

# EFFECTS OF INTERNET ON EDUCATIONAL ACHIEVEMENTS, SOCIAL CAPITAL AND LIFE PATTERN OF YOUTH

By

Shahid Hussain\*

Muhammad Aslam Pervez\*\*

## ABSTRACT

*This research study aimed at exploring the extent of internet usage among youth studying in various colleges and universities of twin cities of Rawalpindi/Islamabad and its ultimate effects on their educational achievements, life pattern and social capital. The study also tested the Time Displacement Hypothesis of Robert Putnam (1995), which postulates that heavy usage of media causes decline in the Social Capital and interpersonal communication of users with family, colleagues and friends and also decreases the social and physical activities of the users. The data has been collected from 500 students of Intermediate to PhD level studying in various colleges and universities of Rawalpindi and Islamabad through a survey with the help of a self-administered questionnaire. The results show that the study has not supported the Time Displacement Hypothesis of Robert Putnam (1995). The regression model has not showed any positive relationship between internet use and its negative effects on the educational achievements, life pattern and social capital of youth. However, the habit of exercise/games among youth has been found badly affected due to the exposure to internet.*

**Key Words:** internet usage, youth, educational achievements, life pattern, social capital,

\* Lecturer, Mass Communication Department, AIU, Islamabad

\*\* Chairman, Mass Communication Department, Gomal University, KPK

## **INTRODUCTION**

Internet is a very important information and communication technology of the present age and is the most widely used source to get connected with rest of the world, making the world a global village. Davison (1959) concludes that the development of new media has been made possible by the convergence of traditional system with the internet technology. Initially, the people welcomed the Internet facility in their homes with expectation of many goods as regards to education and information but it was soon realized that, instead of using Internet for education, the children and young people were wasting hours and hours surfing the undesirable websites or in other online activities and ultimately finding very less time for physical activities, social interaction and education.

Some of the features, for which the internet is being used worldwide include sending and receiving e-mails, financial and business dealing, downloading, music, news and information, encyclopedia, weather information, annual results and other details of colleges/universities/schools, chatting (voice, write and camera), online banking, education, entertainment, online shopping and money exchange and online traditional media (TV, Newspaper and Radio). Since the new generation is spending most of its time using internet, which postulates many bad physical and social effects. This study examines the effects of internet usage on educational achievements, social capital and life pattern of youth. Putnam (1995) referred these affects as displacement effects of media and therefore, this study also tests the Time Displacement Hypothesis of Robert Putnam (1995).

Putnam (1995b) summarized his research findings that watching television is negatively related to the social capital. Similarly, Robinson (1981) says that more time spent with television means less time spent with other important activities like physical activities. Now, with variety of uses of Internet like e-mail, surfing the web, social networking sites, chatting, entertainment, online television, reading online newspapers and listening radio online, the Internet has revolutionized our lives. So, we must investigate that what are the effects which internet is casting on our lives and in which direction? One major question to consider is what activities will be replaced by the increasing time now being spent on Internet?

Many concerns about the negative impact of Internet on its users include the displacement effects of internet on physical activities and educational achievements. Therefore, we need to know that how the use of Internet will be influencing its users especially youth in terms of social capital and educational achievements. Many people think that Internet has a positive impact on its users; however, many others are concerned about its negative influence only (Turrow, 1999).

The number of young people who are using Internet is growing very fast and similarly the concerns of the negative effects on the internet users are also increasing day by day. Mathwick (2002) found that online participation implies engaging in such activities that require too much time and attention of the users. Although, we all realize the importance of studying the effects of Internet on lives of our youth, but it is a fact that very little research has been found in the literature about the displacement affects of internet on the social capital of youth in Pakistan.

So far, there hasn't been a lot of research conducted on the displacement affects of Internet on youth in Pakistan, therefore this research will be a milestone for future researchers. Furthermore, since the internet based modern media especially the social media are seeping in the life of almost every internet user, it hence becomes essential necessary to keep a check on the usage patterns of users. So, this research is important in understanding the internet usage patterns

and their effects on youth in regards of losing social capitals, changes in life pattern and disturbances in educational achievements.

‘Social Capital’ means the social relationship, which helps people to move together for mutual benefits. Having interpersonal communication or sharing good moments with someone refers to social capital. So, the more we communicate with people results more trust and ultimately more social capital (Putnam, 1993a, 1993b). Similarly, social relationships facilitate coordination for collective action (Newton, 1997).

## **Literature Review**

Adapting a new technology revolves around needs of an individual. It is, therefore, the people who usually look for look for more advance communication technologies like internet. So, the use of internet has been increased due to more advanced features and facilities in it (Steyer & Clinton, 2003).

A case study conducted by the Jagboro (2003) on the use of the Internet in Nigeria reveals that the respondents were mostly using Internet to seek and access the research materials and for using and benefitting from the email service. The study of Jagboro also hoped that use of Internet for the academic activities and education would significantly improve with more internet access in the departments or educational institutions including schools, colleges and universities.

The effects of Internet on the society and individuals have been studied in many disciplines like sociology, psychology, education and mass communication. It is also true that the use of the Internet amongst the youth is rapidly increasing. According to Pew Internet & American Life Project (2000a), about 45 percent of children living in America under the age of 18 years were found using Internet (Pew Research Centre, 2000a). It means that now internet facility is available in almost all educational institutions of America. The circumstances in Pakistan are not too much different especially in the urban areas and big cities, where broadband and wireless internet service is being provided by a number of companies. Additionally all the cellular companies in Pakistan are also providing their subscribers with the facility of 3G and 4G, which is the availability of high speed internet on the smart phones, which has been warmly welcomed by youth in Pakistan.

A study of 189 teens of 14 to 19 years of age in America found that the Internet was mostly used by teens for research work and doing their homework. Furthermore, the male respondents were using Internet more for games, videos, music, and online shopping, while the female respondents were using the internet more frequently for gaining information about educational institutions, etc. Moreover, all respondents considered Internet as the most preferred sources of information and communication (La Ferle, Edwards and Lee, 2000).

Another study by Kim (2003) in the University of Georgia investigated the children’s Internet use and its effects on their daily lives. A survey of 297 children examined the relationship of Internet use with social interaction, physical activities, and loneliness. However, the study did not found internet’s displacement effect on children’s daily activities. But, it was found that children who spend more time with Internet were spending more time on physical activities, and were having more social relationships.

The online dangers include exposure to the improper contents, wasting of precious time which was otherwise to be invested in more productive activities like education, research and exercise, the risk of encountering dangerous contacts, as well as issues of privacy, advertising and commercialism (Turrow, 1999; UCLA, 2001).

Internet could also decrease the social capital in way that it prevents its users from having interpersonal or face to face communication with family, siblings and friends etc. by taking too much time and giving less time for other activities. Putnam (1995a) says that “television was only driving force in decline of social capital in America because watching TV reduced time for participation in outside activities”. Putnam (1995b) further elaborated that “people who grew up without Television got engaged in more civic events than the people grown with TV and thus TV was negatively associated with the social capital.” Hampton and Wellman (1999) say that “new communication gadgets maintain relationships with people through a virtual community on the Internet.” On the other hand, Nie and Erbring (2000) found that “as people spend more time on the Internet, they lose contact with social environment.” Now, as the usage of Internet is increasing day by day, the same problem of losing social capital or displacing physical activities is being related to the internet.

### **Time Displacement Theory**

Time displacement theory first presented by Robert Putnam (1995a, 1995b) postulates that new media activities like Internet and television may replace the older activities. For example, Internet users may spend too much time online and leaving very less time for reading, writing, exercises, face to face interaction, etc. Internet is not the first technology held responsible of time displacement. Earlier, TV had shifted time of people from listening to radio, visiting cinema houses, and talking with family etc.

According to the Time displacement Hypothesis of Robert Putnam (1993), with the introduction of online media i.e. internet into a user’s schedule of activities, there will be reduction in time spent on other activities like education and social interaction. In other words, as researchers say, “when a new media activity is introduced into our lives, corresponding reduction in time invested in other activities is expected” (Moy, Scheufele, and Holbert, 1999).

In accordance with the present study, the ‘Time Displacement’ theory applies when internet users start ignoring their old activities like education and interpersonal communication and thus losing social capital and educational achievements. According to Putnam (1993), “Social capital is foundation for trust in a society”. In his book ‘Bowling alone,’ Putnam argued that “television was the prime suspect in declining American social ties as he worried about the decreasing number of bowling leagues”, and now the same concern is being attributed to the internet.

### **Objectives of Study**

This study has the following objectives:

- To bring to light the affect of internet on the educational achievements of youth.
- To explore the affect of internet especially relating to social capital and life pattern of youth.

### **Research Questions**

Following Research Questions were formulated to study the problem in depth.

**Research Question 1:** Whether and to what extent the youth in Pakistan gets exposure to the internet?

**Research Question 2:** Does the use of Internet have any negative effect on social capital and behavior of Pakistani youth?

**Research Question 3:** Whether and to what extent the use of internet has affected the Life Pattern and Educational Achievements of the youth?

## **Hypotheses**

The Hypotheses of the study after review of literature and theoretical framework have been formulated as under:

**Hypothesis 1:** Exposure to Internet of youth would not greatly affect them towards Social Capital.

**Hypothesis 2:** Exposure to internet of youth would not greatly affect their life pattern and educational achievements.

## **Methodology**

A survey with the help of a questionnaire was conducted to obtain quantitative data about internet use habits of youth of 17 to 30 years of age studying in various colleges and universities of twin cities of Rawalpindi/Islamabad from Intermediate to PhD level.

## **Respondents**

Keeping in view the financial and time constraints, a sample of 500 young male and female students studying in various colleges and universities of Rawalpindi and Islamabad was taken as respondents of study filling the questionnaire. In first stage, out of the list of all public and private colleges and universities located in Rawalpindi and Islamabad, 10 institutions were randomly selected. In second stage, classes in progress during the visit of the researcher to institutions were randomly selected to get the questionnaires filled from students with the help of the teachers taking the classes at that time. Close-ended questions on Likert Scale were used to get the required information.

## **Data Analysis**

The data collected with the help of questionnaire was analyzed to investigate the responses on major variables of study and to answer Research Questions and substantiate the Hypotheses of the study, by using appropriate descriptive and inferential statistics with the help of the Statistical Package for Social Scientists (SPSS).

## **Results**

The demographic information were analyzed as shown in Table 1, the majority of the respondents was Male (54.8 percent) while Female respondents were 45.2 percent. In regards to the Educational Level of the respondents, the table shows that majority of the respondents were studying at Bachelor level (42.2 percent) while the second majority was studying at the Masters

level (26.6). Moreover, the greater numbers of respondents were residing in Urban Areas (76.8 percent). Furthermore, the Mean Age in years of the respondents was 22.97 percent.

**Table 1**  
**Characteristics of the Sample**

Variables	Frequency	Percentage
<b>Gender</b>		
Male	274	54.8
Female	226	45.2
<b>Educational Level</b>		
Intermediate	122	24.4
Bachelor	211	42.2
Masters	133	26.6
MS/MPhil	23	4.6
PhD	11	2.2
<b>Residential Area</b>		
Urban	384	76.8
Rural	116	23.2

**Mean Age in Years = 22.97**

### Time Spent on Exposure to Internet

The Table 2 shows the daily time spent in hours by the youth on exposure to internet. The Table elaborates that majority (26.2 percent) of internet users were using internet for *Above 1 hour upto 2 hours*.

**Table 2**  
**Daily Time Spent in hours on Exposure to Internet**

	Exposure to Internet	Percentage
<b>More than 4 hours</b>	96	19.2
<b>Above 3 hours upto 4 hours</b>	85	17.0
<b>Above 2 hours upto 3 hours</b>	86	17.2
<b>Above 1 hour upto 2 hours</b>	131	26.2
<b>Less than 1 hour</b>	82	16.4
<b>Do not get exposure</b>	20	4.0
<b>Total</b>	500	100

Similarly, 19.2 percent respondents were using internet for *More than 4 hours*, It is interesting to note that 17.0 percent of youth were using internet for *Above 3 hours upto 4 hours*, and 17.2 percent of respondents were using the internet for *Above 2 hours upto 3 hours*, when we add these two categories of Time Spent using Internet we get 34.2 percent respondents, which were using the internet between 2 to 4 hours, which is a big percentage of respondents. 17.0 percent were using internet for *above 3 hours upto 4 hours*, 17.2 respondents were using the internet for *Above 2 hours upto 3 hours* while 16.4 percent respondents were using internet for

Less than 1 hour. It is also evident from the Table that 4.0 percent of respondents were not using internet at all.

**Research Question 1:** Whether and to what extent the youth in Pakistan gets exposure to the internet?

As evident from Table 2, the youth has not been found heavy users of internet and mostly the youth was using internet for above one hour upto two hours.

**Effects of Internet on Social Capital**

The Table 3 presents the results of multiple regression, where the presumed predictors, namely, ‘Talk face to face with Parents daily’, ‘Talk face to face with Siblings daily’, and ‘Use of Modern Media has decreased Physical Interaction with Friends’, were regressed against the criterion variable i.e. ‘Exposure to Internet’.

**Table 3**  
**Multiple Regression of Exposure to Internet and its effects on Social Capital of Youth**

<b>Multiple R: .190</b>					
<b>R Square: .036</b>					
<b>Standard Error: .883</b>					
<b>F Value: 3.080 p=.006</b>					
	<b>df</b>	<b>Sum of Squares</b>	<b>Mean Squares</b>		
<b>Regression</b>	6	18.400	2.400		
<b>Residual</b>	493	384.150	.779		
<b>Variables</b>	<b>B</b>	<b>SE B</b>	<b>Beta</b>	<b>T</b>	<b>Sig.</b>
Talk face to face with Parents daily	-.030	.049	-.031	-.599	.549
Talk face to face with Brothers and Sisters daily	.035	.047	.039	.749	.454
Use of Modern Media has decreased Physical Interaction with Friends	.062	.052	.069	1.202	.230

\*Dependent Variable: Exposure to Internet

Unstandardized Coefficients Equation: Exposure to Internet = 3.810 + (-.030 x Talk face to face with Parents daily) + (.035 x Talk face to face with Siblings daily) + (.062 x Use of Modern Media has decreased Physical Interaction with Friends)

The computed values of F (3.080) and Sig. (.006) of the ANOVA as shown in Multiple Regression results of Table 3 indicate that the regression model is fit and overall statistically significant. Moreover, 19% of the variability ( $R^2=.036$ ) in ‘Exposure to Internet’ was overall explained by the predictors.

As evident from Table 3, there was not found any significant positive relationship between the criterion variable ‘Exposure to Internet’ and the predictors; i.e. ‘Talk face to face with Parents daily’ (b=-.030 and p=.549); ‘Talk face to face with Siblings daily’ (b=.035 and p=.454), and ‘Use of Modern Media has decreased Physical Interaction with Friends’ (b=.062 and p=.230).

The result infers that the use of the Internet does not have any significant effect on the Social Capital of the College and University students in Pakistan.

Thus Hypothesis 2 (Exposure to Internet of the Youth would not greatly affect them towards Social Capital) was supported. Which shows that the use of Internet is not affecting the Social Capital of the Youth in Pakistan.

**Research Question 2:** Does the use of Internet have any negative effect on social capital of Pakistani youth?

As evident from Table 3, there was not found any significant effect of exposure to internet on the social capital of Pakistani Youth.

### Effects of Internet on Youth’s Educational Achievements and Life Pattern

The Table 4 presents the results of multiple regression, where the presumed predictors, namely, ‘Use of internet has badly affected Educational Achievements’, ‘Use of internet has badly affected Physical & Mental Health’, ‘Use of internet has resulted Eating Disorders’, and ‘Use of internet has badly affected habit of Exercise/Games’ were regressed against the criterion variable i.e. ‘Exposure to Internet’.

The computed values of F (5.370) and Sig. (.000) of the ANOVA as shown in Multiple Regression results of Table 4 indicate that the regression model is fit and overall statistically significant. Moreover, 23% of the variability ( $R^2=.052$ ) in ‘Exposure to Internet’ was overall explained by the predictors.

**Table 4**  
**Multiple Regression of Exposure to Internet and its effects on Youth’s Life Pattern**

<b>Multiple R: .227</b>					
<b>R Square: .052</b>					
<b>Standard Error: .875</b>					
<b>F Value: 5.370 p=.000</b>					
	<b>df</b>	<b>Sum of Squares</b>	<b>Mean Squares</b>		
<b>Regression</b>	5	20.547	4.109		
<b>Residual</b>	494	378.003	.765		
<b>Variables</b>	<b>B</b>	<b>SE B</b>	<b>Beta</b>	<b>T</b>	<b>Sig.</b>
Use of Internet has badly affected Educational Achievements	-.083	.048	-.093	-1.737	.083
Use of Internet has badly affected Physical & Mental Health	.005	.047	.006	.107	.915
Use of Internet has resulted Eating Disorders	.072	.050	.080	1.437	.151
Use of Internet has badly affected habit of Exercise/Games	.141	.047	.171	3.036	.003

\*Dependent Variable: Exposure to Internet

Unstandardized Coefficients Equation: Exposure to Internet = 3.803 + (-.083 x Use of Internet has badly affected Educational Achievements) + (.005 x Use of Internet has badly affected Physical & Mental Health) + (.072 x Use of Internet has resulted Eating Disorders) + (.141 x Use of Internet has badly affected habit of Exercise/Games)



As evident from Table 4, there was a positive significant relationship between the criterion variable “Exposure to Internet” and the predictor ‘Use of internet has badly affected habit of Exercise/Games’ ( $b=.171$  and  $p=.003$ ). However, the relationship between the criterion variable ‘Exposure to Internet’ and the predictors; i.e. ‘Use of internet has badly affected Educational Achievements’ ( $b=-.093$  and  $p=.083$ ); ‘Use of internet has badly affected Physical & Mental Health’, ( $b=.006$  and  $p=.915$ ), and ‘Use of internet has resulted Eating Disorders’ ( $b=.080$  and  $p=.151$ ) was not found significant.

A comparison of Beta scores indicated that relationship between ‘Exposure to Internet’ (criterion variable) and ‘Use of Internet has badly affected habit of Exercise/Games’ (predictor variable) ( $\beta = .171$ ) was stronger than other predictor variables. The result infers that the college and university students think that the use of the internet has affected their habit of exercise/games, however, it did not have any significant effect on other life patterns and daily routines of youth including achievements.

Thus Hypothesis 3 (Exposure to Internet by the Youth would not greatly affect their Life Pattern and Educational Achievements) was supported except for Exercise/Games. Which shows that the use of Internet did not affect the life patterns and educational achievements of youth in Pakistan. Nevertheless, the internet use had greatly affected the habit of exercise/games of youth in Pakistan.

**Research Question 3:** Whether and to what extent the use of internet has affected the Life Pattern and Educational Achievements of the youth?

As evident from Table 4, there has not been found any significant effect of the usage of internet on the Life Pattern and Educational Achievements of the youth except that the use of Internet has badly affected the habit of exercise/games.

## **Discussions and Conclusions**

The purpose of this study was to explore the usage of Internet among the youth and how Internet usage influences their social capital, life pattern and educational achievements. So, the study sought to determine if there was a possible displacement effect for daily activities and an impact on youth’s physical and social dimensions.

As evident from Table 2, there was not found too much usage of internet among the youth. Furthermore, Table 3 does not show any significant positive relationship between the ‘Exposure to Internet’ and the predictors; i.e. ‘Talk face to face with Parents daily’ ( $b=-.031$  and  $p=.549$ ); ‘Talk face to face with Siblings daily’ ( $b=.039$  and  $p=.454$ ), and ‘Use of Modern Media has decreased Physical Interaction with Friends’ ( $b=.069$  and  $p=.230$ ). So, the results infer that the use of the internet does not have any significant effect on Social Capital of youth in Pakistan.

Similarly, Table 4 elaborates the positive significant relationship between the ‘Exposure to Internet’ and the predictor ‘Use of Internet has badly affected habit of Exercise/Games’ ( $b=.171$  and  $p=.003$ ). However, the relationship between ‘Exposure to Internet’ and the predictors; i.e. ‘Use of Internet has badly affected Educational Achievements’ ( $b=-.093$  and  $p=.083$ ); ‘Use of Internet has badly affected Physical & Mental Health’, ( $b=.006$  and  $p=.915$ ), and ‘Use of Internet has resulted Eating Disorders’ ( $b=.080$  and  $p=.151$ ) was not found significant. The results infer that college and university students think that the use of Internet has

affected their habit of exercise/games, however, it did not have any significant effect on other life patterns and educational achievements of youth.

Since, the present study has not supported the Time Displacement Hypothesis of Robert Putnam (1995a; 1995b) regarding the use of media and erosion of social capital. Overall, the findings of this research study suggest that time spent using internet does not erode the daily life activities and interpersonal communication of youth with family and friends. Furthermore, there was not found any significant effect of the use of internet on the educational achievements and life pattern of the youth.

### **Limitations**

The findings of the study are purely depending on the opinions/perceptions of the respondents. Similarly, due to the limitations of the time and resources, this research study has been conducted on a survey of 500 male and female young students studying in the various colleges and universities of the twin cities of Rawalpindi and Islamabad from Intermediate to PhD level.

Furthermore, though this study made an effort to measure every possible aspect of the internet usage, including the effects on social capital, life pattern and educational achievements, however, many other activities can be measured to further explore the various aspect of internet usage by the students.

### **Recommendations**

Overall, this study found no displacement effect of Internet on the youth's daily activities and life pattern including the educational achievements. For future studies, this study strongly suggests that types of Internet usage should be examined to test the displacement effect of new media.

Online activities, like online games, chatting and surfing are important in investigating the displacement of social relations. In fact, sometimes online relationships lead to offline relationships and it is also fact that some people have more strong relationships online than offline. Thus, examining the impact of the specific types of Internet use on users' daily activities will provide better understanding. Furthermore, addiction of internet must be studied to explore its displacement effect and affect on youth's health.

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