A Study Of Children's Behaviour In Relation To Family Environment And Technological Exposure At Pre primary Stage

Amit Kauts and Balwinder Kaur

The present study to assesses the impact of family structure, family environment and technology exposure on the behaviour of children at pre primary stage. 400 students from four schools of Jalandhar city (India) were selected on the basis of their family structure, reputation and socio-economic status as the sample for the study. Family environment scale by Bhatia and Chadha (1993) was used to measure the family environment of the students. Technology exposure inventory was prepared by the investigator to measure the technology exposure of the students. Eyberg's Child Behaviour Inventory (1998) was employed to measure the behaviour of the children. A 2X2X2 factorial design was employed for data analysis. The findings of the study reveal that children living in joint families show better behaviour and have less behavioural problems than children living in nuclear families. Child behaviour is better in families with good family environment than in families with poor family environment. The behaviour of children is better in families with less than 2 hours of technological exposure than in family with more than 2 hours of technological exposure. Children belonging to joint family and poor family environments and who were more exposed to technology were found to have more problems than children belonging to good family environment with less exposure to technology in joint as well as nuclear families.

Keywords: Child Behaviour, Family Environment, Technology Exposure, Pre-primary Stage, Impact of Joint and Nuclear Families on Children, Impact of Television on Pre Schoolars.

Technology's impact on the 21st century family is fracturing its very foundation, and causing a disintegration of core values that long ago were what held families together as Balswick (1989) and others said in their book 'The Family'. Juggling work, home and community lives, individuals now rely heavily on communication, information and transportation technology to make their lives faster and more efficient. Entertainment technology (TV, internet, videogames, iPods) has advanced so rapidly, that families have scarcely noticed the significant impact and changes to their family structure

and lifestyles. A national survey by the Kaiser Family Foundation 2010 found that with technology allowing nearly 24-hour media access as children and teens go about their daily lives, the amount of time young people spend with entertainment media has risen dramatically, especially among minors. Today, 8-18 year-olds devote an average of 7 hours and 38 minutes (7:38) to using entertainment media across a typical day (more than 53 hours a week). And because they spend so much of that time 'media multitasking' (using more than one medium at a time), they actually manage to pack a total of 10 hours and 45 minutes (10:45) worth of media content into those 7½ hours.

A child's developing sensory and motor systems have biologically not evolved to accommodate this sedentary, yet frenzied and chaotic nature of today's technology. The impact of rapidly advancing technology on the developing child has seen an increase of physical, psychological and behaviour disorders that the health and education systems are just beginning to detect, but still a long way to go.

In 2001 the American Academy of Paediatrics issued a policy statement recommending that children less than two years of age should not use any technology, yet toddlers up to 2 years of age average 2.2 hours of TV per day. The Academy further recommended that children older than two should restrict usage to one hour per day if they have any physical, psychological or behavioural problems, and maximum two hours per day TV watching if they don't, yet parents of elementary children are allowing up to 8 hours per day.

CHILD BEHAVIOUR AND DEVELOPMENT

According to Piaget the developmental period of the individual includes the following :

Stages of Cognitive Development

Stage	Characterised by
Sensory-motor (Birth-2 yrs.)	Differentiates self from objects Recognises self as agent of action and begins to act intentionally: e.g. pulls a string to set mobile in motion or shakes a rattle to make a noise Achieves object permanence: realises that things continue to exist even when no longer present to the sense (pace Bishop Berkeley)
Pre-operational (2-7 years)	Learns to use language and to represent objects by images and words Thinking is still egocentric: has difficulty taking the viewpoint of others

Stages of Cognitive Development (contd.....)

	Classifies objects by a single feature: e.g. groups together all the red blocks regardless of shape or all the square blocks regardless of colour
Concrete operational (7-11 years)	Can think logically about objects and events Achieves conservation of number (age 6), mass (age 7), and weight (age 9) Classifies objects according to several features and can order them in series along a single dimension such as size.
Formal operational (11 years and up)	Can think logically about abstract propositions and test hypotheses systematically Becomes concerned with the hypothetical, the future, and ideological problems

Knitzer (2002); Shonkoff and Phillips (2001) showed that the past decade has witnessed a growing concern regarding the implications of serious challenging behaviours exhibited by young children. It has become widely understood that persistent challenging behaviours in early childhood are associated with subsequent problems in socialization, school adjustment, and academic performance, and that these problems can continue to affect adaptation in adolescence and adulthood.

Ravichandran and Sasikala (2002) showed that most significant changes brought in children are by the technological revolution. Children have grown up with remote controls and spend more time watching television and videotapes. Atari and Nintendo ultimately brought electronic entertainment right into the living room.

FAMILY STRUCTURE

Family is the first school of the child. Family plays an important role in the development of the child. Family is the social agency, which develops the skill of socialization in the child.

According to Eitzen (2003), "Family is a construct of meaningful relationships"

JOINT FAMILY AND NUCLEAR FAMILY

Joint Family: In joint families the network of relatives acts as a close-knit community. Joint families can include, aside from parents and their children:

- Spouses of children
- Cousins, aunts, uncles
- Foster children/adopted children etc.

Workload is equally shared among the members. The women are often housewives and cook for the entire family. The patriarch of the family (often the oldest male member) lays down the rules, works (if not retired) and arbitrates disputes. They are also responsible in teaching the younger children their mother tongue, manners and etiquette.

Nuclear family: The term nuclear family developed in the western world to distinguish the family group consisting of parents, most commonly a father and mother, and their children. Nuclear families can be of any size, as long as the family can support itself and there are only parents and children .According to Merriam-Webster, the term dates back to 1947 and is therefore relatively new, although nuclear family structures themselves date back thousands of years.

Grief (2005) stated that the term "nuclear" was used because of its original Latin meaning, "kernal" or "nut". Generally, the trend to shift from joint to nuclear family structures has been supported by the spread of western values. Traditional family roles are changing as democratic notions creep into the social system. Earlier, it was assumed to be written in stone that the man was the provider in the family and the woman the homemaker. Women are also turning out in large numbers in the work force due to economic necessity. This is the one of the reason that traditional joint families are breaking up into nuclear families.

IMPACT OF JOINT AND NUCLEAR FAMILIES ON CHILDREN

Traditionally, families in India have been classified as joint in nature. Joint families consist of one or more married couples residing with their children and other close relatives, such as grandparents, aunts, and uncles, all in one home. A nuclear family structure, which is becoming increasingly common, constitutes a single married couple and their children (Ahuja, 1993; Bisht & Sinha, 1981; Muttalib, 1990). The structural differences between the joint family and the nuclear family lead to different interaction patterns among members of the two family types. Children in joint families are often indulged and overprotected, which encourages child's dependence on the mother and other family members. In nuclear families, the child is in more direct contact with his or her parents, and the number of adult role models decreases. As compared to children from joint families, children from nuclear families are encouraged to function in an individualized manner, take initiative, and act independently. Fathers play an important role in nuclear families since they are often more

approachable and psychologically available to their children (Bisht and Sinha, 1981). Thus, children's experiences growing up in such a complex society can be unique.

FAMILY ENVIRONMENT

Children learn the ways of people in their culture by participating in cultural tasks and activities (Ogbu, 1988). The family is the primary unit through which customs, beliefs, habits, values, and modes of behaviour are transmitted from one generation to the next through the process of socialization (Saraswathi & Dutta, 1988; Tandon, 1981).

For pre-school age children, the most important familial influence is the quality of the home environment for academic learning and parental involvement. Researchers report strong correlations between characteristics of the home environment (Alyward 1997; Molfese, Di Lalla, and Bunce, 1995).

Bayder and Brook-Gunn (1991) found that grandmother care is related to higher cognitive development and fewer behavioural problems among preschoolers. Moreover, there is reason to believe that grand parenting may have particularly strong effects on child socialization.

Gergen (1991) has described the emerging family form as "the structured family", whose members feel that their lives are scattered in intensified busyness. In addition, exposure to myriad values, attitudes, opinions, life styles and personalities, family members has become embedded in a multiplicity of relationships. The technologies of social saturation like telephone, computer, television etc. have created family turmoil and a sense of fragmentation, chaos and discontinuity.

Whitney (1999) found that family environment appears to contribute to the well being in present as well as future life of the child.

TECHNOLOGICAL EXPOSURE AMONG PRE PRIMARY CHILDREN

As technology becomes a large part of many consumers in everyday lives, the risk of overexposure to new advances in technology grows for people of all ages. Children, however, may be especially at risk of becoming too dependent on devices and outlets such as television sets, cell phones, music players, video games and the internet. Technological efficiency does not in itself enrich the human dimensions nor does it lead to expanded consciousness. Man's magnificent achievements in the outer, the physical world have not led to an extension of man's inner self. This hiatus calls for serious thinking on inculcating spiritual values and pride in our rich heritage to curtail the growing distance between the old and the young in knowledge, behaviour, values and motivation.

Congressional Public Health Summit (2000) found that young children who see media violence have a greater chance of exhibiting violent and aggressive behaviour later in life, than children who have not seen violent media

Bushman (2001) found that children are affected at any age, but young children are most vulnerable to the effects of media violence. Young children are more easily impressionable, they have a harder time distinguishing between fantasy and reality and cannot easily discern motives for violence.

COMPUTERS AND PRE-SCHOOLARS

With the pervasiveness of computers and technology today, and with the stereotypical images that emerge of those who are heavily experienced with technology, many wonder what implications technology has on young users. Computers are intrinsically compelling for young children. The sounds and graphics gain children's attention. Increasingly, young children observe adults and older children working on computers, and they want to do it, too.

Developmentally appropriate software engages children in creative play, mastery learning, problem solving, and conversation (Haugland & Shade, 1990). At the front of the concern is the fear that children who are heavily involved with technology do not develop the social skills necessary to become functional adults, or to live a happy life. Many are afraid that children will turn into the socially unapproved, introverted, reclusive, hacker-esque characters, stereotyped in many books, movies, and other media.

Many researchers do not recommend that children under 3 years old use computers (Hohmann, 1998). Computers simply do not match their learning style. Children younger than 3 learn through their bodies: their eyes, ears, mouths, hands, and legs. Although they may return over and over again to an activity, they are full of movement, changing focus frequently. Computers are not a good choice for the developmental skills these children are learning to master: crawling, walking, talking, and making friends.

Shade & Watson (1990) found that children frequently use computers for short period, and then become interested in another activity. Three to five year olds generally spend about the same amount of time at a computer as they do on other activities such as playing with blocks or drawing. Computers can be used in developmentally appropriate ways beneficial to children and also can be misused, just as any tool can. Developmentally appropriate software offers opportunities for collaborative play, learning, and creation.

TELEVISION AND PRE-SCHOOLARS

Television is most powerful medium of entertainment in 21st century but it is also the most educative medium in a restricted sense. Children's television viewing has been of concern to parents, educators, and health care providers for almost as long as the medium itself has been in existence. Although most studies have focused on children's exposure to potentially deleterious content, such as violence, sex, or food advertising (Christakis, Zimmerman &, McCarty 2004).

Family is the most important influence in a child's life, but television is not far behind. Television can inform, entertain and teach us. However, some of what TV teaches may not be what you want your child to learn. TV programmes and commercials often show violence, alcohol or drug use and sexual content that are not suitable for children or teenagers. Studies show that TV viewing may lead to more aggressive behaviour, less physical activity, altered body image, and increased use of drugs and alcohol. By knowing how television affects your children and by setting limits, you can help make your child's TV-watching experience less harmful, but still enjoyable. the amount of time children spend in front of the screen is an important predictor of cognitive, behavioural, and physical outcomes in children, including school performance, bullying, attention, and weight status (Saelens, Sallis & Nader, 2002) .

STATEMENT OF THE PROBLEM

The present study has been entitled as "a study of children's behaviour in relation to family environment and technological exposure at pre primary stage".

OBJECTIVES

The present study has been delimited to achieve the following objectives:

1) To study behaviour of children interacting with technology for more than 2 hours and less than two hours in a day.
2) To study the behaviour of children living in joint and nuclear families.
3) To study children's behaviour in relation to their family environment.

HYPOTHESES

The study has been designed to test the following hypotheses:

1) There is no significant difference in the behaviour of children living in joint and nuclear families.
2) There is no significant difference in the behaviour of children belonging to good family environment and poor family environment.

3) There is no significant difference in the behaviour of children exposed to technology for less than 2 hours and more than two hours in a day.

SAMPLE

In order to conduct the study, 400 students from four schools of Jalandhar city were selected on the basis of their family structure(Joint and nuclear), family environment and socio-economic status(rich and poor). The students (both boys and girls) of pre-primary wing of the schools were taken. On the basis of scores on family environment scale, 30% top and 30% bottom i.e. 120 families with good family environment and 120 families with poor family environment were taken. Therefore, the study was restricted to 240 children of pre-primary stage in the second phase.

DESIGN AND PROCEDURE OF THE STUDY

Firstly, a sample of 400 students from pre-primary wing of the respective schools was taken. The addresses of the children were taken from their class teachers. The children were classified on the basis of joint family and nuclear family. Then the family environment scale was administered to the parents and on that basis joint and nuclear families were further classified as the families with good family environment and poor family environment. Then the technology exposure inventory was administered to the parents. The children were classified into two groups i.e. children who have technological exposure for more than two hours and who have technological exposure for less than two hours in a day. According to this classification, child behaviour inventory was administered to all the parents to assess the behaviour of the children.

A 2x2x2 factorial design was employed on the scores of child behaviour on the basis of structure of family (viz -joint family and nuclear family), family environment (viz- good family environment and poor family environment) and technological exposure (viz- exposure of technology for more than 2 hours and exposure to technology for less than 2 hours). Structure of family, family environment and technological exposure were studied as independent variables. Child behaviour was studied as a dependent variable.

TOOLS FOR THE STUDY

The following tools were used in the present investigation:

1. Family Environment Scale (Bhatia and Chadha, 1993).
2. Technology Exposure Inventory (Prepared by the Investigator).
3. Eyberg Child Behaviour Inventory (Eyberg,1998).

RESULTS AND DISCUSSION

The acronyms used are as follows:-

JF	=	Joint Family
NF	=	Nuclear Family
GFE	=	Good Family Environment
PFE	=	Poor Family Environment
MTE	=	More Than 2 Hours Technological Exposure
LTE	=	Less Than 2 Hours Technological Exposure
SD	=	Standard Deviation
M	=	Mean
SS	=	Sum of Squares
MSS	=	Mean Sum of Squares
DF	=	Degree of Freedom
MD	=	Difference between Means
S.ED	=	Standard Error Difference.
PB I	=	Teases or Provoke Other Children
PB II	=	Is Easily Distracted
PB III	=	Has Difficulty in Entertaining Himself Alone.
PB IV	=	Over Expressive in Front of Family Members.
PB V	=	Has Temper Tantrums.
PB VI	=	Gets Angry When Doesn't Get Own Way.
PB VII	=	Physically Fights with Brothers and Sisters.
PB VIII	=	Overactive and Restless.

Table 1

Means and Standard Deviations of Sub Groups of ANOVA for 2x2x2 Design on the Scores of Children's Behaviour in Relation to Structure of Family, Family Environment and Technological Exposure.

		JF	NF	
GFE	LTE	M1=141.84 SD1=19.32	M2=148.96 SD2=22.99	MM3=147.79
	MTE	M3=143.78 SD3=22.11	M4=157.04 SD4=15.78	
PFE	LTE	M5=148.27 SD5=22.25	M6=160.23 SD6=19.93	MM4=160.35
	MTE	M7=163.45 SD7=16.13	M8=169.48 SD8=15.14	
		MM1=149.46	MM2=158.68	
		MM5=149.76	MM6=158.88	

In order to analyze the variance in dimensions of children's behaviour at pre primary stage, the manually obtained scores were subjected to ANOVA and the results have been presented in the Table 2:

TABLE 2

Summary of ANOVA for 2x2x2 Design on the Scores of Children's Behaviour in Relation to Structure of Family, Family Environment and Technological Exposure

Source of Variation	SS	df	MSS	F-Ratio
Structure of Family(A)	4673.63	1	4673.63	8.91**
Family Environment(B)	8681.48	1	8681.48	16.55**
Technological Exposure(C)	4566.98	1	4566.98	8.71**
AxB	61.15	1	61.15	0.12
BxC	17.15	1	17.15	0.08
AxC	44.39	1	44.39	0.03
AxBxC	5353.21	1	5353.21	10.21**
Error (within)	111204.85	212	524.55	
Total	134602.84	219		

**Significant at the 0.01 level of significance.

INTERPRETATION

STRUCTURE OF FAMILY (A)

It may be observed from Table 2 that F-ratio for the difference between means of joint family and nuclear family on the scores of children's behaviour was found to be significant at the 0.01 level of significance. Thus, the data provides sufficient evidence to reject the Hypothesis (1), namely, there is no significant difference in the behaviour of children living in joint families and nuclear families. Further the analysis of the means from table 1 suggests that the children's behaviour is better in joint families than in nuclear families.

The findings are in tune with the studies of Bayber and Brook- Gunn (1991) and Gergen (1991).

FAMILY ENVIRONMENT (B)

It may be observed from Table 2 that F-ratio for the difference between means of good family environment and poor family environment on the scores of children's behaviour was found to be significant at the 0.01 level of

significance. Thus, the data provides sufficient evidence to reject the Hypothesis (2), namely, there is no significant difference in the behaviour of children belonging to good family environment and poor family environment. Further, the analysis of the means from Table 1 suggests that the children's behaviour is better in good family environment than in poor family environment.

The findings are in tune with the study of Papp, Cummings and Goeke – Morey (2002).

TECHNOLOGICAL EXPOSURE (C)

It may be observed from Table 2 that F-ratio for the difference between means of technological exposure for more than 2 hours and technological exposure for less than 2 hours on the score of children's behaviour was found to be significant at the 0.01 level of significance. Thus, the data provides sufficient evidence to reject the Hypothesis (3), namely, there is no significant difference in the behaviour of children exposed to technology for less than 2 hours and for more than 2 hours. Further, the analysis of the means from Table 1 suggests that children's behaviour is better in families with less than 2 hours technological exposure than in families with more than 2 hours technological exposure. The findings are in tune with results reported by Krcmar (2001) and American Academy of Paediatrics (1995).

STRUCTURE OF FAMILY AND FAMILY ENVIRONMENT (AXB)

It may be observed from Table 2 that F-ratio for the interaction between structure of family and family environment on the score of children's behaviour was not found to be significant even at the 0.05 level of significance. It shows that there is no significant relationship between structure of family and family environment on the score of children's behaviour.

FAMILY ENVIRONMENT AND TECHNOLOGICAL EXPOSURE (BXC)

It may be observed from Table 2 that F-ratio for the interaction between family environment and technological exposure on the score of children's behaviour was not found to be significant even at the 0.05 level of significance. It shows that there is no significant relationship between family environment and technological exposure on the score of children's behaviour.

STRUCTURE OF FAMILY AND TECHNOLOGICAL EXPOSURE (AXC)

It may be observed from Table 2 that F-ratio for the interaction between

structure of family and technological exposure on the score of children's behaviour was not found to be significant even at the 0.05 level of significance. It shows that there is no significant relationship between structure of family and technological exposure on the score of children's behaviour.

STRUCTURE OF FAMILY, FAMILY ENVIRONMENT AND TECHNOLOGICAL EXPOSURE (AXBXC)

It may be observed from Table 2 that F-ratio for the interaction among structure of family, family environment and technological exposure on the score of children's behaviour was found to be significant at the level of significance. It shows that there is no significant relationship among structure of family, family environment and technological exposure on the score of children's behaviour.

To further analyze the significance of difference in various cells, t-ratios have been computed to know the inter cell differences due to which the F-ratio for the interaction was found to be significant. t-ratios are presented in the Table 3.

TABLE 3

T-ratios For the Difference in Means in Various Cells of 2x2x2 Design on the Score of Children's Behaviour in Relation to Structure of Family, Family Environment and Technological Exposure.

Subgroup	M_D	SE_D	t-ratio
M1-M2	7.12	5.53	1.29
M1-M3	1.94	5.74	0.34
M1-M4	15.2	4.57	3.33**
M1-M5	6.43	5.54	1.16
M1-M6	18.39	4.99	3.69**
M1-M7	21.61	4.54	4.76**
M1-M8	27.64	4.56	6.06**
M2-M3	5.18	6.33	0.82
M2-M4	8.08	5.30	1.30
M2-M5	0.69	6.16	0.11
M2-M6	11.27	5.67	1.99**
M2-M7	14.49	5.28	2.74**
M2-M8	8.26	5.29	3.88**
M3-M4	20.52	5.52	2.40

Table 3 (Contd.....)

M3-M5	4.49	6.35	0.71
M3-M6	16.45	5.87	2.80
M3-M7	19.67	5.49	3.59**
M3-M8	25.70	5.52	4.66**
M4-M5	8.77	5.32	1.65
M4-M6	3.19	4.74	0.67
M4-M7	6.41	4.26	1.50
M4-M8	12.44	4.29	2.89**
M5-M6	11.96	5.68	2.11**
M5-M7	15.18	5.29	2.87**
M5-M8	21.21	5.31	3.99**
M6-M7	3.22	4.71	0.68
M6-M8	9.25	4.73	1.95
M7-M8	6.03	4.26	1.42

** Significant at the 0.01 level of significance

It may be observed from the Table 3 that means of sub -groups of sample on children's behaviour(as eight categories of child behavior are taken) shows that t-ratios are significant for some subgroups namely, M_1-M_4, M_1-M_6, M_1-M_7, M_1-M_8, M_2-M_6, M_2-M_7 , M_2-M_8 M_3-M_7 , M_3-M_8 ,M_4-M_8 ,M_5-M_6 ,M_5-M_7 and M_5-M_8

The interpretation is as under:

1. In case of children belonging to joint families and poor family environment and more exposed to technology have more problems than children belonging to good family environment with less exposure to technology in joint as well as nuclear families.
2. In case of children belonging to nuclear families and poor family environment and more exposed to technology have more problems than children belonging to joint families as well as nuclear families with good family environment and more exposure to technology.
3. In case of children belonging to joint families with poor family environment and less exposed to technology have less problems than children belonging to nuclear families with poor family environment, and more exposed to technology.
4. In case of children belonging to good family environment and less exposed to technology in joint as well as nuclear families have less problems than children belonging to poor family environment and

exposure to technology less than two hours and more than two hours in nuclear families.

5. In case of children belonging to joint families, good family environment and less exposed to technology, have less problems then children belonging to nuclear families with poor family environment and more exposed to technology.
6. In case of children belonging to joint families, good family environment and more exposed to technology and also children belonging to poor family environment and less exposed to technology have less problems than children belonging to poor family environment and more exposed to technology in joint families.

Quantitative Analysis of the Data Percentage of Children with Different Problem Behaviours

The percentage of children with different problem behaviours have been computed in relation to structure of family, family environment and technological exposure at pre-primary stage and is presented below in the Table 4.

Table 4

Percentage of the Children with Different Problem Behaviour in Relation to Structure of Family, Family Environment and Technological exposure

	Problem Behaviours	NF, GFE T.E< 2hrs	NF, GFE T.E> 2hrs	NF, PFE T.E< 2hrs	NF, PFE T.E> 2hrs	JF, GFE T.E< 2hrs	JF, GFE T.E> 2hrs	JF, PFE T.E< 2hrs	JF, PFE T.E> 2hrs
		1	2	3	4	5	6	7	8
1	Teases or Provoke other children	39.20%	55.50%	60%	68%	43.70%	78.20%	61.50%	72.40%
2	Is easily distracted	42.80%	77.70%	70%	32%	31.25%	43.40%	42.30%	41.40%
3	Has difficulty entertaining himself alone	78.60%	77.70%	53.30%	40%	65.60%	78.30%	73.10%	62.10%
4	Over expressive in front of family members	75%	81.50%	70%	72%	37.50%	39.10%	80.80%	44.80%
5	Has temper tantrums	53.60%	55.50%	76.60%	48%	53.10%	52.20%	57.70%	41.40%
6	Gets angry when doesn't get own way	60.70%	59.30%	77%	44%	34.40%	51%	46.20%	65.50%

Table 4 (Contd.....)

7	Physically fights with brothers and sisters	42.80%	74.10%	56.60%	48%	68.70%	69.50%	80.80%	58.60%
8	Over active & restless	50%	81.30%	42.30%	68%	59.40%	56.50%	65.30%	79.30%

It may be observed from Table 4 that in joint families with good family environment, problem behaviours are occurring in children due to more than 2 hours of technological exposure. Also 78.2% of children are having problem behaviour (PBI) i.e. "Teases or provokes other children" and 78.3% of children are having problem behaviour (PBIII) i.e. has difficulty entertaining himself alone." Number of children with other problem behaviours is also high with more technological exposure.

It may also be observed from Table 4 that in nuclear families, 55.5% of children with more than 2 hours technological exposure have problem behaviour (PBI)i.e. "Teases or provokes other children" as this problem is with 39.2% of children with less than 2 hours technological exposure. 77.7% of children are having problem behaviour (PBII) i.e. "Is easily distracted" with more than 2 hours technological exposure. 81.5% of children with more than 2 hours technological exposure are having problem behaviour VIII (PBVIII) i.e. "Is overactive and restless". Thus, it is observed that due to more than 2 hours technological exposure, children have problem behaviours in nuclear families with good family environment.

Therefore, it may be concluded that in joint and nuclear families and good family environment, children with problem behaviours is more where there the exposure to technology is more than 2 hours.

It can also be observed from Table 4 that in joint families, if there is poor family environment, it leads to problem behaviour in children where technological exposure may be more or less. 60.8% of children living in poor family environment are having problem behaviour IV & VII i.e. "Over expressive in front of family members" and "Physically fights with brothers and sisters." against 44.8% and 58.6% of children living in good family environment respectively. 80.8% of children with less than 2 hours technological exposure are having problem behaviours "Over expressive in front of family members" and "physically fights with brothers and sisters", these problems are faced by 44.8% and 58.6% of children respectively with more than 2 hours technological exposure. Therefore in poor family environment children having problem behaviours are more.

It may be observed from Table 4 that in nuclear families with poor family environment, due to less than 2 hours technological exposure, children are

having problem behaviours. 76.6% of children with less than 2 hours exposure to technology are having problem behaviours (PBV) i.e. "Has temper tantrums" and only 48% of children with more than 2 hours technological exposure are having this problem. Similarly 77% of children are having problem behaviour "Gets angry when doesn't get own way" and only 44% of children with more than 2 hours technological exposure have this problem. Therefore it is clear that poor family environment leads to more behavioural problems in children.

DISCUSSION OF FINDINGS

This study is an attempt to examine the impact of structure of family, family environment and technological exposure on children's behaviour at primary stage. The findings of the study reveal that children living in joint families show better behaviour and have less behavioural problems than children living in nuclear families. The reason of this finding may lie in the fact that there is conducive environment for inculcating social values and interpersonal skills in joint families. This finding gets its support from the studies conducted by Bayber and Brook-Gunn (1991) and Gergen (1991).

The findings of the study also reveal that children's behaviour is better in families with good family environment than in families with poor family environment. This finding gets its support from the fact that the first learning of the child commences at his/her home by his/her family. The early years of rapid development of children depends largely on their family environment. So, the impact of family environment on a child's behaviour is ever lasting. This finding is in tune with the study of Papp, Cummings and Goeke – Morey (2002).

The findings of the study also reveal that children's behaviour is better in families with less than 2 hours technological exposure than in families with more than 2 hours technological exposure. The reason of this finding may lie in the rapid development of electronic media like T.V. and internet and its widening area of exposure. Sometimes the programmes shown on T.V. consist of undesirable content .It proves to be an overdose for sensitive minds of the children and it takes a lot of time to settle down. This finding is in tune with the result of Krcmar (2001) and American Academy of Paediatrics (1995).

In case of children belonging to joint families and poor family environment and more exposed to technology have more problems than children belonging to good family environment with less exposure to technology in joint as well as nuclear families. The children belonging to

nuclear families and poor family environment with more exposure to technology, have been found to exhibit more problems than children belonging to joint family as well as nuclear family with good family environment and more exposure to technology. Children belonging to joint families with poor family environment and less exposure to technology have less problems than children belonging to nuclear families with poor family environment, but with both less and more exposure to technology. The children belonging to good family environment and less exposed to technology in joint as well as nuclear families have less problems than children belonging to poor family environment and exposure to technology for less than two hours and more than two hours in nuclear families. Further the study shows that children belonging to joint families, good family environment and less exposed to technology, have less problems then children belonging to nuclear families with poor family environment and more exposure to technology. In case of children belonging to joint families, good family environment and more exposure to technology and children belonging to poor family environment and less exposure to technology have less problems than children belonging to poor family environment and more exposure to technology in joint families.

So, it can be concluded from the findings of the study that informal factors like family environment, family structure and technological exposure have a vital role to play in determining a child's behaviour. Therefore, it is important for the parents to arrange conducive family environment and to monitor their children's technological exposure from early years. That will certainly help in conditioning and shaping children's behaviour in right direction.

REFERENCES

Ahuja, R. (1993). Indian Social System. New Delhi: Rajwat Publications.

Alyward,G.(1997). Environmental influences: Considerations for early assessment and intervention. In S. Dollinger and L. DiLalla (Eds.), Prevention and intervention issues across the life span (pp.9-34). Mahwah, NJ:Lawrence Erlbaum associates.

American Academy of Pediatrics(1995), Committee on Communications, Media violence.*Pediatrics*, 949, 951.

Bayder, N., & Brook-Gunn, J.(1991).Effects of Maternal Employment and Child Care, Arrangement on Preschoolers Cognitive and Behavioral Outcomes: Evidence from the Children of the National

Longitudinal Survey of Youth. Developmental Psychology.27.932-945.

Balswick, J. O., & Balswick J. K.(1989). *The Family.* Grand Rapids: Baker Books, Chapter 17.

Bisht, S., & Sinha, D.(1981). Socialization, Family and Psychological differentiation. In D. Sinha (Ed.), Socialization of the Indian Child (pp. 41-54). New Delhi, India: Concept Publishing.

Bushman, B.J.(2001).Effects of televised violence on aggression. In D.G Singer and J.L Singer (Eds), Handbook of children and the media (Ch. 11,pp 223-254). Thousand Oaks. CA:Sage.

Christakis, D.A., Zimmerman, F.J. & McCarty, C.A.(2004). Early television Exposure and Subsequent Attention Problems in children. Pediatrics.113(4).708-713.

Congressional Public Health Summit. (2000). Joint statement on the impact of entertainment violence on children. Accessed at: www.aap.org/advocacy/releases/jstmtevc.htm.

Eitzen, D.(2003).Social Problems.(9th Ed.) Boston: Allyn and Bacon Gergen. (1991). The Saturated Family. Networker, September / October.

Grief, A.(2005). "Family Structure, Institutions, and Growth: The Origin and Implications of Western Corporatism"

Eitzen, D.(2003). "Social Problems".(9th Ed.) Boston: Allyn and Bacon.

Haugland, S.W., & Shade, D.D.(1990). Developmental evaluations of software for young children: 1990 edition. New York: Delmar.

Hohmann, C. (1998). Evaluating and selecting software for children. Child Care Information Exchange, 123, 60-62.

Knitzer, J. (2002). Promoting Social and Emotional Readiness for School: Toward a Policy Agenda. Set for success: Building a strong foundation for school readiness based on the social-emotional development of young Children. Kansas City, MO: The Kaufman Early Education Exchange.

Molfese,V., DiLalla,L., & Bunce,D.(1995).Prediction of Intelligence Test Scores of 3-to8-year old Children by Home Environment, Socio-Economic status, Biomedical Risks. Merrill-Palmer Quarterly, 43, 219-234.

Muttalib, M. A. (1990). Child development: A study of health culture of low income urban settlement. New Delhi, India: Sterling Publishers.

Ogbu, J. U. (1988). Cultural diversity and human development. New Directions for Child Development, 42, 11-28.

Papp, L.M., Cummings,E.M., & Goeke-Morey, M.C.(2002). Marital Conflicts in the Home when Children are present versus absent. Developmental Psychology,38,774-783.

Ravichandran, R., & Sasikala, P.(2002). Constructivism, Computer technology and Future Classroom Learning, Journal of Indian Education, Vol. xxxii, pp 46-47.

Saelens, B.E., Sallis, J.F., Nader, P.R., Broyles, S.L., Berry, C.C., & Taras, H.L. (2002). Home environmental influences on children's television watching from early to middle childhood. Journal of Developmental and Behavioral Pediatrics, 23, 127-132.

Saraswathi, T. S., & Dutta, R.(1988). Invisible Boundaries: Grooming for Adult roles. A Descriptive Study of Socialization in a Poor Rural and Urban Slum Setting in Gujarat. New Delhi, India: Northern Book Centre.

Shade, D.D., & Watson, J.A. (1990). Computers in early education: Issues put to rest, theoretical links to sound practice, and the potential contribution of microworlds. Journal of Educational Computing Research 6(4): 375-392.

Shonkoff, J.P., & Phillips, D.A. (Eds.) (2001). From neurons to neighborhoods: The Science of Early Development. Washington, DC: National Academy Press.

Tandon, T. (1981). Process of transmission of values in the Indian child. In D. Sinha (Ed.), Socialization of the Indian child (pp. 11-30). New Delhi, India: Concept Publishing.

Victoria, J. R.,Ulla, G. F., & Donald, F.R. (2010). Generation M2 Media in the Lives of 8- to 18-Year-Olds. California: Henry J Kaiser Family Foundation.

Whitney, A. (1999). The Effect of Childhood Sexual Abuse and Family Environment on Present and Future Possible Selves (self-concept), DAI, 60(4), P.1875.

http://ezinearticles.com/?The-Impact-of-Technology-on-the-Developing-Child&id=4595772

http://www.accessibilitynewsinternational.com/?p=68

http://www.iamot.org/conference/index.php/ocs/4/paper/viewFile/1010/421

http://www.learningandteaching.info/learning/piaget.htm