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An Exploration of the Internet Influence amongst School Going Children

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Abstract

Objective: *To explore the influence of internet on the school going children.*

Methods: *A descriptive study was conducted with the help of questionnaire administered on the parents of children exposed to internet and are going to school in Navi Mumbai between ages of 6-12 years. The sample size for the study is 502.The statistical analysis was carried by means, standard deviation, t-test and Chi-Square.*

Results:

The study identified that the three most important reasons for browsing the internet are identified (need) as due to Status Symbol, due to peer pressure and because family members are busy. It is also revealed that school assignment is least important reasons for browsing internet. The results showed that internet has influenced the children more on development as compared to behaviour and learning.

Conclusions:

This study brings to limelight some important reason of the children using internet and their usage pattern. This research attempts to further study the effect of various demographic factors age and gender on the reason of the children using internet. It is found that internet has influenced the children development.

Keywords: School, Internet Influence, Reasons, Children, Usage of Internet.

1. Introduction

The Internet is an innovation in the field of Information Technology that has changed the life of people. It is used for disseminating, searching, creating huge amounts of information to people across the world.

In an era of fast changing technology today children are highly exposed to the internet. This exposure to the internet has led to a high amount of knowledge flow for the children in their early childhood. This is leading to early child development, changes in their behavior and learning. The study aims at analyzing the perception of parents about the influence of internet exposure on a child's development, behavior and learning and how it is affecting their family.

The Internet provides a significant amount of information at the click of a button. This has led to vast information made available to children and youth. This has opened gateways to the opportunities available for learning and jobs for future generations. Parents take pride and tell that there child is computer savvy and has internet skills. This may be good in the sense that nowadays computers and the internet is an essential part of one's life. Besides, the internet is also providing access to educational information and can act as a huge library available at home. The credibility of such information may be questionable many a time besides other issue.

The internet even in COVID-19 scenarios has helped the education system to continue with regular classes to be run on an online platform. The Internet is helping the children and youth to continue with their education in a pandemic situation. Further, the internet has helped them to learn new hobbies and explore a new set of information in the current situation.

2. Material and Methods

a) Literature Review

(Internet, 2020), in this study, the researcher studied that how the internet is expedient in education. According to the researcher, one should take a step back to find the truth of what has already happened with the internet and education instead of influential predicting about future. It is necessary to inquire in what way the educational potential of the Internet is being realized in practice. In this sense, we should acknowledge that the internet has been long used for educational purposes and numbers of protuberant models of Internet-based education have emerged over the past 20 years. The most well-known forms of what has come to be known as e-learning extending from online courses to

virtual classrooms and even virtual schools. The programs tend to rely on online content management systems, albeit supported by some form of interactivity in the form of e-mail, bulletin boards, and other communications systems.

(Malamud, Cueto, Cristia, & March, 2020), this study was about considerable resources in expanding internet use to children in developing countries. They did an experiment in Peru where laptops and internet connection were provided to school children. A researcher found that children selected to receive a laptop to improve their digital skills.

(Whatley, Hinkle, & Breneiser, 2011), a researcher explained the impact of internet usage amongst adolescents. The researcher explored possible, the linkage between internet usage, socio-emotional development, and problematic behavior among adolescents viz; depression, social isolation, aggression, rejection, and persecution, etc.

One puzzling aspect of the findings was the presence of behavioral differences between male and female adolescents.

(College & Johnson, 2006), in this paper, the author observed that internet access and the amount of time online are increasing steadily. Children and adolescences play video games, access websites communicating using a chat room, instant messaging, and email.

(KIM, 2003)**,** Kim in the paper described different reasons children are using the internet, such as for getting information, playing games, for making communicating with people, surfing for information, visiting different kids on the website, for social and intellectual development, etc. Also, the author found that the use of the internet is increased amongst children.

b) Research Methodology

Objectives of the Study:

The study was conducted keeping in mind the following objectives:

1. The study attempts to examine the reasons for Browsing Internet by children.
2. The study attempts to observe the usage of Internet amongst children by gender group.
3. The study attempts to observe the usage of Internet amongst children of different age groups.
4. To explore the influence of internet on the school going children.

c) Research Design

The research study is a sample survey of parents 'children exposed to the internet' and is going to school in Navi Mumbai between the ages of 6-12 years. The sample size for the study is 502. For

the sake of study primary data was collected using a structured questionnaire from the parents of children going to school in Navi Mumbai. The units of Observations are Children. SPSS Version-23 was used for data analysis. The analysis involves chi-square tests and mean tests.

d) Hypothesis

H1: There is no significant difference between male and female children (parents believe) with regards to reason of browsing internet.

H2: There is no significant difference between age group of children (parents believe) with regards to reason of browsing internet.

3. Results and Discussion

Table 1.1 - Gender of Child

	Frequency	Percentage	Cumulative Percentage
Male	225	44.8	44.8
Female	277	55.2	100.0
Total	502	100.0	

Table 1.2 - Age of Child

	Frequency	Percentage	Cumulative Percentage
6-8 Years	180	35.9	35.9
8-9	64	12.7	48.6
9-12	258	51.4	100.0
Total	502	100.0	

Table No. 1.1 gives the distribution of gender of children. Two categories are given i.e., male and female. The table shows that 44.8% (n=225) are male children and 55.2% (n=277) are female children.

In above Table 1.2, it is seen that 35.9% (n=180) of the children were from the age group of 6-8 years, 12.7% (n=64) of the children were from the age group of 8-9 years, and 51.4% (n=258) of the children were from the age group of 9-12 years.

Table 1.3 - Hours Spend on Browsing Internet by Children

Hours spend on browsing Internet	**Frequency**	**Percentage**
Up to 2 Hours	380	75.7
2.1 to 4 hours	75	14.9
4.1 to 6 hours	27	5.4
More than 6 hours	20	4.0
Total	502	100.0

In table 1.3 it is found that 75.7% (n=380) of the children spend up to 2 Hours browsing (using) internet daily, followed by 14.9% (n=75) of the children spend 2.1 to 4 hours on browsing (using) internet daily, 5.4% (n=27) of the children spend 4.1 to 6 hours on browsing (using) internet daily and the rest 4.0% (n=20) of the children spend more than 6 hours on browsing (using) internet daily.

Objective 1: The study attempts to examine the reasons for Browsing Internet by children.

Table 1.4 - Reasons for Browsing Internet Descriptive Statistics

Reasons for Browsing Internet	N	Mean	Std. Deviation
Because it is a Status Symbol	502	3.19	1.200
Due to Peer Pressure	502	3.09	1.138
Because Family members are busy	502	2.91	1.196
As Feeling Lonely	502	2.89	1.141
Due to Lack of siblings/ friends	502	2.88	1.137
Because of Nuclear Family	502	2.87	1.182
Due to Working Parents	502	2.81	1.223
Due to Lack of playground in the Society	502	2.74	1.193
Because these are Habits of today's children	502	2.53	1.115
To complete School Assignment	502	1.86	.833

In table 1.4 the descriptive statistics of the reason for browsing the internet are presented. The three most important reasons for browsing the internet are identified, as due to status symbol (Mean=3.19), due to peer pressure (Mean=3.09) and because family members are busy (Mean=2.91). The least important reason identified is to complete school assignments (Mean=1.86).

Objective 2: The study attempts to observe the usage of Internet amongst children by gender group.

Table 1.5 - How Many Hours Does Your Child Spend on Browsing (Using) Internet Daily by Gender of Child

			Gender of Child		Total
			Male	Female	
How many hours does your child spend on browsing (using) internet daily?	**Up to 2 Hours**	**Count**	**164**	216	380
		% within Gender of Child	**72.9%**	78.0%	75.7%
	2.1 to 4 hours	**Count**	**41**	34	75
		% within Gender of Child	**18.2%**	12.3%	14.9%
	4.1 to 6 hours	**Count**	**11**	16	27
		% within Gender of Child	**4.9%**	5.8%	5.4%
	More than 6 hours	**Count**	**9**	11	20
		% within Gender of Child	**4.0%**	4.0%	4.0%
Total		**Count**	**225**	277	502
		% within Gender of Child	**100.0%**	100.0%	100.0%

Table 1.6 - Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.547[a]	3	.315
Likelihood Ratio	3.528	3	.317
Linear-by-Linear Association	.387	1	.534
N of Valid Cases	502		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.96.			

In the table 1.5 numbers of hours child spend on browsing (using) internet daily by gender is presented. It is found that the both male (72.9%) and female (78.0%) children are browsing internet maximum in the category up to 2 Hours daily. Table 1.6 represent the Chi -Square Test value.

Objective 3: The study attempts to observe the usage of Internet amongst children of different age groups.

Table 1.7 - How Many Hours Does Your Child Spend on Browsing (Using) Internet Daily by Age of Child in Years

			Age of Child in years			Total
			6-8 Years	8-9 Years	9-12 Years	
How many hours does your child spend on browsing (using) internet daily?	**Up to 2 Hours**	**Count**	156	55	169	380
		% within Age of Child in years	86.7%	85.9%	65.5%	75.7%
	2.1 to 4 hours	**Count**	16	8	51	75
		% within Age of Child in years	8.9%	12.5%	19.8%	14.9%
	4.1 to 6 hours	**Count**	4	1	22	27
		% within Age of Child in years	2.2%	1.6%	8.5%	5.4%
	More than 6 hours	**Count**	4	0	16	20
		% within Age of Child in years	2.2%	0.0%	6.2%	4.0%
Total		**Count**	180	64	258	502
		% within Age of Child in years	100.0%	100.0%	100.0%	100.0%

Table 1.8 - Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.939[a]	6	.000
Likelihood Ratio	36.605	6	.000
Linear-by-Linear Association	24.294	1	.000
N of Valid Cases	502		
a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 2.55.			

Further, in table 1.7 the analysis is done on basis of age for numbers of hours child spend browsing (using) internet daily, it is found that all the age categories 6-8 years (86.7%), 8- 9(85.9%) and 9-12 (65.5%) children are browsing internet maximum in the category up to 2 Hours daily.

Further, in table 1.8 of Chi-Square Tests, the Pearson Chi-Square value is found to be 0. 000. This shows the relationship is significant.

Objective 4: To explore the influence of internet on the school going children.

Table 1.9(A) - Descriptive Statistics of Influence of Internet on their Children's Development, Behaviour & Learning

	N	**Mean**	**Std. Deviation**
Poor Peer Relations	502	3.9056	1.24996
Emotional Adjustment Problems	502	3.8333	1.21061
Defiant Behaviour	502	3.7353	1.17613
Influence on Learning	502	2.7004	.82629
Total Development	502	1.8762	.88658

In table 1.9(A) descriptive statistics of influence of internet on development, subcategories of behavior and learning is shown, it is found that "Poor Peer Relations" and Mean=3.9056, "Emotional Adjustment Problems" Mean=3.833, "Defiant Behaviour" Mean=3.7353, "Influence on Learning" Mean=2.7004, minimum in the Total Development category is found Mean=1.8762. The overall analysis implies that the higher the score of mean less is the impact and the less the score of mean more is the impact. Thus the influence of the internet is more on development as compared to behavior and learning.

Table 1.9(B) T-Test of Influence of Internet on their Children's Development, Behavior & learning Group Statistics

	Gender of Child	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Defiant Behaviour	Male	225	3.5671	1.23873	.08258
	Female	277	3.8718	1.10627	.06647
Poor Peer Relations	Male	225	3.7964	1.28951	.08597
	Female	277	3.9942	1.21200	.07282
Emotional Adjustment Problems	Male	225	3.7280	1.26285	.08419
	Female	277	3.9188	1.16174	.06980
Influence on Learning	Male	225	2.7271	.84854	.05657
	Female	277	2.6787	.80866	.04859
Total Development	Male	225	1.8619	.88203	.05880
	Female	277	1.8878	.89169	.05358

In table 1.9(B) T-test on group statistics of influence of internet on development, subcategories of behavior and learning are shown, it is found that both for Male and female the highest mean value is for "Poor Peer Relations" and Mean (M) =3.7964 but Mean (F) =3.9942, and minimum for both male and female in the Total Development category is found Mean (M) =1.8619 and Mean (F) =1.8878. The overall analysis implies that the higher the score of mean less is the impact and the less the score of mean more is the impact. Thus the influence of the internet is more on development as compared to behavior and learning.

Table 1.9(C) - Independent Samples Test of Influence of Internet on their Children's Development, Behavior & Learning

	t-test for Equality of Means		
	t	**df**	**Sig. (2-tailed)**
Defiant Behaviour	-2.875	453.705	.004
Poor Peer Relations	-1.767	500	.078
Emotional Adjustment Problems	-1.760	500	.079
Influence on Learning	.652	500	.514
Total Development	-.326	500	.745

In table 1.9(C) independent sample Tests of the influence of the internet on children's development, subcategories of behavior and learning are shown. Thus the influence of the internet is more on development as compared to behavior and learning.

Hypothesis Testing

H1: There is no significant difference between male and female children (parents believe) with regards to reason of browsing internet.

Table 1.10(A) - 1 T-Test – Need for Using Internet - 1. Reasons for Browsing Internet by Gender

	Gender of Child	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Due to Working Parents	**Male**	225	2.85	1.229	.082
	Female	277	2.77	1.220	.073
Because of Nuclear Family	**Male**	225	2.82	1.206	.080
	Female	277	2.92	1.163	.070
To complete School Assignment	**Male**	225	1.93	.810	.054
	Female	277	1.81	.849	.051
As Feeling Lonely	**Male**	225	2.94	1.088	.073
	Female	277	2.84	1.183	.071
Due to Lack of siblings/ friends	**Male**	225	2.90	1.098	.073
	Female	277	2.87	1.170	.070
Due to Lack of playground in the Society	**Male**	225	2.72	1.179	.079
	Female	277	2.75	1.207	.072
Due to Peer Pressure	**Male**	225	3.10	1.110	.074
	Female	277	3.08	1.163	.070
Because it is a Status Symbol	**Male**	225	3.12	1.193	.080
	Female	277	3.25	1.204	.072
Because Family members are busy	**Male**	225	2.94	1.167	.078
	Female	277	2.89	1.221	.073
Because these are Habits of today's children	**Male**	225	2.48	1.044	.070
	Female	277	2.56	1.171	.070

Table 1.10(A) - 2 Independent Samples Test

	t-test for Equality of Means		
	T	**Df**	**Sig. (2-tailed)**
Due to Working Parents	.735	500	.462
Because of Nuclear Family	-.935	500	.350
To complete School Assignment	1.619	487.275	.106
As Feeling Lonely	.908	500	.364
Due to Lack of siblings/ friends	.350	500	.726
Due to Lack of playground in the Society	-.288	500	.773
Due to Peer Pressure	.215	500	.830
Because it is a Status Symbol	-1.274	500	.203
Because Family members are busy	.462	500	.644
Because these are Habits of today's children	-.796	495.603	.427

In Table 1.10(A).2 Independent Samples Test the difference is not significant as the p-value for all the parameters is found to be more than 0.05. Thus, it is found that there is no significance in reasons of browsing the internet by gender. Thus, the Null hypothesis "There is no significant difference between male and female children (parents believe) with regards to reason of browsing internet." is accepted.

H2: There is no significant difference between age group of children (parents believe) with regards to reason of browsing internet.

Table 1.11(A) - 1 Descriptive Statistics - 1. Reasons (Need) for Browsing Internet by Age Group

Reason	**Age**	**N**	**Mean**	**Std. Deviation**	**Std. Error**
Due to Working Parents	6-8 Years	180	2.69	1.295	.097
	8-9	64	2.75	1.098	.137
	9-12	258	2.90	1.198	.075
	Total	502	2.81	1.223	.055
Because of Nuclear Family	6-8 Years	180	2.75	1.250	.093
	8-9	64	2.75	1.168	.146
	9-12	258	2.99	1.128	.070
	Total	502	2.87	1.182	.053
To complete School Assignment	6-8 Years	180	1.96	.874	.065
	8-9	64	2.02	1.031	.129
	9-12	258	1.76	.732	.046
	Total	502	1.86	.833	.037
As Feeling Lonely	6-8 Years	180	2.75	1.181	.088
	8-9	64	2.86	.924	.115
	9-12	258	2.99	1.155	.072
	Total	502	2.89	1.141	.051
Due to Lack of siblings/ friends	6-8 Years	180	2.70	1.237	.092
	8-9	64	2.84	1.042	.130
	9-12	258	3.02	1.071	.067
	Total	502	2.88	1.137	.051
Due to Lack of playground in the Society	6-8 Years	180	2.71	1.185	.088

	8-9	64	2.53	1.181	.148
	9-12	258	2.81	1.199	.075
	Total	502	2.74	1.193	.053
Due to Peer Pressure	6-8 Years	180	3.24	1.169	.087
	8-9	64	2.97	1.126	.141
	9-12	258	3.01	1.112	.069
	Total	502	3.09	1.138	.051
Because it is a Status Symbol	6-8 Years	180	3.20	1.252	.093
	8-9	64	2.97	1.126	.141
	9-12	258	3.24	1.179	.073
	Total	502	3.19	1.200	.054
Because Family members are busy	6-8 Years	180	3.01	1.196	.089
	8-9	64	2.38	1.120	.140
	9-12	258	2.97	1.185	.074
	Total	502	2.91	1.196	.053
Because these are Habits of today's children	6-8 Years	180	2.64	1.152	.086
	8-9	64	2.19	.974	.122
	9-12	258	2.53	1.109	.069
	Total	502	2.53	1.115	.050

Table 1.11(A) - 2 ANOVA

Reason		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
Due to Working Parents	Between Groups	4.869	2	2.435	1.631	.197
	Within Groups	744.772	499	1.493		
	Total	749.641	501			
Because of Nuclear Family	Between Groups	7.126	2	3.563	2.566	.078
	Within Groups	692.715	499	1.388		
	Total	699.841	501			
To complete School Assignment	Between Groups	6.188	2	3.094	4.523	.011
	Within Groups	341.328	499	.684		
	Total	347.516	501			
As Feeling Lonely	Between Groups	6.078	2	3.039	2.346	.097
	Within Groups	646.449	499	1.295		
	Total	652.528	501			
Due to Lack of siblings/ friends	Between Groups	10.925	2	5.463	4.278	.014
	Within Groups	637.141	499	1.277		
	Total	648.066	501			
Due to Lack of playground in the Society	Between Groups	4.265	2	2.133	1.501	.224
	Within Groups	709.026	499	1.421		
	Total	713.291	501			
Due to Peer Pressure	Between Groups	6.667	2	3.333	2.588	.076
	Within Groups	642.650	499	1.288		
	Total	649.317	501			
Because it is a Status Symbol	Between Groups	3.803	2	1.902	1.322	.268
	Within Groups	717.838	499	1.439		
	Total	721.641	501			
Because Family members are busy	Between Groups	21.178	2	10.589	7.594	.001
	Within Groups	695.788	499	1.394		
	Total	716.966	501			
Because these are Habits of today's children	Between Groups	9.646	2	4.823	3.923	.020
	Within Groups	613.464	499	1.229		
	Total	623.110	501			

In table 1.11(A).1 the reason for Browsing Internet- Descriptive Statistics is presented. The three most important reasons for browsing the internet are identified (need) as due to Status Symbol (Mean=3.19), due to peer pressure (Mean=3.09) and because Family members are busy (Mean=2.91). The least important reason identified is to complete School Assignment (Mean=1.86).

Further, in t-test analysis done based on gender, the same result is supported.

In table 1.11(A).2 ANOVA analyses on Reasons for Browsing Internet were performed. In table 1.10(A).2 ANOVA on reasons for Browsing Internet among children by age performed. It is the p-value is found to be less than 0.05 for the four reasons: To complete School Assignment (p=0.011), Due to Lack of siblings/ friends (p=0.014), because Family members are busy (p=0.001), and because these are Habits of today's children (p=0.020). There is a significant relationship between the reasons for children browsing the internet by age. Thus, the null hypothesis is rejected and the alternate hypothesis is accepted.

4. Conclusion

India is 2nd in the rankings in the term of several internet users in the world. This is so as India has the largest young population in the world which is driving internet usage in India. Internet traffic is driven by mobile internet users. In today's scenario where the internet is available on every mobile its plays a pivotal role in every walk of life. The major reason for such a change is at the cost of smartphones is decreasing and 3G and 4G internet services are available at less cost. Every individual now a day in the family has a smartphone with an internet connection. Thus the free access of a smartphone with the internet is easily available to children also. Children are the future of any nation. Their proper nurturing and development will help the country in sustaining future growth. This study brings to the limelight some important reasons for the children using the internet and their usage pattern. This research attempts to further study the effect of various demographic factors age and gender on the reason for children using the internet.

The study identified that the three most important reasons for browsing the internet are identified (need) as due to Status Symbol, due to peer pressure and because family members are busy. It is also revealed that school assignment is the least important reason for browsing the internet. Further, the study concludes that the influence of the internet on children is more on development as compared to behavior and learning.

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