant relationship between children's exposure to too many advertisements on TV and age as p value was found to be .009 which is less than 0.01 at 5% level of significance. All other p values show no significant relationship. Overall parents attitude towards advertisements show a higher impact on 6-7 year olds followed by 8-9 & 10-12 year old. (m=3.93, 3.88 and 3.86).Hence it can be stated that there is no significant relationship between parents attitude towards advertisements and age as all the remaining p values are greater than 0.05 at 5% level of significance.

2. **Children's capacity to understand advertisements** show statement B1 to have a greater impact on children in the age group of 6-7 years (m=4.04) while statement B2, B3 & B4 show greater impact on children in the age group of 8-9 years (m=3.79, 3.99 and 3.60).There is no significant relationship between children's capacity to understand advertisements and district as all p values were found to be greater than 0.05 at 5% level of significance. Overall children's capacity to understand ads has highest influence on 8-9 year old followed by 6-7 and10-12 year olds. (m=3.88, 3.87 and 3.79).

3. **Children's behaviour regarding advertisements** show statement C2, C3 and C4 to influence children in the age group of 6-7 years(m=3.87, 3.97 and 3.91), as they are the ones who are easily influenced, demand various products seen on TV and put pressure on their parents to buy various products. Whereas statement C1, C5 and C6 influence children in the age group of 8-9 and 10-12 years (m=3.94, 3.40 and 3.68) as they learn a lot from peers and friends and also know to recognise celebrities and the products they endorse. Statement C3 shows significant relationship between children recollecting advertised products more quickly & demanding them as p value is .018 which is less than 0.05 at 5% level of significance. All other statements show no significant relationship. Overall children's behaviour regarding advertisements show higher influence on 6-7 year old (m=3.78) as compared to 8-9 and 10-12 year old. (m=3.74, 3.70). Hence it can be stated that there is no significant relationship between children's behaviour regarding advertisements and age as all the remaining statements show p values to be greater than 0.05 at 5% level of significance.

4. In case of **regulation of advertising to children** statement D1 and D2 have greater influence on children in the age group of 10-12 years.(m=3.37, 3.55). There is a significant relationship between the statements T.V ads to children to be banned and T.V ads to children less than 12 years to be restricted as p values were found to be .018 and .034 which are less than 0.05 at 5% level of significance. Similarly the overall impact on regulation of advertising to children and age also show p value to be .010 which is less than 0.05 at 5% level of significance. Hence it can be stated that there is a significant relationship between regulation of advertising to children and age as all the p values are less than 0.05 at 5% level of significance.

5. In case of **Conflict** statement E1, E3 and E4 show greater influence on children in the age group of 10-12 years (m=3.44, 3.11 and 3.48) while statement E2 shows greater influence on children in the age group of 6-7 years (m=3.73). Statement E2 shows significant relationship between T.V ads encouraging children to want products they don't need and age as p value was found to be .049 which is less than 0.05 at 5% level of significance. Similarly overall impact of conflict has higher influence on children in the age group of 10-12 years and shows p value to be .032 which is less than 0.05, hence showing significant relationship between conflict and age of children .All other statements show no significant relationship as the p values are all greater than 0.05 at 5% level of significance.

6. **Influence of food advertisements** as stated in statement F1, F3 and F4 show a greater impact in 6-7 age group (m=4.01, 3.72 and 3.92), while statement F2 and F5 show greater impact on children in the age group of 10-12 years (m=3.86 and 3.80). It has been found that children in 6-7 age group are too immature and demand all types of advertised products while children 10-12 years old are quite grown up and know what to purchase, they also get more pocket money and so are influenced by food advertisements. There is no significant relationship between food advertisements and areas as all p values are greater than 0.05 at 5% level of significance. The overall influence of food ads is more on 6-7 year old (m=3.85) as compared to 8-9 and 10-12 year old (m=3.80 and 3.81).

7. On analysing **influence of advertising on children** it has been found that statement G1 and G3 show greater influence on children in the age group of 6-7 years (m=4.04, 4.00) while statement G2 has greater influence on children in the age group of 10-12 years(m=3.47). There is no significant relationship between influence of ads on children and age as all p values were found to be greater than 0.05 at 5% level of significance. Overall the influence of advertising on children is more on 6-7 year old as compared to others.(m=3.82)

8**.Parental concern with child nutrition** has been analysed and it was found that statement H2, H3, H4, H5 and H9 shows greater impact on children are in the age group of 10-12 years.(m=2.33, 2.80, 3.79, 3.96 and3.96), While statement H1, H6 and H7 have greater impact on children in the age group of 8-9 years (m=4.26,4.09, 4.22), while statement H8 has greater impact on children are in the age group of 6-7 years(m=4.14). From the study it can be seen that parents are more worried of children from 8-12 years as there is a rise in consumption of fast food and sweet drinks among them due to influence of advertisements, peer group and friend circle. All p values except that of statement H7 show no significant relationship between parental concern with child nutrition and area. Statement H7 shows p value to be .003 which shows a significantly high relationship between excessive intake of fast food resulting into obesity and age at 5% level of significance. All other statements show p value to be greater than 0.05 at 5% level of significance and hence it can be concluded that there is no significant relationship between parental concern with child nutrition and age. Overall the influence of parental concern with child nutrition is equal on 8-9 and 10-12 year old (m=3.69) as compared to 6-7 year old (m=3.67).

9**. Parental restrictive mediation** undertaken by parents reveal that statements I1, I4, I5, I6, I8 and I12 to show a higher impact on children in the age group of 6-7 years as they are in their tender age and more prone to watch all types of children's programmes and advertisements.(m=4.00, 4.12, 4.23, 3.86,4.25and 4.44). Statements I2, I3, I9 and I11 show greater influence on children in the age group of 8-9 years (m=4.04, 4.11, 4.18 & 4.28) while statement I7 shows greater influence on children in the age group of 10-12 years (m= 2.92).

Parental restriction is less on children in the age group of 10-12 years as they are quite grown up and know what to see and also they are now more immersed in their studies and have other things to keep them busy rather than television.

The p values of most of the statements were found to be greater than 0.05 which shows no significant relationship between parental restrictive mediation and age of children, except in case of statement I2 where p value is .005 which is less than 0.01 and shows a significantly high relationship between I deciding when my children can watch T.V and age. Statement I5 and I9 also show significant relationship between the statements I insist my child to play outside rather than watch T.V and my child not allowed to watch T.V until homework is done and age as p values are .041 and .021 which are less than 0.05 at 5% level of significance. Overall it can be seen that parental restrictive mediation is equal on 6-7 and 8-9 year old (m=4.03) as compared to 10-12 year old (m=3.95).

Hence from the above Table 6.19 it can be seen that in case of the following statements there is a significant association between parent's attitude towards advertising, T.V viewing and consumption of advertised products and age while in case of the remaining statements there is no significant relationship. The statements are Children's are exposed to too many advertisement messages on T.V, Children could recollect advertised products more quickly and demanded them, T.V advertising to children should be banned, T.V advertising to children less than 12 years should be restricted , regulation of advertising to children, T.V advertising encourages my children to want products they don't need, Conflict, excessive intake of fast food results into obesity, I decide when my children can watch T.V, I insist that my child play outside rather than watch T.V and my child is not allowed to watch T.V until homework is done.

Table 6.20

Gender wise distribution of Parent's attitude towards advertising, T.V viewing and consumption of advertised products

St. No.	Statements	Gender	No. of resp	Mean	S.D	Mean (IQR)	Mannwhitney test z value	p value
A1	Advertisement is a valuable source of information for consumers	Male	563	3.84	1.01	4	.04	.971
		Female	437	3.86	.96	4		
A2	Children's are exposed to too many advertisement messages on T.V	Male	563	3.93	.86	4	1.29	.196
		Female	437	3.83	.95	4		
A3	Advertisements are generally misleading	Male	563	3.58	1.02	4	1.45	.146
		female	437	3.49	1.04	4		
A4	T.V ads contributes to children's understanding of the world around them	Male	563	3.51	1.03	4	.66	.511
		Female	437	3.54	1.03	4		
A5	T.V ads to children are full of tricks & deceits	Male	563	3.70	.98	4	.58	.562
		Female	437	3.73	1.01	4		
A6	Ads does not always tell the truth	Male	563	4.12	.84	4	1.41	.158
		Female	437	3.97	1.04	4		
A7	Purpose of ads is to sell products	Male	563	4.33	.76	4	.29	.769
		Female	437	4.33	.78	4		
A8	Ad creates awareness of new products that have arrived in the market	Male	563	4.14	.77	4	.00	.999
		Female	437	4.12	.83	4		
	Parents attitude towards advertisements	Male	563	3.89	.47	3.8	.66	.512
		Female	437	3.86	.50	3.8		
B1	Children are more influenced by ads then grown up people	Male	563	4.03	.91	4	.84	.398
		Female	437	3.98	.93	4		
B2	Children aged between 10-12 understand advertising's communication intent	Male	563	3.77	.91	4	.89	.376
		Female	437	3.72	.93	4		
B3	Children are able to distinguish between programmes & ads	Male	563	3.96	.87	4	.48	.634
		Female	437	3.91	.94	4		
B4	By age of 5 children acquire ability to differentiate between commercials & programmes but did not know the intent	Male	563	3.61	1.00	4	.54	.587
		Female	437	3.55	1.06	4		

Table 6.20 (contd……)

St. No.	Statements	Gender	No. of resp.	Mean	S.D	Mean (IQR)	Mannwhitney test z value	p value
	Children's capacity to understand advertisements	Male	563	3.87	.87	4	1.08	.282
		Female	437	3.79	.62	4		
C1	T.V advertising to children encourages them to desire products they don't really need	Male	563	3.97	.92	4	.92	.357
		Female	437	3.91	.94	4		
C2	Children usually look for advertised products	Male	563	3.83	.93	4	2.05	.040*
		Female	437	3.73	.93	4		
C3	Children could recollect advertised products more quickly & demanded them	Male	563	3.79	1.58	4	.83	.405
		Female	437	3.78	1.02	4		
C4	T.V advertising to children encourages them to put pressure on their parents to buy goods	Male	563	3.80	1.06	4	.74	.457
		Female	437	3.73	1.14	4		
C5	Children demanded products endorsed by celebrities	Male	563	3.29	1.14	4	1.53	.125
		Female	437	3.40	1.13	4		
C6	Children get disappointed on not being able to buy new advertised products	Male	563	3.72	1.01	4	1.32	.188
		Female	437	3.61	1.10	4		
	Children's behaviour regarding advertisements	Male	563	3.76	.78	3.8	.42	.672
		Female	437	3.69	.70	3.8		
D1	T.V advertising to children should be banned	Male	563	3.27	1.11	3	.12	.908
		Female	437	3.27	1.12	3		
D2	T.V advertising to children less than 12 years should be restricted	Male	563	3.49	1.09	4	.87	.385
		Female	437	3.42	1.14	4		
	Regulation of advertising to children	Male	563	3.38	.98	3.5	.43	.666
		Female	437	3.35	1.01	3.5		
E1	T.V advertising is an important cause of my children pestering me for advertised products	Male	563	3.42	1.09	4	1.39	.163
		Female	437	3.31	1.14	4		
E2	T.V advertising encourages my children to want products they don't need	Male	563	3.61	1.07	4	.48	.635
		Female	437	3.56	1.12	4		
E3	T.V advertising leads to family conflict	Male	563	3.10	1.11	3	2.09	.037*
		Female	437	2.95	1.15	3		

Table 6.20 (contd……)

St. No.	Statements	Gender	No. of resp	Mean	S.D	Mean (IQR)	Mannwhitney test z value	p value
E4	Children argue when request for advertised product is denied	Male	563	3.44	1.08	4	.01	.994
		Female	437	3.42	1.15	4		
	Conflict	Male	563	3.39	.80	3.5	1.29	.197
		Female	437	3.31	.85	3.5		
F1	There are too many additives in food products advertised in T.V programme directed at children	Male	563	3.92	.89	4	.49	.623
		Female	437	3.90	.89	4		
F2	All advertised foods are not fit to be consumed	Male	563	3.87	.96	4	1.97	.049*
		Female	437	3.71	1.09	4		
F3	Advertisement depicts food products as better than they really are	Male	563	3.72	1.03	4	1.07	.284
		Female	437	3.63	1.10	4		
F4	Food advertisements influence children's eating habits	Male	563	3.91	.90	4	1.04	.300
		Female	437	3.84	.94	4		
F5	Food ads usually shown on T.V were for breakfast cereals, confectionery & used more animation, humour & promotion	Male	563	3.74	.89	4	.70	.482
		Female	437	3.76	.95	4		
	Food advertisement	Male	563	3.85	.66	3.8	1.10	.273
		Female	437	3.77	.62	3.8		
G1	Children are influenced by ads in children's programmes	Male	563	4.01	.87	4	2.06	.039
		Female	437	3.93	.84	4		
G2	Children are influenced by ads in other programmes (adult programme)	Male	563	3.45	1.04	4	.03	.973
		Female	437	3.45	1.05	4		
G3	Children below 8 years get easily influenced by T.V commercials	Male	563	3.88	.94	4	.62	.535
		Female	437	3.84	.96	4		
	Influence of advertising on children	Male	563	3.78	.69	4	.94	.350
		Female	437	3.74	.68	4		
H1	I am concerned about getting my children to eat good food	Male	563	4.26	.90	4	.85	.397
		Female	437	4.24	.86	4		
H2	Children should be allowed to eat whatever they want	Male	563	2.34	1.25	2	.94	.349
		Female	437	2.25	1.19	2		
H3	Children like to eat whatever they want	Male	563	2.80	1.22	2	1.42	.156
		Female	437	2.70	1.28	2		

Table 6.20 (contd……)

St no	Statements	Gender	No. of resp.	Mean	S.D	Mean (IQR)	Mannwhitney test z value	p value
H4	Children like to eat & drink while watching T.V	Male	563	3.79	1.07	4	.61	.541
		Female	437	3.70	1.18	4		
H5	Advertised food are generally not good for health	Male	563	3.98	1.01	4	1.72	.085
		Female	437	3.84	1.12	4		
H6	Consumption of food in front of T.V has brought about unhealthy food habits in children	Male	563	4.11	.90	4	1.65	.100
		Female	437	4.02	.94	4		
H7	Excessive intake of fast food results into obesity	Male	563	4.16	.86	4	1.83	.067
		Female	437	4.03	.96	4		
H8	Some advertised food products create health problems	Male	563	4.09	.89	4	.88	.380
		Female	437	4.05	.89	4		
H9	Children eating too much of advertised food develop more body weight	Male	563	3.89	1.04	4	1.79	.074
		Female	437	3.98	1.03	4		
	Parental concern with child nutrition	Male	563	3.71	.48	3.7	2.28	.022
		Female	437	3.66	.57	3.6		sig
I1	I determine how much T.V my children can watch	Male	563	3.97	.86	4	1.34	.181
		Female	437	3.89	.91	4		
I2	I decide when my children can watch T.V	Male	563	3.99	.89	4	1.54	.123
		Female	437	3.89	.95	4		
I3	I control which programmes my children watch	Male	563	4.02	.89	4	1.01	.314
		Female	437	4.10	.81	4		
I4	I limit the amount of T,V my child watches in one sitting	Male	563	4.03	.83	4	.09	.925
		Female	437	4.06	.73	4		
I5	I insist that my child play outside rather than watch T.V	Male	563	4.12	.88	4	.69	.493
		Female	437	4.14	.93	4		
I6	I do not allow T.V to be on during meal time	Male	563	3.78	1.08	4	.18	.858
		Female	437	3.77	1.08	4		
I7	I allow our child to watch any T.V show that he/she chooses	Male	563	2.85	1.24	2	.63	.531
		Female	437	2.90	1.21	2		
I8	When I feel my child watched T.V long enough I tell to switch it off	Male	563	4.22	.86	4	1.06	.289
		Female	437	4.16	.89	4		

Table 6.20 (contd……)

St . No.	Statements	Gender	No. of resp.	Mean	S.D	Mean (IQR)	Mannwhitney test z value	p value
I9	My child is not allowed to watch T.V until homework is done	Male	563	4.15	.89	4	.88	.377
		Female	437	4.10	.89	4		
I10	I actively encourage my child to do other things than watch T.V	Male	563	4.12	.90	4	.60	.546
		Female	437	4.12	.83	4		
I11	I check to see what my child is watching	Male	563	4.27	.81	4	.99	.324
		Female	437	4.25	.74	4		
I12	Parents should play active role in monitoring children's T.V viewing	Male	563	4.39	.86	5	.16	.873
		Female	437	4.41	.79	5		
	Parental restrictive mediation	Male	563	4.00	.50	4	.60	.551
		Female	437	3.98	.46	4		

Source: Primary data *Significant at 5% level of significance

Further gender wise analysis has been undertaken and the following results have been found.

1. **Parent's attitude towards advertisements** show statement A1, A4, A5 and A8 to have greater influence on female (m=3.86, 3.54, 3.73 and 4.12), While statement A2, A3 and A6 greater influences on males (m=3.93, 3.58 and 4.12). There is no significant relationship between parent's attitude towards ads and gender as p values are all greater than 0.05 at 5%level of significance. Overall the impact of parents attitude towards ads is more on males (m= 3.89) than females (m= 3.86).

2. **Children's capacity to understand advertisements** show all statements to have greater influence on males than females. (m=4.03, 3.77, 3.96 and 3.61). All statements show no significant relationship between children's capacity to understand ads and gender as all p values are above 0.05 at 5% level of significance. Overall it has been found that impact is more on males (m=3.87) than females (m=3.79). It can be seen that parents are concerned about their sons as they are more playful by nature and spend more time in front of TV.

3. **Children's behaviour regarding advertisements** show all statements to have greater influence on males (m=3.97, 3.83, 3.79, 3.80), except statement 5 which influences females (m=3.40). Females are influenced by celebrities and their styles buy products endorsed by them.

Statement C2 shows a significant relationship between children looking out for advertised products and gender as p value is found to be .049 which is less than 0.05 at 5% level of significance. All the other statements show no significant relationship. Overall children's behaviour regarding advertisements show higher impact on males (m=3.76) as compared to females (m=3.69). Hence it can be said that there is no significant relationship between children's behaviour regarding advertisements and gender as all remaining p values were found to be greater than 0.05 at 5% level of significance.

4. **Regulation of advertising to children** shows statement D1 to have equal impact on male and female (m=3.27). Parents of both genders feel that TV advertising to children should be banned. Statement D2 shows greater influence on male (m=3.49). There is no significant relationship between regulation of advertising to children and gender as all p values are greater than 0.05 at 5% level of significance. Overall regulation of advertising to children shows greater impact on males (m=3.38) than females (m=3.35).

5. All statements under the head **Conflict** show a greater impact on males (m=3.42, 3.61, 3.10 and 3.44). Statement E3 shows p value to be .037 which is less than 0.05 at 5% level of significance which shows a significant relationship between TV advertising leading to family conflict and gender. All other statements show no significant relationship. Overall conflict shows higher influence on males (m=3.39) as compared to females (m=3.31). Hence it can be concluded that there is no significant relationship between conflict and gender as all the other p values are greater than 0.05 at 5% level of significance.

6. **Food advertisement** reveals statement F1, F2, F3, and F4 to show greater influence on males (m=3.92, 3.87, 3.72 and 3.91) while statement F5 shows greater influence on females (m=3.76). Statement F2 shows a significant relationship between advertised food not fit to be consumed and gender as the p value is .049 which is less than 0.05 at 5% level of significance. All other statements show no significant relationship. Overall food ads show greater impact on males (m=3.85) as compared to females (m=3.77).

Hence it can be concluded that there is no significant relationship between food advertisements and gender as all the other p values are greater than 0.05 at 5% level of significance.

7. **Influence of advertising on children** shows statement G1 and G3 to have greater influence on males (m=4.01 and 3.88) while statement G2 shows equal influence on male and female (m= 3.45). Statement G1 shows p value to be .039 which is less than 0.05 at 5% level of significance which states that there is a significant relationship between children influenced by advertisements in children's programmes and gender. All other statements show no significant relationship. Overall influence of ads on children show greater impact on males (m= 3.78) as compared to females (m= 3.74).). Hence it can be concluded that there is no significant relationship between influence of advertising on children and gender as all the other p values are greater than 0.05 at 5% level of significance.

8. **Parental concern with child nutrition** shows all statements except statement H9 to have a greater influence on males (m= 4.26, 2.34, 2.80, 3.79, 3.98, 4.11, 4.16 and 4.09), while statement H9 has greater influence on females (m= 3.98). This is so as parents were more concerned with their sons from getting overweight. All the p values were greater than 0.05 and show no significant relationship but overall parental concern with child nutrition show significant relationship as p value was found to be .022 which is less than 0.05 at 5% level of significance. In all other cases the p values were found to be greater than 0.05 at 5% level of significance which shows that there is no significant relationship between all other statements and gender. Overall parents concern with child nutrition shows higher impact on males (m=3.71) as compared to females (m=3.66).

9. **Parental restrictive mediation** shows statements I1, I2, I6, I8, I9 and I11 to have greater influence on males (m=3.97, 3.99, 3.78, 4.22, 4.15 and 4.27), while statement I3, I4, I7,I 12 show greater influence on females. (m=4.10, 4.06, 2.90 and 4.41). On the other hand statement I10 shows equal influence on male as well as female (m=4.12).

There is no significant relationship between parental restrictive mediation and gender as all p values are found to be greater than 0.05 at 5% level of significance. Overall parental restrictive mediation shows greater impact on males (m=4.00) as compared to females (m=3.98).

From the above Table 6.20 it can be seen that in case of statements like Children usually look for advertised products, T.V advertising leads to family conflict, All advertised foods are not fit to be consumed, Children are influenced by ads in children's programmes and overall parental concern with child nutrition show a significant association between parent's attitude towards advertising, T.V viewing and consumption of advertised products and gender while all the remaining statements show no significant relationship.

Further impact of TV viewing score and parents attitude towards advertising, TV viewing and consumption of advertised product is studied through Table 6.21.

Table 6.21
Correlation table

T.V viewing score

St. no.	**Statements**	**Pearson's Correlation ****	**p value ***	**Significant**
1.	Children's capacity to understand advertisements	.219**	.000*	Sig
2.	Children's behavior regarding advertisements	.354**	.000*	Sig
3.	Regulation of advertising to children	.292**	.000*	Sig
4.	Conflict	.371**	.000*	Sig
5.	Food advertisement	.294**	.000*	Sig
6.	Influence of advertising on children	.343**	.000*	Sig
7.	Parental concern with child nutrition	.278**	.000*	Sig
8.	Parental restrictive mediation	.146**	.000*	Sig
9.	Overall attitude of parents towards advertising, TV viewing and consumption of advertised products	.509**	.000*	Sig

Source: Primary data *Significant at 5% level of significance
**Correlation is significant at 0.01 level (2 tailed)

It can be seen that moderate correlation exists between TV viewing score and other statements regarding parental concern of TV viewing and food consumption. There is moderate correlation between children's capacity to understand ads (r=.219) and children's behaviour regarding ads. (r=.354).

Similarly between regulation of advertising to children (r=.292) and conflict (r=..371), between food advertisement (r=.294) and influence of advertising on children (r=.343), between parental concern with child nutrition (r=.278) and parental restrictive mediation (r=.146) show moderate correlation between all of them. The overall attitude of parents shows a good impact(r=.509). All the statements show a significantly high relationship as all p values are .000 which is less than 0.01 at 5% level of significance.

Further multiple regression has been undertaken. This method is considered to find out the relationship between the dependent variable which is T.V viewing score and independent variables, that is the various parental attitudes towards advertising, T.V viewing and consumption of advertised products.

Table 6.22
Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.516[a]	.266	.260	2.14784

a. Predictors: (Constant), Parental restrictive mediation, Conflict, Children's capacity to understand advertisements, Parental concern with child nutrition, Regulation of advertising to children, Influence of advertising on children, Food advertisement, Children's behaviour regarding advertisements

Table 6.23

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1656.920	8	207.115	44.896	.000[a]
	Residual	4571.704	991	4.613		
	Total	6228.624	999			

a. Predictors: (Constant), Parental restrictive mediation, Conflict, Children's capacity to understand advertisements, Parental concern with child nutrition, Regulation of advertising to children, Influence of advertising on children, Food advertisement, Children's behaviour regarding advertisements

b. Dependent Variable: T.V veiwing score

Table 6.24

Multiple regression results showing coefficients [a]

Model	St. no.	Statements	Unstandardized Coefficients		Standardized Coefficients	t value	P value
			B	Std. Error	Beta		
1.	1.	(Constant)	-2.014	.725		-2.776	.006*
	2.	Children's capacity to understand advertisements	.440	.092	.136	4.792	.000*
	3.	Children's behavior regarding advertisements	.437	.108	.131	4.046	.000*
	4.	Regulation of advertising to children	.347	.075	.138	4.656	.000*
	5.	Conflict	.475	.102	.157	4.643	.000*
	6.	Food advertisement	.261	.124	.067	2.114	.035*
	7.	Influence of advertising on children	.464	.116	.127	3.983	.000*
	8.	Parental concern with child nutrition	.522	.144	.110	3.613	.000*
	9.	Parental restrictive mediation	-.089	.153	-.017	-.580	.562

a. Dependent Variable: T.V viewing score

Source: Primary data * Significant at 5% level of significance

As seen from table 6.22 the value of R is .516 and R square is .266. The value of R shows a positive relationship between variables. Table 6.23 shows the sum of squares for regression residual and the total. The regression sum of square value is 1656.920 and residual sum of square is 4571.704. The value of F test is 44.896 significant at α 0.000. This shows the model has a good fit in explaining the variations with moderately high values of R^2 (.266). Therefore the model shows that the factors (11 factors) explain 26.6% variance towards T.V viewing. Table 6.24 shows the beta values of constant and the variables in the model. The value of t for preparedness is above +2, which makes it an important predictor. From table 6.24 it can be seen that T.V viewing has greatest influence on conflict. Advertising encourages children to want products they don't need and when their request is denied it leads to family conflict. This is evident from Beta=.157. As a result parents feel that T.V advertising to children should be banned or should be restricted to those less than 12 years. (Beta=.138). Children's capacity to understand the difference between programmes and ads without knowing the selling intent is influenced by T.V viewing (Beta=.136).

In this manner the beta values state the level of influence of T.V viewing on the 8 statements. It can also be seen that there is a significantly high association between T.V viewing and the various statements as all the p values are .000 which is less than 0.01 at 5% level of significance, except statement 6 and statement 8. In case of statement 6 there is a significant relationship as p value is .035 which is less than 0.05 at 5% level of significance, while in case of statement 8 there is no significant relationship as p value is .562 which is greater than 0.05 at 5 % level of significance. All these variables contribute to 26.6% of the T.V viewing.

Table 6.25
Correlation Table

Overall impact on eating

St. no.	Statements	Pearson's Correlation **	p value *	Signi-ficant
1.	Children's capacity to understand advertisements	.316**	.000*	Sig
2.	Children's behavior regarding advertisements	.499**	.000*	Sig
3.	Regulation of advertising to children	.318**	.000*	Sig
4.	Conflict	.475**	.000*	Sig
5.	Food advertisement	.387**	.000*	Sig
6.	Influence of advertising on children	.463**	.000*	Sig
7.	Parental concern with child nutrition	.374**	.000*	Sig
8.	Parental restrictive mediation	.263**	.000*	Sig
9.	Overall attitude of parents towards advertising, TV viewing and consumption of advertised products	.678**	.000*	Sig

**Correlation is significant at 0.01 level (2 tailed)
Source: Primary data * Significant at 5% level of significance

It can be seen that moderate correlation exists between children's capacity to understand ads (r=.316) and children's behaviour regarding ads (r=.499). Similarly moderate correlation exists between regulation of advertising (r=.318) and conflict (r=.475), between food advertisement (r=.387) and influence of advertising on children(r=.463), between parental concern with child nutrition (r=.374) and parental restrictive mediation (r=.263). The overall attitude of parents towards advertising, T.V viewing and consumption of advertised products and overall impact on eating show a good correlation (r=.678). All the statements show a significantly high relationship as all p values are .000 which is less than 0.01 at 5% level of significance .Further multiple regression has been undertaken.

Table 6.26
Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684[a]	.469	.464	16.28159

a. Predictors: (Constant), Parental restrictive mediation, Conflict, Children's capacity to understand advertisements, Parental concern with child nutrition, Regulation of advertising to children, Influence of advertising on children, Food advertisement, Children's behaviour regarding advertisements

Table 6.27

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	231585.9	8	28948.240	109.201	.000[a]
	Residual	262704.4	991	265.090		
	Total	494290.4	999			

a. Predictors: (Constant), Parental restrictive mediation, Conflict, Children's capacity to understand advertisements, Parental concern with child nutrition, Regulation of advertising to children, Influence of advertising on children, Food advertisement, Children's behaviour regarding advertisements

b. Dependent Variable: overallimpact on eating

Table 6.28
Multiple regression results showing coefficients [a]

Model	St. no.	Statements	Unstandardized Coefficients		Standardized Coefficients	t value	p value
			B	Std. Error	Beta		
1.	1.	(Constant)	-92.591	5.499		-16.836	.000*
	2.	Children's capacity to understand advertisements	5.502	.696	.191	7.907	.000*
	3.	Children's behavior regarding advertisements	6.382	.818	.215	7.797	.000*
	4.	Regulation of advertising to children	2.236	.565	.100	3.958	.000*
	5.	Conflict	5.403	.776	.200	6.965	.000*
	6.	Food advertisement	2.536	.938	.073	2.704	.007*

Table 6.28 (contd…..)

Model	St. no.	Statements	Unstandardized Coefficients		Standardized Coefficients	t value	p value
			B	Std. Error	Beta		
	7.	Influence of advertising on children	5.696	.882	.175	6.457	.000*
	8.	Parental concern with child nutrition	5.683	1.095	.134	5.190	.000*
	9.	Parental restrictive mediation	2.530	1.162	.055	2.177	.030*

a. Dependent variable: overall impact on eating

Source: Primary data. *Significant at 5% level of significance.

As seen from table 6.26 the value of R is .684 and R square is .469. The value of R shows a positive relationship between variables. Table 6.27 shows the sum of squares for regression residual and the total. The regression sum of square value is 231585.9 and residual sum of square is 262704.4. The value of F test is 109.201 significant at α 0.000. This shows the model has a good fit in explaining the variations with moderately high values of R^2 (.469). Therefore the model shows that the variables (8 statements) explain 68.4% variance towards overall impact on eating. Table 6.28 shows the beta values of constant and the variables in the model. The value of t for preparedness is well above +2, which makes it a useful predictor. From the regression analysis shown in table 6.28 it can be seen that overall impact on eating has greatest influence on children's behaviour regarding advertisements. Children easily recollect products seen on television and put pressure on their parents to buy them. This is evident from Beta score of .215. It also brings about conflict when children's request for advertised products are denied as shown in table (Beta=.200). Though children are able to distinguish between programmes and ads they are more influenced by ads then grown up people. Hence children's capacity to understand advertisements also influences overall impact on eating (Beta=.191).

In this manner the Beta values state the level of impact on eating as against the 8 statements. It can also be seen that there is a significantly high association between overall impact on eating and the various statements as all the p values are .000 which is less than 0.01 at 5% level of significance except statement 8 whose p value is .030 which is less than 0.05 at 5% level of significance and shows a significant relationship. All these variables contribute to 46.9% of the overall impact on eating.

6.4 DISCUSSION AND CONCLUSION

Table 6.29

Table showing brief summary of different values on Parents T.V viewing behaviour

Contents of Parents T.V viewing behaviour	Area (U / R)	Region (N / S)	Age (6-7, 8-9, 10-12)	Gender (M / F)
	Accepted	Accepted	Accepted	Accepted
Parents watching T.V	.516	.001*	.091	.986
Parents watching advertisements	.196	.250	.413	.514
Parents frequency in accompanying children while watching T.V.	.673	.125	.739	.397
Parent's frequency of making intent of ad clear.	.058	.088	.087	.361
Parents control on T.V programmes of children	.559	.063	.049	.949
Children's behaviour while watching advertisements.	.609	.095	.002*	.172
Effects on children due to T.V watching.	.778	.640	.342	.747
Parents attitude towards advertising, T.V viewing & consumption of advertised products.	.307	.596	.229	.083

Source: Primary data. *Significant at 5%level of significance.

From the present study it can be concluded that parent's from urban and rural areas, irrespective of their children's age and sex were regular television viewers. It has been found that greater the amount of interest taken by parents in watching television more would be the time spent by children in front of the television.

Similarly parents in urban (75.6%) and rural areas (72.0%) were equally interested in watching advertisements. T.V advertisements which were quite popular with children were also popular with their parents. It was noticed that if parent's themselves were interested in watching advertisements, they viewed them with great interest with their children and helped in building positive thinking about advertisements.

Parents in rural areas (53.4%) were" often" found watching television with their children. As a result they are able to know what their children are watching and can guide them about the pros and cons of television.

Further it was also found that parents" often" accompanied their daughters(53.8%) and children in the age group of 6-7 (57.5%) and 8-9 years (57.3%) while watching T.V. Since children in this age group were more attracted to television parents with children in this age group" often" explained the intent of advertising to them. On the other hand parents from urban areas (41.2%) occasionally watched television with their children, and occasionally (50.6%) spoke about the intent of advertisements to their children.

Parents also find it necessary to exercise control on the T.V viewing behaviour of children .Parents in rural areas (60.0%) exercise greater control on their children as mothers were found to be housewives taking care of their children and knew the ill effects of T.V watching as compared to parents in urban areas (33.0%) who occasionally restricted their children from viewing T.V programs as they were found to be busy with their jobs and paid less attention to their children. It was also found that parent's had greater concern for children in the age group of 6-7 (61.9%) and 8-9 years (61.6%) and for boys (58.8%) as they were found to be highly attracted by television. They exercised control quite often on them.

Children in urban areas (28.0%) watched television with lot of attention while those in rural areas (24.4%) watched only for few minutes. This could be because children in urban areas were confined to their homes and did not have any other access like children in rural areas that were more playful and interacted with children in the neighbourhood. Further it was found that girls (26.3%) and children in the age of 8-9 (29.1%) watched T.V with lot of attention.

T.V viewing has also affected children's studies and their physical activity in urban and rural areas. It was found that boys (36.9%) as well as girls (37.8%) paid less attention to their studies as maximum of their time was shared between T.V watching and playing, leaving very little time for studies. This was also more visible of children in the age group of 6-7 (38.1%) and 10-12 years (38.9%) Another effect of T.V viewing is the fact that children have become demanding and have started asking for the products they have seen on television was found that children in rural areas(20.6%) were more demanding than children in urban areas (20.2%).

Parents therefore play an important role in guiding their children in making the right choice and shield them from T.V advertisements that have undesirable effects.

Thus from the above analysis it can be concluded that overall parents interest in T.V advertisements and their regulation of children's T.V viewing behaviour is the same as far as age, gender and area and region is concerned, and, thus the hypothesis formed for the purpose is accepted.

From the table 6.29 it can be seen that parent's T.V viewing behaviour shows no significant association as far area and gender while in case of region parents T.V viewing shows significant association while in case of age parent's control on T.V programmes of children and children's behaviour while watching ads show significant association. Thus the hypothesis formed for the purpose is accepted.

Table 6.30

Table showing brief summary of different values on parent's attitude

Contents of parents attitude tested based on objective	**Area (U / R)**	**Region (N / S)**	**Age (6-7, 8-9, 10-12)yrs**	**Gender (M / F)**
Difference in attitude of parents	Accepted	Accepted	Accepted	Accepted
Parents attitude towards advertisements	.235	.627	.462	.512
Children's capacity to understand advertisements	.749	.285	.511	.282
Children's behaviour regarding advertisements	.612	.963	.500	.672
Regulation of advertising to children	.159	.711	.010*	.666
Conflict	.503	.816	.032*	.197
Food advertisement	.573	.464	.450	.273
Influence of advertising to children	.649	.129	.593	.350
Parental concern with child nutrition	.571	.103	.321	.022*
Parental restrictive mediation	.022*	.169	.108	.551

Source: Primary data * Significant at 5%level of significance

Parents in general have a mixed attitude towards advertising. It is neither positive nor wholly negative. Parents agree to the fact that advertisements are an important source of information to consumers and inform them about new arrivals. The mean value 4.15 in rural areas, 4.16 in South Goa, mean value 4.24 in case of 6-7 year old children and mean value 4.14 for males explains this fact.

They also opine that advertisements are misleading, are full of tricks and deceit, do not always tell the truth and their purpose is to sell products.
Regarding children's capacity to understand advertisements parents agree that children are more influenced by ads than grown up people.

This is evident from mean value 4.01 in urban and rural areas, mean value 4.03 in South Goa, mean value 4.03 for children of 8-9 years and mean value 4.03 for male.

Parents are also concerned about children's behaviour regarding advertisements. They hold the view that advertisements encourage them to demand products they don't really need .This is evident from mean value 3.95 in case of rural areas, m=3.80 in North Goa, m=3.98 for 6-7 year olds and m= 3.97 for males.

Parents also feel that there should be regulation of advertising to children. They are more in favour of restricting T.V advertising to children below 12 years as seen from mean value 3.49 in rural areas, m=3.50 in North Goa, m= 3.40 for 8-9 year old, m=3.55 for 10-12 year olds and m= 3.49 for males than banning advertisements.

Parents are quite worried about the conflict that develops due to T.V advertisements, especially when there is denial to buy the advertised products. The mean value 3.11 in rural areas, m= 3.46 in South Goa, m=3.41 for 6-7 year old, m= 3.48 for 10-12 year old and m=3.44 for males prove this. Conflict is moreover seen in low income families as they have limited resources and cannot buy whatever the child demands.

Parents agree with the fact that food advertisements influence children's eating habits. Food products advertised have too many additives in them. This can be seen from mean value 3.96 in rural areas, m=3.92 in North Goa, m= 4.01 for 6-7 year old and m= 3.92 for males prove this point.

Regarding influence of advertising on children parents feel that children's programmes are full of ads that influence them and children below 8 years are easily influenced by them. This has been shown in mean value 4.01 in urban areas, m= 4.05 in North Goa, m= 4.04 for 6-7 year old and m= 4.01 for males.

All parents are concerned about their children's health and wellbeing. They want their children to have healthy food. They agree that T.V advertisements create desire to eat junk food resulting into obesity and health problems. Similarly consumption in front of television has brought about unhealthy food habits in children.

The mean value 4.25 for urban and rural areas, m= 4.32 in North Goa, m= 4.25 for 6-7 year old, m=4.26 for 8-9 year old, m= 4.24 for 10-12 year old and m= 4.26 for male justify this fact.

Due to undue influence exerted by television and advertising on children parents keep a strict vigil and control on children through parental restrictive mediation. They control the types of programmes viewed by children, check on what they are watching, limit the viewing time, insist on completing home- work first, encourage other activities like playing instead of watching T.V. Parents agree that they should play an active role in monitoring children's T.V viewing activity. This will help them to explain to their children what is good and bad about advertising. This is evident from the mean value of 3.96 in urban area and m=4.02 in rural area, m=4.01 in North Goa and m= 3.97 in South Goa, m= 4.03 for 6-7 and 8-9 year old children and m= 3.95 for 10-12 year old children, m= 4.00 for males and m=3.98 for females.

The above discussion can be summed up as:

1. 456 parents in urban area and 450 parents in rural area like to watch television.
2. 50-57% of the parents often view T.V with their children while 40% of the parents occasionally view T.V and the remaining never views T.V with their children.
3. 378 parents in urban area and 360 parents in rural area like to watch advertisements.
4. 37-41% of the parents often make the intent of advertising clear to their children while 44-50% of the parents occasionally make the intent clear while the remaining never make the intent clear.

5. 55-60% of the parents often control the T.V viewing of their children, 28-33% occasionally control while the remaining never control the T.V viewing of their children.
6. 22-28% children in urban areas watch advertisements with attention while 23-29% children in rural areas watch for few minutes.
7. T.V viewing has a greater effect on studies of children in the age group of 10-12 years (38.9%) and children in the age group of 6-7 years (38.1%) as compared to children in the age group of 8-9 years (35.1%).
8. 35-40% of the parents have moderate attitude towards advertising, T.V viewing and consumption of advertised products while 27-32% have highly favourable attitude towards advertising and the remaining have less favourable attitude towards advertising, T.V viewing and consumption of advertised products.
9. Parents in rural areas (m=3.49) are more in favour of restricting T.V advertisements to children less than 12 years than parents in urban areas (m=3.43).
10. Parents in urban and rural areas equally agree that advertised food is not good for health (m=3.92).

Hence from the Table 6.30 we find that parents attitude towards advertising, T.V viewing and consumption of advertised products show no significant relationship as far as region is concerned while parental restrictive mediation shows significant association area wise. On the other hand regulation of advertising to children and conflict shows significant relationship as far as age is concerned and parental concern with child nutrition shows significant relationship as far as gender is concerned.

Thus it can be concluded that overall there is no significant difference in parent's attitude towards advertising, T.V viewing and consumption of advertised products and area, region, age and gender and hence H01, H02, H03 and H04 are accepted.

CHAPTER 7

FINDINGS, CONCLUSION & SUGGESTIONS

CHAPTER SEVEN

FINDINGS, CONCLUSION & SUGGESTIONS

7.1 INTRODUCTION

A study of this nature was not an easy task. To look into the mind set of children and parents and to gather their opinion was rather difficult. But this study helped to solve the research problem.

7.2 FINDINGS

Since this study is a comparative analysis between urban and rural children the findings also focus on this aspect. It first takes a look at children's interest in T.V advertisements and their T.V viewing behaviour. From the analysis undertaken it can be seen that children of all age groups, sexes and from all areas and districts like to watch television. They also like to view advertisements.

But it has been found that children in rural areas watch television for more number of hours on school days as well as holidays as compared to urban children. Similarly children in rural areas watch advertisements with lot of interest. Boys were found to watch advertisements more than girls and also remember them. Children in urban area remember more of food and clothing advertisements while children in rural areas remember more of toys advertisements. Overall children were found to watch television more with their siblings than their parents. But in rural areas children were found to watch television more with their parents, friends and neighbours as compared to children in urban areas who preferably watched with their siblings. Parents in urban area" often "discuss about the intent of ads with their children while parents in rural areas discussed only" sometimes ". Similarly it was found that children in urban and rural areas were fond of music, brand, colour, celebrity and presentation in advertisements. Overall frequency of children's T.V viewing has been found to be moderate in the state of Goa.

As more and more parents have started working they find less time to accompany their children in T.V watching. With the development of nuclear families children

are left all alone at home with lot of T.V viewing time. As a result there is need to keep a control on what children view and also undertake discussion on the intent of advertising so that they do not develop interest to demand what they see on television.

The second part of the study deals with the impact of advertising and the changing food preferences of children. It has been found that branded eatables and branded drinks are highly preferred by children in urban areas while ordinary drinks and branded drinks are preferred by those in rural areas. Boys (males) were fond of branded eatables and ordinary as well as branded drinks while girls preferred branded drinks. Children preferred to eat chocolates and ice creams the most, followed by biscuits, noodles, wafers and soft drinks. Children either purchased these products with their pocket money or it was parents themselves who purchased it for them. It has been found that children in rural areas get less pocket money as compared to children in urban areas. Similarly children in urban areas like to eat while watching T.V.

Further analysis reveals that products like Domino's pizza and KFC have more demand in urban areas while Domino's burgers have more demand in rural areas. Kissan jam has more demand in urban area while Kissan sauce has more demand in rural areas. Among noodles Maggie is the most popular and is widely consumed by children in urban as well as rural areas. Among biscuits Cadbury Oreo has maximum demand with high preference by children in urban areas. Among chocolates Cadbury is in the forefront with maximum demand in the rural areas. Taking a look at health drinks Boost is the leader of the market with maximum demand in urban areas. Amul is the leader of the market as far as butter, cheese and ice creams are concerned with maximum demand in urban areas as compared to rural areas. A study of the soft drink market revealed soft drinks are demanded more in rural areas than urban areas. Slice, Pepsi, Limca, Kissan squash, Tang and Rasna have maximum demand in the rural areas while Coca cola has high demand in urban areas. The same can be said about wafers and chips. The demand for Kurkure, Lays and Balaji is high in rural areas while Uncle Chips has high demand in urban areas.

This gives us an understanding that rural children are no way behind as far as consumption of advertised products are concerned. With all types of products available in rural areas accompanied by intense advertising by marketers and improvement in standard of living it can be said that rural children have overtaken urban children in consumption of advertised products.

The type of food given by parents and elder siblings to small children have a high influence on preference and eating patterns in childhood (Culen et al 2000, Jenvey and Jenvy 2004), so if parents buy the so called snack food and junk food for their children then it will be readily available in their homes. In other words advertising messages reinforce preference of young children to consume food that is already present in their homes.

The frequency of consumption of advertised products is an important factor which needs to be considered. If they are regularly consumed they could unknowingly lead to health problems. Soft drinks which are sugary drinks could increase the body sugar level leading to diabetes. They would also be causing dental cavities. Constant consumption of soft drinks would replace other nutritious drinks and even water which is a matter of serious concern. Similarly eating of burgers, pizzas, French fries regularly could increase the body salt level and cholesterol level. Most of the advertisements directed towards children try to promote fatty and sugary food. Borzekowski and Robinson (2001) show a direct connection between children's memorability of food advertisements and the number of food like soft drinks, snacks and wafers that they eat. The cheap availability of these products is one of the reasons for such blind consumption. Therefore parents need to keep a strict vigil on the frequency of consumption. They also need to restrict the amount of pocket money given to children.

The third part of the study deals with the factors that bring about consumption of advertised products. It has been found that out of the various factors it is availability of fast food outlets around school, availability of pocket money and product characteristics which play a very important role in purchasing advertised products. Children get pocket money which they utilise to buy various products back home.

The presence of fast food outlets around the school vicinity has added to their convenience .In addition the taste, variety and attractive layout is what attracts children towards fast food. Taking a look at urban and rural children we find that working parents, taste, product characteristics, pocket money, convenience, casual attitude for home- made food, attractive promotion are the factors that have an influence on rural children to consume advertised food while it is outing with parents, availability near school, cheapness of fast food and preference for branded products that have an influence on urban children to consume advertised food. Among all these factors product characteristics, convenience and casual attitude for home-made food show a significant difference between urban and rural areas.

School managements should first take a firm decision about school run canteens. They should check the menu and see that fast food items, other advertised products and soft drinks should be replaced by reasonably priced nutritious food items and drinks that would improve the health of children. Similarly they should also not allow fast food stores to crop up near school vicinity. The impact of these factors were found to be more in rural areas than urban areas as rural children are very much attracted and carried away by the persuasive advertisements. As a result it is the responsibility of the parents to create awareness among children. They should discuss with them the good and bad effects of advertising and create in them the ability to judge the right type of ads and also make the intent of ad clear to them.

The last part of the study deals with parents attitude towards advertising, T.V viewing and consumption of advertised products. It has been found that urban parents watch television and advertisements more than rural parents. Rural parents often accompany their children in watching television and often make the intent of ad clear to them. Similarly parents in rural areas ‘often’ exercise control on children’s T.V viewing. It has been found that T.V watching has affected studies of rural children, have developed lack of initiative and also made them more demanding while urban children have developed reduced physical activity.

It has also been found that parents attitude towards advertisements, children’s

capacity to understand ads, regulation of advertising to children, parental restrictive mediation, conflict, food advertising and parental restrictive mediation shows greater impact in rural areas while influence of advertising, parental concern with child nutrition and children's behaviour regarding advertisements show greater impact in urban areas.

It is the duty of the parents to check what their child is watching and also control the number of hours of T.V watching. They should be motivated to do other things than watching television .It has also been found that boys create family conflict if their demand for products were not satisfied especially in rural areas. This could be because rural parents cannot afford to buy whatever is demanded by children as their earnings are limited. As a result they need to make their child understand to live within means and not to be carried by advertisements. Further analysis on rural and urban areas show that Chaffee, Ward, Tipton (1970), Sheikh, Prasad and Rao (1974) have indicated that children put pressure on parents to buy certain products many times causing conflicts among them and children... Sheikh and Moleski (1977) found that commercials have a growing effect inducing children to request for purchases to their parents. Children are not ready to accept refusal of items they ask from their parents and often react aggressively when there is a conflict.

From the above discussion and the results drawn from preceding chapters we can conclude that parents in urban and rural areas have moderate attitude towards advertising, T.V viewing and consumption of advertised products.

Though India has adopted liberalisation and globalisation in 1990 there are no legal guidelines and no specific restrictions as far as advertising to children are concerned. No specific laws are framed related to advertisements of food that are targeted to children and its time of relay.

Though ASCI (Advertising Standards Council of India) was set up to assure safe delivery it has been found that there is no separate code for advertising. India too requires better control systems like that of developed countries. Although ASCI have allowed public participation, the complaint process is different in India and other developed countries.

We find that MRTP Act has the power to take suo motto action which is not prevalent in Consumer Protection Act. There is an ardent need to give more powers to Consumer Courts to take up cases of false advertisements. There is a need to start more Consumer Clubs. If consumers feel that advertising is not undertaken truly or correctly they should be able to write to ASCI. With stronger approach controversies like that of Maggi noodles would be unfurled that would disclose not only the bad contents in food but also the bad effects of advertising on children.

Though there are a number of laws, there is absence of specific laws exclusively directed at children's food items. This is where changes have to be undertaken by the Government.

7.3 CONCLUSION

From this study the following conclusions can be drawn:

1. All children like to watch television. They also like to watch advertisements. They prefer to watch television in their own homes.

2. Children watch television for 2 hours on school days and more than 3 hours on holidays.

3. Children watch advertisements with lot of interest. They remember food and toy advertisements the most.

4. Children prefer to watch television with their siblings than with their parents. Parents undertook discussion about ads with their children 'sometimes' or 'only if asked 'by them.

5. Children's frequency of T.V viewing was found to be moderate in the state of Goa.

6. T.V viewing has an impact on consumption of food and beverages in the state of Goa.

7. There is high demand for branded products and beverages in urban areas and ordinary eatables and beverages in rural areas. Boys prefer branded eatables and drinks while girls have high preference for soft drinks. Girls get more pocket money than boys.

8. Availability of fast food outlets around school, availability of pocket money and product characteristics are the prominent factors that have the highest impact on purchase of fast food. As age advances children have more desire to consume branded products.

9. The overall preference for advertised food and beverage is low among children in Goa.

10. Parents in rural areas exercised greater control on T.V viewing behaviour of their children as compared to urban areas. Parental control was more on male children than females.

11. It has been found that working parents, taste, product characteristics, availability of pocket money, convenience, outing with parents, availability of fast food outlets around school, casual attitude for home-made food, cheapness of fast food, attractive promotion and preference for branded products are the factors that influence children to consume fast food.

12. Parent's from urban and rural areas were regular T.V viewers. They also watched advertisements.

13. Parents in rural areas exercised greater control on T.V viewing behaviour of their children as compared to urban areas. Parental control was more on male children than females.

14. Parents in rural areas often accompanied their children in watching television and often spoke about the intent of advertising while those in urban areas occasionally accompanied their children and occasionally spoke about the intent of advertising.

15. T.V viewing has not only affected children's studies but has also brought about reduced physical activity and made them demanding. Parents are of the opinion that children could be encouraged in indulging in outdoor activities like playing than sitting in front of the television. Similarly they control the programmes watched by their children.

16. Parents are worried about conflicts that develop between parent and child due to desire to purchase advertised products. They are of the opinion that if proper guidance is given to children about the intent of advertising then a lot of unwanted purchase can be reduced. They keep a check on what their child watches.

17. Parents agree with the fact that though advertisements are a valuable source of information, they do not always tell the truth. . They encourage children to buy unwanted products. They are of the opinion that T.V advertising to children less than 12 years should be restricted. They also limit the amount of T.V watching of their child in one sitting and keep a check on what they are watching.

18. Parent's agree that food advertisements influence children's eating habits. They are very much concerned about their children's health and eating habits. Parents agree that consumption of food in front of television has brought about unhealthy food habits and the excessive intake of it results into obesity and other health related problems. They do not allow T.V to be on during meal time and also do not allow their child to watch any T.V programme that they choose.

19. Parent's keep a strict vigil and control on children through parental mediation. Parental restriction involves controlling programs viewed by children, monitoring T.V viewing, insisting on completing home- work first and encourages other activities like playing instead of T.V watching.

20. Overall parents in Goa show moderate attitude towards advertising, T.V viewing and consumption of advertised products.

7.4 SUGGESTIONS

Following are some suggestions that can be looked upon to sort out many of the problems analysed and found in this study.

1) Establishment of an agency which continuously verifies the content of advertisements before sending them to be shown on television.

2) Promotion of children's rights for protecting them against negative effects of advertisements.
3) There should be more interactions between parent and child to avoid conflicts. Constant discussion between parent and child is necessary to protect children from adverse effects of T.V advertisements.
4) Mothers are the main persons who act as mediators therefore they should very strongly act to prevent negative influence of television.
5) Children should be better informed so that they develop the ability to make critical comparisons between favourable and unfavourable advertisements.
6) As child spends majority of their time in school, teachers should take the responsibility to appraise the children about possible negative influence of T.V viewing and consumption of snacks and fast food.
7) There should be meetings between principal- parent-pupil to promote healthy food consumption so as to counteract negative effects of advertisements.
8) Consumption of soft drinks can be reduced by not making it available at home and replacing it with more nutritive drinks.
9) Nutritive food and drinks should be made available in school canteens at discounted prices.
10) Children should not be directly motivated to buy what is shown in advertisements.
11) All types of advertisements that are directed to small children who are not able to understand the true intent of advertising should be considered as exploitative.
12) Food ads should not be shown when children are most likely to watch television.
13) In order to decrease the risk factors, parent's right from the beginning should control the T.V viewing time and dissuade children from eating and drinking in front of television.
14) Banning advertisements will not solve the purpose as children would watch ads elsewhere.
15) School authorities should take decision not to allow setting up of shops selling fast food in its vicinity.

16) Primary teachers could be trained to teach small children the importance of good eating. Subjects on ‘proper nutrition’ could be started to teach children about healthy and safe eating.
17) Parents should keep control and check on amount of pocket money given and how it is utilised by children.
18) Parents should exercise greater control on T.V viewing behaviour of their children. They should try to accompany children in their T.V viewing so that they can discuss about the good and bad effects of advertisements.
19) Public announcements should also be made on television about the importance of eating healthy.
20) Parents should also find time to prepare tasty food for their children and tell them the benefits of eating home cooked food.

7.5 SCOPE FOR FUTURE RESEARCH:

The area of advertising has vast scope for research study. The current study undertaken is only the tip of this large ice berg. It is confined to the small state of Goa.

Future research in similar area can be undertaken by considering a bigger state or region.

Similarly other types of products and their influence on children’s buying behaviour can be studied. The sample can consist of school students as well as higher secondary students.

Similarly the impact of big fast food restaurants and small way side restaurants on children’s food purchase behaviour can also be looked into.

Children are a big market today. They attract not only producers and advertisers but also movie makers, serial makers and channel producers. The implications of this fast growing entertainment sector and its impact can also be studied. Laws, regulations and restrictive policies imposed by government on various industries, media and advertisers so as to maintain certain standards for advertising can also be studied. The list is endless but a thoughtful mind can unearth many new topics.

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ANNEXURE-I

QUESTIONNAIRE

Dear Parent,

I am conducting a research study on the topic "**Impact of T.V. advertising on food habits of children in Goa"**. I would be grateful if you could spare a few minutes to participate in it. You are requested to kindly complete the questionnaire. The information given by you shall be kept confidential and shall be used for this research study only. I request the parent who spends maximum time with the child to fill up the questionnaire. If you receive more than one questionnaire, please complete each questionnaire separately for each child.

The first three parts are to be filled by the child while the fourth part is to be filled by the parent. Children below the age of 10 may be helped by their parents to fill part I to part III. You are requested to **tick one option** for each question. Thank you for your cooperation.

Interview– Schedule

Sr. No:-

Date:-

Area : ☐ Urban ☐ Rural

District: ☐ North Goa ☐ South Goa

Part I: Respondents Profile

1) **Name of the child:**
2) **Name of the Institution :**
3) **Age in years :** 6 – 7 ☐ 8 – 9 ☐ 10 – 12 ☐
4) **Gender :** Male ☐ Female ☐
5) **Height (in cms.)**

   ☐ 110-115 ☐ 116-120 ☐ 121-135 ☐ Above 135 cm
6) **Weight (in kgs.)**

☐ 15-25 ☐ 26-35 ☐ 6-50 ☐ 51 & Above

- **Parental Education :**

7) **Father's Education**

☐ Non matriculate ☐ SSC ☐ HSSC ☐ Graduate
☐ Post Graduate ☐ Diploma Holder ☐ Others

8) Mother's Education

☐ Non Matriculate ☐ SSC ☐ HSSC ☐ Graduate

☐ Post Graduate ☐ Diploma Holder ☐ Others

➢ **Parental Occupation :**

9) Father's Occupation:

☐ Agriculturist ☐ Service ☐ Business ☐ Self Employed

10) Mother's Occupation:

☐ Agriculturist ☐ Service ☐ Business ☐ Self Employed

☐ Housewife

11) Parent filling the questionnaire:

Father ☐ Mother ☐

12) Number of family members:

Up to 3 ☐ 3 to 5 ☐ More than 7 ☐

13) Type of family

Nuclear ☐ Joint ☐ Extended ☐

14) Annual Income:

Less than Rs.60, 000 ☐ Rs.60, 000 - Rs.1, 20, 000 ☐

Rs.1, 20,000 – Rs.2, 40,000 ☐ Rs.2, 40,000 – Rs.3, 60,000 ☐

Rs.3, 60,000 – Rs.500000 ☐ Rs.500000 – Rs.1000000 ☐

Above Rs.10, 00,000 ☐

Obj I: To study the T.V. viewing habits of children in Goa.

1) Do you have T.V. at home?

Yes ☐ No ☐

2) Do you watch T.V. outside your home?

Yes ☐ No ☐

3) Do you watch advertisements while watching programmes?

Yes ☐ No ☐

4) Do you remember advertisements?

Yes ☐ No ☐

5) What type of advertisements do you remember the most?

Food ☐ Clothing ☐ Toys ☐

Electronics ☐ Others ☐

6) What do you like most about T.V. advertisements? (Please rank).

Music ☐ Brand ☐ Colour ☐ All ☐

Celebrity ☐ Presentation ☐ Slogan ☐ None ☐

7) Why do you see advertisements?

For entertainment ☐ Product purchase ☐ None ☐

For break in programme ☐ Product information ☐

8) What do you do when you see advertisements?

Watch with interest ☐ Switch T.V. channels ☐

Lower the volume ☐ Leave the room ☐

9) Who accompanies you while watching T.V. most of the time?

Parents ☐ Brothers/Sisters ☐ Grandparents ☐

Friends ☐ Neighbours ☐ Alone ☐

10) Do your parent's discuss about T.V. advertisements with you?

Often ☐ Only if asked ☐ Sometimes ☐ Never/Seldom ☐

11)How many hours on an average do you watch T.V. daily?

School days	Less than 1 hr	1 – 2 hrs	2 – 3 hrs	More than 3 hrs
Holidays	Less than 1 hr	1 – 2 hrs	2 – 3 hrs	More than 3 hrs

12)Advertisements of which product category do you like watching the most? (Please tick).

Chocolates Snack ☐ Soft drinks ☐ Ice cream ☐

Chips ☐ Others All ☐ None ☐

13)Where do you get information about what kind of food you should eat?

School ☐ Friends ☐ Parents ☐ Advertisements ☐

11) Point out two important differences between advertisements & programmes.
(Tick any two).

Sr.No	Statements	
1	TV advertisements are shorter & programmes are longer.	
2	TV advertisements are persuasive efforts to sell & programmes are for entertainment & education.	
3	TV advertisements are not a part of the main show; programmes have a story, a theme or a moral.	
4	TV advertisements give product information while programmes are about fantasy & real situations.	
5	TV advertisements are shown during breaks while programmes are continuation.	

14)Which of these advertisements in column A influence you to buy products in column B? Please tick mark.

Column A **Advertisements**	**Column B** **Products**
Alpaliebe	1)Alpaliebe cream fills 2)Chocolates
Dominos	1)Pizza 2)Burgers
Mc Donald	1)Pizza 2)Burgers
KFC	1)Pizza 2)Burgers 3) French fries 4)Crunch
Maggie	1)Noodles

Yippie	1)Noodles
Cadbury	1)Chocolates
Cadbury Oreo	1)Biscuits
Kinderjoy	1)Chocolates
Horlicks	1)Health drinks 2) Biscuits
Boost	1)Health drinks
Complan	1)Health drinks
Bournvita	1)Health drinks
Quacker oats	1) Oats
Kellogs	1)Cornflakes
Dabur	1)Chavanprash 2)Honey 3)Glucose
Go cheese	1)Cheese 2)Butter
Amul	1)Milk 2)Butter 3)Cheese 4)Ice cream 5)Sweet drinks 6)Chocolates 7)Shrikhand
Baskin Robbins	1)Ice cream
Kwality walls	1)Ice cream
Sunfeast	1)Biscuits 2) Noodles
Milano	1)Biscuits
Glucose	1)Biscuits 2) Health drinks
Nestle	1)Gems 2) Chocolates
Coca cola	1)Soft drinks 2) Soda
Priya gold	1)Biscuits
Pepsi	1)Soft drinks 2) Soda
Slice	1)Soft drinks
Limca	1)Soft drinks
Kissan	1)Jam 2) Squash 3) Sauce
Kurkure	1)Wafers
Lays	1)Wafers
Balaji	1)Wafers

(Contd...)

Uncle chips	1)Chips
Tang	1)Sweet drinks
Rasna	1)Sweet drinks
Act II	1)Popcorn
Knor soups	1)Soupie noodles
Foodles	1)Noodles

Obj II: To examine the influence of T.V. advertising on food & beverage preferences of children.

2.1) How much pocket money do you get per month?

Less than Rs.100 ☐ Rs. 100/- to Rs. 200/- ☐ None ☐

Rs. 200/- to Rs. 400/- ☐ Above Rs. 400/- ☐

2) How regularly do you consume (eat) these advertised products with/without your pocket money? Tick mark (✓) one option in each product category.

Frequency of consumption / Food items	Everyday	1-3 times a week	4-6 times a week	Less than once a week	Never
KFC Burgers					
Ordinary burgers					
Dominos Pizzas					
Ordinary Pizzas					
French fries					
Pasta					
Biscuits					
Bourbon, Hide N Seek, Fab Sunfeast dream cream, Oreo.					
Ordinary biscuits.					

Frequency of consumption / Food items	Everyday	1-3 times a week	4-6 times a week	Less than once a week	Never
Chocolates					
Cadbury Dairymilk, Eclairs Kitkat, Munch, Bar One.					
Kinderjoy, Gems ball, Alpeliebe lollipop.					
Others					
Crunchy wafers					
Lays, Kurkure, Bingo					
Others					
Chips					
Uncle chips					
Banana chips					
Ordinary potato chips					
Cakes					
Noodles					
Maggie, Yippie, Knor					
Ordinary noodles					

Ice cream					
Amul, Kwality Walls, Hangyo					
Baskin Robins					
Ordinary ice creams.					
Butter & Cheese					
Cornflakes					
Oats					
Soft drinks					
Pepsi, Coke, Mirinda, Limca					
Fanta, Maaza, Frooti, Appy, Taan.					
Others					
Health drinks					
Complan, Boost, Bourn vita, Horlics					
others					
Sugar sweetened drink					
Squash					
Popcorn					
Nuts					

3) What are the reasons for not consuming advertised products? (you may tick mark(√)more than one option).

Does not taste good ☐ Expensive ☐ Does not contain natural ingredients ☐

Chemical additives ☐ Not easily available ☐ No nutritional value ☐

4) How often do you eat a meal sitting down with your family?

1 – 2 times a week ☐ 3 - 4 times a week ☐ Once everyday ☐ Never ☐

5) A nutritious breakfast is,

A healthy meal that you start your day with ☐ Always a very big meal ☐ A meal that only tastes good ☐

6) Do you sometimes take junk food as alternative to breakfast?

Yes ☐ No ☐

7) Which of these meal do you sometimes skip/miss?

Breakfast ☐ Lunch ☐ Dinner ☐

8) Are you aware that advertised food is unhealthy?

Yes ☐ No ☐

9) Do you know that eating too much of advertised food leads to obesity?

Yes ☐ No ☐

10) Do you always eat while watching T.V.?

Yes ☐ No ☐

11) Which of these food items do you consume (eat) while watching T.V.? Tick mark (✓) one option in each product category.

Frequency of consumption / Food items	Everyday	1-3 times a week	4-6 times a week	Less than once a week	Never
Fruits					
Vegetables					
Salad					
Eggs					
Beans/pulses					
KFC Burgers					
Ordinary burgers					
Dominos Pizzas					
Ordinary Pizzas					
French fries					
Pasta					
Frequency of consumption / Food items	Everyday	1-3 times a week	4-6 times a week	Less than once a week	Never
Biscuits					

Bourbon, Hide N Seek, Fab Sunfeast dream cream, Oreo.					
Ordinary biscuits.					
Chocolates					
Cadbury Dairymilk, Eclairs Kitkat, Munch, Bar One.					
Kinderjoy, Gems ball, Alpalibe lollipop.					
Others					
Crunchy wafers					
Lays, Kurkure, Bingo					
Others					
Chips					
Uncle chips					
Banana chips					
Ordinary potato chips					
Cakes					
Noodles					
Maggie, Yippie, Knor					
Ordinary noodles					
Ice cream					
Amul, Kwality Walls, Hangyo					

Baskin Robins					
Ordinary ice creams.					
Butter & Cheese					
Cornflakes					
Oats					
Soft drinks					
Pepsi, Coke, Mirinda, Limca					
Fanta, Maaza, Frooti, Appy, Taan.					
Others					
Health drinks					
Complan, Boost, Bourn vita, Horlics					
others					
Sugar sweetened drink					
Squash					
Popcorn					
Nuts					

Obj III: To analyse factors determining changing food habits.

1) State your agreement or disagreement on the factors determining changing food habits. Please read each item carefully and tick mark (✓) the appropriate option that indicates how much you agree or disagree with each statement.
   Scale 5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = strongly disagree.
   - **Factors determining changing food habits.**

Sr. No.	Statements	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1	I like advertised products with free offers & cartoon characters.					
2	I love to use advertised products with cartoon characters.					
3	I like to eat only branded products.					
4	I prefer eating at fast food outlets than eating at home.					
5	You prefer advertised food for its taste.					
6	I like fast food as they are available in different varieties.					
7	You get impressed by attractive presentation of advertised products.					
8	Eating fast food occasionally does no harm to your health.					
9	There are many shops around my school that sell advertised products.					
10	I buy products that show my favourite hero.					
11	I think that fast food is delicious.					
12	Fast food stores are clean & safe.					
13	Soft drinks are convenient to buy.					

S.N	Statements	S A	A	U	D	SD
14	I choose the soft drinks with the best T.V. advertisements.					
15	Drinking soft drink makes me feel good.					
16	I like advertised products due to the attractive package.					
17	Fast food is cheaper & convenient to buy.					
18	Advertisements showed on television influence me to buy advertised products.					
19	I like fast food for its freshness & taste.					
20	Fast food restaurant provides fast service and friendly atmosphere.					
21	There are plenty of fast food outlets available all around my school.					
22	I like to eat burgers & pizzas advertised on television.					
23	I like to eat at any way side outlet.					
24	Meal at fast food restaurant is as nutritious as a meal prepared at home.					
25	Noodles & corn flakes constitute a nutritious breakfast.					
26	I like to eat advertised food though I know it is unhealthy.					
27	I eat advertised food while watching T.V.					
28	I eat out quite often as my parents are both working.					
29	You eat out as there is no time for your mother to cook.					
30	You go out to eat fast food only on special occasions.					
31	I eat a lot of advertised food as I don’t have my breakfast.					

S.N	Statements	S A	A	U	D	SD
32	Soft drinks are usually available in my home.					
33	I do not consult my parents in buying advertised food & beverages.					
34	I usually choose soft drinks instead of water or milk.					
35	I eat a lot of advertised food when my parents are not at home.					
36	I go out for dinner with my parent's at least once a week.					
37	I buy the same snacks & soft drinks as my friends.					
38	Consumption of fast food with your family & friends is a form of entertainment for you.					
39	I visit fast food restaurants with my parent's & relatives.					
40	I buy advertised products with my pocket money.					
41	I spend maximum of my pocket money to buy fast food items.					
42	Soft drink is good value for money.					
43	I can afford to buy advertised products.					
44	I prefer to visit fast food restaurants that provide good atmosphere and parking facilities.					
45	I like to visit fast food restaurant as they are open throughout the day.					

Obj IV: To examine parents attitude towards advertising, T.V. viewing and changing food habits of children.

1) Do you watch T.V.?

Yes ☐ No ☐

2) Do your spouse watch T.V.?

Yes ☐ No ☐

3) Do you watch advertisements while watching programmes?

Yes ☐ No ☐

4) Does your spouse watch advertisements while watching programmes?

Yes ☐ No ☐

5) What do you do when you see advertisements?

Watch with interest ☐ Lower the volume ☐

Switch T.V channels ☐ Leave the room ☐

6) Do you watch T.V. along with your child?

Often ☐ Occasionally ☐ Never ☐

7) How frequently do you make the intent (real purpose) of T.V. advertisements clear to your children?

Often ☐ Occasionally ☐ Never ☐

8) Do you control T.V. programmes watched by your children?

Often ☐ Occasionally ☐ Never ☐

9) What is your child's behaviour while watching advertisements?

Watches with attention ☐ Does not care ☐

Watches for few minutes ☐ Makes comments about products ☐

Looks from time to time ☐ Wants the product ☐

10) Which of these effects do you notice in your child due to T.V. watching?

Lack of initiative ☐ Effect on studies ☐

Reduced physical activity ☐ Become demanding ☐

11) What is the number of packed food purchased by you in a month?

Up to 10 packets ☐ 10 – 20 packets ☐

Above 20 packets ☐ None ☐

12) What is your child's attitude on not being able to buy new product?

Frustrated ☐ Disappointed ☐ Angered ☐

13) State your level of agreement or disagreement on the following statements. Please read each item carefully & tick mark(✓)the appropriate option that indicates how much you agree or disagree with each statement.

Scale 5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = strongly disagree.

- **Parent's general attitude towards advertising, T.V. viewing & changing food habits of children.**

Sr. no	Statements	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1	Advertisement is a valuable source of information for consumers.					
2	Children's are exposed to too many advertisements messages on TV.					
3	Advertisements are generally misleading.					
4	TV advertisement contributes to children's understanding of the world around them.					
5	TV advertisements to children are full of tricks &deceits.					
6	Advertisement does not always tell the truth.					
7	Purpose of advertisement is to sell products.					
8	Advertisement creates awareness of new products that have arrived in the market.					
9	Children are more influenced by advertisements then grown up people.					
10	Children aged between 10-12 understand advertising's communication intent.					
11	Children are able to distinguish between programmes & advertisements.					
12	By age of 5 children acquire ability to differentiate between commercials &programmes but did not know the intent.					

13	TV advertising to children encourages them to desire products they don't really need.					
14	Children usually look for advertised products.					
15	Children would recollect advertised products more quickly & demanded them.					
16	TV advertising to children encourages them to put pressure on their parents to buy goods.					
17	Children do not consult parents in buying food items.					
18	Children demanded products endorsed by celebrities (stars).					
19	Excessive T.V. watching brings about reduced physical activity in children.					
20	Children get disappointed on not being able to buy new products.					
21	TV advertising to children should be banned.					
22	TV advertising to children less than 12 years should be restricted.					
23	Children are influenced by advertisements shown in children's programmes.					
24	Children below 8 years get easily influenced by T.V. commercials.					
25	Children are influenced by advertisements in other programmes (adult programmes).					
26	TV advertising is an important cause of my children pestering me for advertised products.					
27	TV advertising encourages my children to want products they don't need.					
28	TV advertising leads to family conflict.					
29	Children argue when request for advertised product is denied.					

30	There is too much sugar & fat in food products advertised in TV programmes directed at children.					
31	There are too many additives in food products advertised in TV programmes directed at children.					
32	All advertised foods are not fit to be consumed.					
33	Advertisement depicts food products as better than they really are.					
34	Food advertisements influence children's eating habits.					
35	Children like to eat advertised products though they contain sugar, salt & fat.					
36	Children like to eat burgers & pizzas advertised on television.					
37	Children ate more after exposure to food advertisements.					
38	Advertisements usually shown on T.V. were for breakfast cereals, confectionery & used more animation, humour & promotion.					
39	I buy whatever my child demands as I have very little time to spend with him/her.					
40	I am concerned about getting my children to eat good food.					
41	Children should be allowed to eat whatever they want.					
42	Children like to eat fast food for breakfast.					
43	Children like to eat & drink while watching T.V.					
44	All advertised food are not good for health.					
45	Consumption of food in front of T.V. has brought about unhealthy food habits in children.					
46	Excessive intake of fast food results into obesity.					
47	Some advertised food products create health problems.					

48	Nagging (repeatedly asking) influences parent's in buying products.					
49	Parents should watch T.V. along with children.					
50	Children eating fast food develop more body weight.					
51	T.V. advertising influences spending of parent's due to pestering.					

14) State your level of agreement or disagreement on the following statements related to TV viewing. Please read each item carefully & tick mark (✓) the appropriate item that indicates how much you agree or disagree with each statement.

Scale 5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = strongly disagree.

Sr. No.	Rules for T.V. viewing	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1	I do not allow T.V. to be on during meal time.					
2	I allow our child to watch any T.V. show that he/she chooses.					
3	When I feel my child watched T.V. long enough I tell to switch it off.					
4	My child is not allowed to watch T.V. until homework is done.					
5	I actively encourage my child to do other things than watch T.V.					
6	When I need to punish my child, I take away his/her T.V. watching privilege.					
7	I check to see what my child is watching.					
8	I limit the amount of T.V. my child watches in one sitting.					
9	I control which programmes my children watch.					
10	I insist that my child plays outside rather than watch T.V.					
11	I determine how much TV my children can watch.					
12	I decide when my children can watch TV.					
13	I control which programmes my children watch.					
14	We talk to our children about T.V. advertising messages.					

15	Children should not watch those T.V. channels that broadcast too many advertisements.					
16	I have set rules regarding the amount of time he/she can watch T.V.					
17	Parents should play active role in monitoring children's T.V. viewing.					

- **Thank you for your valuable time, help & cooperation in the completion of this questionnaire. It is deeply appreciated and will be duly acknowledge**