Impact of Internet on Social Capital: Testing Putnam's Theory of Time Displacement in the Urban Pakistan

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Abstract

Sociability is important for establishing and maintaining social capital, the use of internet might alter the nature and kind of the individual's social capital. The advent of internet brought faster and major changes in societies influencing people pattern of communication and changing behavior towards life style. People are relying on the internet to gratify their social and psychological needs. Besides, the use of internet isolates people and reduces social/family and outdoor activities (Attewell, Battle, Paul and Suazo-Garcia 2003). Social media use facilitates the raise of individual's virtual ties but at the same time disturbs family relationship. Many investigations have checked the impact of internet consumption on social capital such as heavy internet users are more vulnerable to separate from physical social ties. This study analyzes the usage of internet by the young and impact on the relationship with the social capital and interpersonal behavior. It is found that excessive use of Internet decreases the want for face-to-face communication with family members and close friends, thus Internet users are losing some of the vital aspects of their life such as: family relationships and friendships which is severe threat for maintaining the fabric of society, particularly, tradition society.

Key words: *Usage of Internet, Social Capital, Virtual and physical Communication*

Introduction

Communication is constantly developing with the advent of modern technologies influencing people pattern of communication and considerably changing their behavior towards life pattern. People are reliant on the internet to gratify their social and psychological needs. Besides, the use of internet isolates people and reduces their social/family bonds and outdoor activities (Attewell, Battle, Paul and Suazo-Garcia 2003). Sociability is important for establishing and maintaining social capital. The use of internet might change the nature and kind of the individual's social behavior and facilitate individual's virtual ties and disturb social capital. Computer-dependent communication might be used to reinforce virtual relations, but it also develops weak interpersonal and face to face communication (Granovetter1973, Resnick 2001, Riphagen and Kanfer 1997).

Many investigations have checked the impact of internet consumption on Social Capital, such as the heavy internet users are more susceptible to be separated from usual social ties. (Agarwal, Animesh and Prasad 2005; Goldfarb 2006; DiMaggio, et al. 2004, Weiser 2001; Widyanto & McMurran, 2004; Beard 2002; Young, 1996). Moody (2001) argues that excessive use of internet diminishes and displaces social activities since the user spends much time online and therefore, he/she in not able to take part in social activities. When people are busy and

indulged in a large number of virtual contacts, these may reduce the stronger face to face communication (Kraut et al., 1998). Couples of other studies report that excessive internet usage not only diminishes and reduces social circle but also raises melancholy and loneliness (Kraut et al., 1998; Lavin, Marvin, McLarney, Nola & Scott, 1999; Nie & Erbring, 2000; Stoll, 1995; Turkle, 1996). The present study is based on Putnam theory of 'Time Displacement', which describes how far time spent with internet, reduces the time for other activities.

Statement of the Problem

This research studies analyzed impact of internet use on the interpersonal communication network and social capital in the urban setting in Pakistan. Specifically was design to explore whether and to what extent the Putnam theory of 'Time Displacement and Social Capital is applicable in the Pakistani urban society and how far it effects the social fabric.

Social Media Usage Trends in Pakistan

Use of internet has rapidly spread in Pakistan especially in urban areas all social classes. The use of internet in 2013-14 expanded about 60 percent in Pakistan. However the Internet users are still on the edge of around 13 to 18 percent of the total population in Pakistan, (Ayesha Sajid, 2013). In Pakistan, Social Networking Sites (SNSs) have become an essential ingredient for fun, excitement, and adventure for many. In fact, it has become a meeting place for all where, people who can't catch up with their family members and friends, greet online, Ayesha Sajid (2013) highlights that the 120 million mobile phone subscribers has significantly change the media landscape in Pakistan However, the 3G technology phone is an additional fun for the users. Simon Kemp (2013) reveals that Pakistan stands at no 5 among the largest mobile Phone in the Asian market.

<div align="center">Pakistan Social Media Facts and Figures</div>

Total Population	190, 291, 000
Population under age 30	67%
Population in Rural Area	64%
Social Network Users	8, 007, 460
Mobile Subscribers	120, 962, 829
One New Mobile subscription	Every 2 Second
3G Mobile subscription	500, 000
Average cost of Mobil	Less than $100
Total Internet Users	29, 128, 970
Internet penetration in Pakistan	15%
Mobile internet Users	15, 000, 000
Face book use by Gender	Male 69% Female 31%
Usage of face book	40 Minutes average per day
Time of Face book usage	Between 6pm and Midnight
Average Friend on Face book	135
Using face book via Smartphone	30%
No. Tweeter users	1, 900, 000
No. of Linkedin Users	1, 200, 000
Visit to YouTube	1,400, 000

Courtesy by: Simon Kemp (2013) and Ayesha Sajid (2013)

Interaction via Social Networking Sites particularly Face book is gradually considered more comfortable and intimate. In Pakistan's urban setup, SNSs have become an indispensable tool of communication and has gone deeply in everyone's' lives. Some say that it has become an addiction. People from all walks of life are now actively joining these networks for a variety of reasons, may it be for socializing, marketing, business, staying in touch with friends and family so and so forth. It easily crosses over fences from being a fashion statement to becoming a need for everyone.

However, where Social Networking Sites have benefits, there are crucial harms and risks attached to their usage. These sites have somewhat casted a spell on the youth who cannot escape from the charisma and attraction of these attractive social interaction tools. SNSs have a strong influence on the youth and with more and more users joining it every day, this seemingly influence rate is also growing like an obsession. Because of their charismatic appeal, it is necessary to study the reasons behind the observed behavior and attitude of users/consumers of these sites. The parents, educators, technologists and all other people from different segments should know the potential risks and rewards of this growing phenomenon. This aspect has taken in to account these important points.

Theory and Literature Review

Putnam, on the basis of his studies of television viewing, concluded that television is playing a role in declining social capital and constructed a theory "Time Displacement" The theory holds that new communication replaces old communication. Time spent with internet affects social capital at the expense of other daily activities and it reduces the time for face-to-face interactions. The researcher therefore, wanted to test the theory in the Pakistani urban society which is mixed in nature—traditional and liberal; to see as to what extent the theory is replicated. There is a common assumption that internet is affecting interpersonal communication and real life relations of individual in urban life. The edifice and continuance of social capital are affected quite large by the use of internet. The term social capital spins around the social institutions, family affairs, society and custom that help in shaping the quality and quantity of a society's social interactions. Social capital is the glue that holds all these institutions as one (Bourdieu 1980, Coleman 1988, Burt 1992). Every community or group is distinguished by a stratum of social capital that appears to be linked with the level of belief among group of people, (Bowles & Gintis 2002). Internet usage will be helping if used for normal routine; however its excessive use can be harmful particularly for the daily life and family affairs. Studies indicated that excessive use of internet diminishes psychosocial comfort and resulted in the breakdown of family relationship (Widyanto & McMurran 2004; Yao-Guo, Lin-Yan & Feng-Lin 2006; Whitty & McLaughlin, 2007).

Putnam's (2000) 'time displacement hypothesis' states that heavy television viewers and Internet users have lesser face-to-face interactions. Different researches established that online communication positively helps the individuals' in building social trust and motivating them to take part in social development (Best & Dautrich, 2003; Kobayashi, Ikeda, & Miyata, 2006; Kouvo, 2007). Shah, & Holbert (2004) argue that the scholarly clash between cyber cynic and

optimists still continues, although it is obvious that the optimistic and pessimistic impacts of the internet on social capital are subjected to academic conceptualization of the medium (Williams,2006). According to Williams (2006), 'time displacement hypothesis' is nothing to do with the use of traditional media and internet. While watching TV usually People do not talk with one and each other. Whereas, while sending or receiving e-mail, during chatting and using SNSs, people are engaged in interpersonal communication, (Raacke& Bonds-Raacke, 2008; Shah et al., 2001).

Life of the people contentment is judged in some way by their societal affairs. In the case of internet, it is assumed that those vigorously using social media are more likely to feel happier and experience connectedness (Valkenburg, Peter, & Schouten, 2006, Diener, Emmons, Larsen, & Griffin, 1985, Kahneman & Krueger, 2006). Ellison et al., (2007) argue that college students with less pleasure use internet to increase their personal happiness/comfort. People get more emotional support at the time of personal crisis by using internet trusted network of members (Uslaner, 2002). Social media networks allow consumers to acquire detailed information about their associations that includes individual surroundings, music flavor, wellbeing, and location. Such information can lessen hesitation concerning other users' behaviors and intent (Berger & Calabrese, 1975).

Generally, it is assumed that internet usage patterns related to the community building and information acquisition play a positive role at individual-level. Whereas internet usage patterns in case of entertainment affect the production of social capital in a negative manner, (Norris & Jones, 1998; Shah, Schmierbach, Hawkins, Espino, & Donavan, 2002; Wellman, Haase, Witte, & Hampton, 2001). Actually, use of internet itself does not shape one's social capital; rather the different ways of using the technology affect one's social capital. Williams (2006) argues that the kind of associations shaped by social media can build varied categories of social capital. According to the data collected on the quantity of email exchanged and the extent of those exchanges, they concluded that web phones, like other mobile phones, are particularly significant for upholding sturdy binds.

According to McQuail (2005) the most apparent reason for the internet users is the need for integration and social relations. In another research *I have a life online*, Ahsan (2009) discusses that people like to move towards online social life more than trying to exercise socializing skills in real world. According to the report of Daily Dawn, the increased usage of internet is reducing the time spent for other activities. People like to create new online contacts rather than making new contacts in real world. Barry Wellman, Jeffrey Boase, Wenhong Chen (2000) discuss that how the internet has influenced different aspects of communication and society. They conclude that due to the impact of internet, society is shifting from groups towards individualized networking. The heat of the impact has not only reached to the interpersonal level but also at the governmental, inter organizational and even at the global levels.

The above mentioned studies and reports conclude that internet has impact of the social capital of people. It helps in producing strong or weak social ties. These studies enable the researcher to draw the following research question and hypotheses.

Research Question and Hypotheses
Research Question
R.Q.1 Whether and to what extent the usage of Internet has an impact on the Social Capital?

Hypotheses
H1:   The use of internet will positively be correlated with virtual connectivity with friends and
        relatives
H2:   The use of internet will negatively be correlated with physical interaction with the social
        capital

Methodology
        Survey method was applied to collect quantitative data from a large representative but
mixed population of various universities students during September 2012 to July 2013. Due to
time and budget constraint, only few universities in Punjab were selected; i.e. Government
College University, Punjab University, and BZ University, Multan. The total population was 400
respondents. Of them 200 male and 200 were female who have access to internet. Due to the
vast, mixed and scattered nature of the population, the researcher applied purposive and
convenient sampling technique for data collection.

Conceptualization of the study
*   Connect and communicate
*   Socializing with new people
*   Content Sharing
*   Social contact with family
*   keep in touch with friends
*   usage of internet increased during travelling
*   virtual ties
*   Exposure to internet

Operational definitions of the key concepts
        Impact**:** Impact means all those changes that occur in the behavior and routine of people
due to internet usage. ***Social Capital*****:** Social Capital means family system, family relations and
daily interactions, real world relation with friends and face to face communication with family
and friends. ***Connection with family*****:** To keep in touch with family members through social
networking sites and internet. ***To keep in touch with friends*****:** To keep in touch with friends
through social networking sites and internet. **Internet usage is increased while travelling:**
While travelling nationally or internationally internet is the most commonly used source to
connect with social capital. ***Virtual ties*****:** Online interaction and connection with family and
friends. ***Face to face communication with family and friends*****:** Discussions, meetings with real
world relations, to spend quality time with real world relations. Face to face communication with
family and friends.

Pre testing and reliability
The questionnaire was pre-tested from five respondents in every group which identified some deficiency in the questionnaire. So the researcher did amendments before embarking on a full scale survey. The reliability of the tool was confirmed through Cronbach's alpha which was an average 0f 82% on the concept based items in the questionnaire. This method of reliability test is usually used while studying the behavior, attitude and practice as same in the case in this study. Data on the questionnaire items was mostly obtained through the Likert's scale.

Data Analysis and Results
Data of the study was analyzed using descriptive and inferential statistic in order to answer to the research questions and testing the hypotheses. Univariate analysis was used to explain the phenomena while multiple regression model was applied to investigate relationship between usage of interest and social capital and to how Putnam theory of time displacement is workable in the Pakistani society. Statistical Package for the Social Sciences (SPSS Version 13.0) was used for the analysis. Following are the results

Contact with family and friends while travelling
In figure1 indicate that 60% respondents agreed and 58% strongly agreed that their telephonic and internet usage are increased respectively during travelling nationally and internationally. 57% respondents disagree and 42% strongly disagree to use letter to contact with their family while travelling.
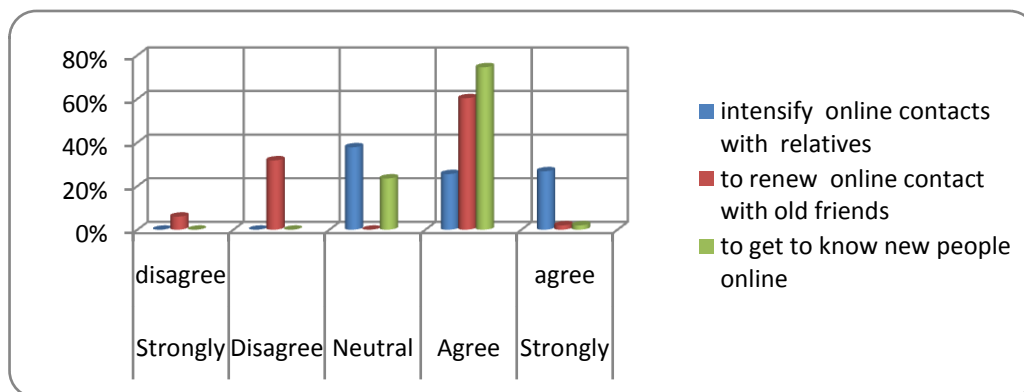

Figure 1: Contact with family and friends while travelling
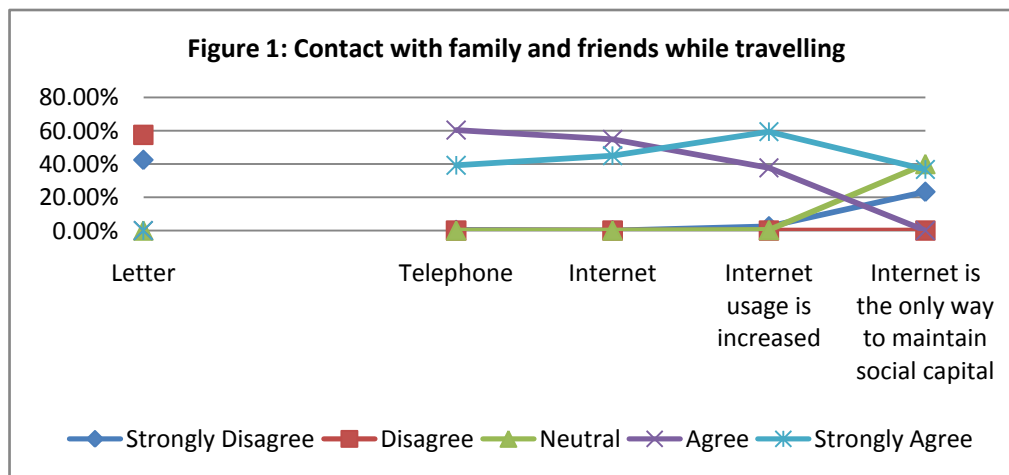
Heavy internet usage minimizes face to face communication
Figure 2 shows that, 95% respondents strongly agreed that internet usage minimizes face to face communication with friends and 50% strongly agreed that it minimizes their interpersonal communication with family. Whereas almost same ratios of respondents agree that heavy internet usage minimize face to face communication with family and friends.
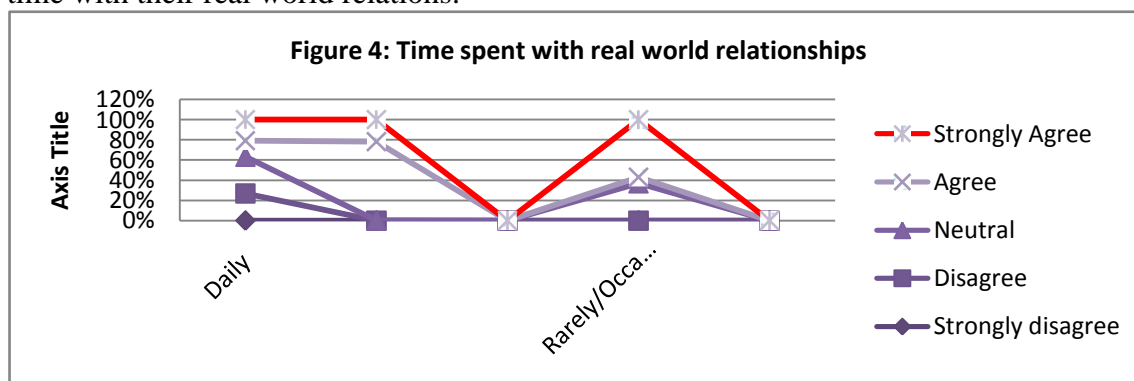
Figure 2: Internet minimizes face to face communication

	Strongly	Disagree	Neutral	Agree	Strongly
	disagree				agree

(Legend: Family, Friends)
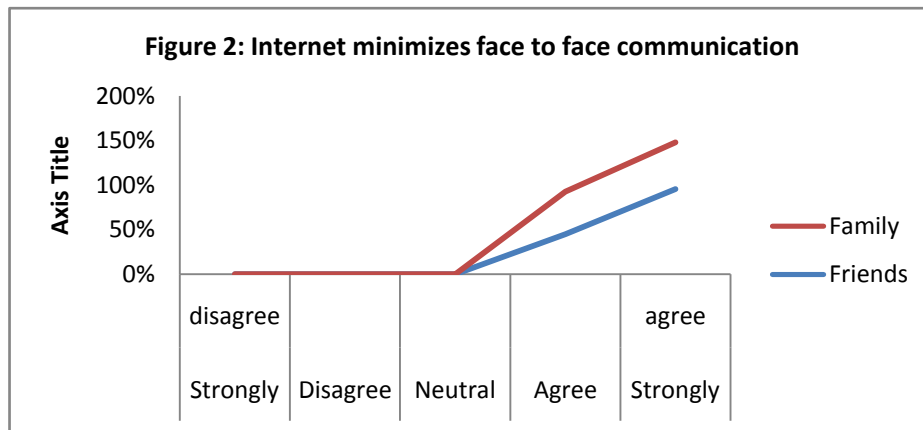
Internet helps users improve their online social capital

Figure 3 shows that 73% agreed that the use of internet enable them to get to know new people so it increases their online social capital. While 60% people agreed that the use of internet renews online contacts with old friends. Whereas only 27% strongly agree that use of social media intensifies online contacts with their relatives.

(Bar chart)

Legend:
- intensify online contacts with relatives
- to renew online contact with old friends
- to get to know new people online

	Strongly	Disagree	Neutral	Agree	Strongly
	disagree				agree

Quality time spent with your real world (offline) relationships

Figure 4 shows that 78% agreed that they spend quality time with their real world relationships on weekends and holidays and 57% strongly agreed that they spent quality time with their real world relationships occasionally. Whereas 28% disagree that they spent quality time with their real world relations.

Figure 4: Time spent with real world relationships

(Line chart with x-axis categories: Daily, ..., Rarely/Occa...)

Legend:
- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Impact of internet especially SNSs on **real life relations**
Figure 5 presents that majority of respondents (75%) strongly agree that use of internet results in loss of privacy, loss of time, less emotional bonding in relations.
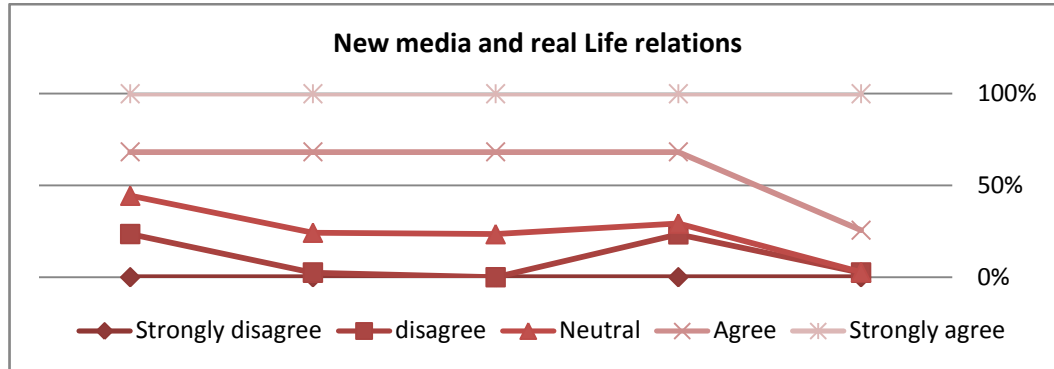
H1: **There is a positive relationship between the usage of internet and virtual sociability with friends and the social capitals.**

Table 2: Multiple regression of Usage of Internet leads to virtual sociability with the social capital.

Multiple R: **.976**
R Square: **.953**
Standard Error: **.283**
F Value: 2.024   **p: .000**

	Sum of Squares	df	Mean square		
Regression	646.80	8	161.701		
Residual	31.55	395	.080		
Variables	**B**	**Std. Error**	**Beta**	**T**	**Sig.**
Internet gets friends & family virtually	.734	.033	.679	21.979	.000
Internet makes new friends virtually	1.217	.033	.1.06	36.513	.000
Internet increases virtual socialization	.419	.058	.275	7.276	.000
Socializing with new people	1.169	.006	.851	190.332	.000
Easier to communicate	1.770	.025	.202	70.642	.000
Keep in Touch with family	1.652	.011	.883	145.542	.000
Keep in touch with friends	.915	.013	.300	69.882	.000
Connect with family	.417	.010	.230	43.352	.000

It is evident from Table 2 that the value of Multiple R is .976 which indicates that there is positive significant and very strong relation between criterion variable (Exposure to internet) and all the independent variables collectively. The value of R square is .953; we can infer that the

model is explaining 95 % of the variance in the criterion variable. The computed value of F (2.0243) and Sig. (.000) of the ANOVA suggests that the regression model is fit and overall statistically significant.

As evident from the table that there was a significant relationship between the criterion variable "usage of social media" and the predictors i.e. internet bought me closer to family and friends (b=.679 and p=.000); internet helped me to make new friends (b=1.2170 and p= .000); and Internet increased my online social circle (b=.419 and p=.000); Socializing with new people (b=.851 and p= .000); it is easier to communicate with others (b=.202 and p= .000); to keep in touch with friends (b=.300 and p= .000); Staying connected with family (b=.230 and p= .000); and easier to connect with others (b=.883 and p= .000). Thus H1 (There is a positive relationship between the use of internet and virtual sociability with friends and relatives) was supported.

H2: **There is a negative relationship between the usage of internet and physical interaction with the social capital and community involvement**

Table 3: Multiple regression of Usage of Internet leads to less physical interaction with the Social Capital and Community Involvement

Multiple R : .999
R Square: .998
Standard Error: .065
F Value: 2.6824   **p:** .000

	Sum of Squares	df	Mean Square		
Regression	676.707	6	112.785		
Residual	1.653	393	.004		
Variables	**B**	**Std. Error**	**Beta**	**T**	**Sig.**
Physical relationship with family and community	-.980	.028	-.769	-4.500	.000

It is evident from Table 3 that the value of Multiple R is .999 which indicates that there was very strong negative relationship between criterion variable usage of internet and Physical relationship with family, friend and community involvement. The value of R square is .998, indicates that the model is explaining 99% of the variance in the criterion variable. The computed value of F (2.6824) and Sig. (.000) of the ANOVA suggests that the regression model is fit and overall statistically significant. Thus H2 (There is a negative relationship between the usage of internet and physical interaction with the social capital and community involvement) was supported.

Discussion and Conclusion
This study explored the impact of internet on social capital. The study produced Internet used by students and general public, specifically the study to understand whether internet effects our real life relations and social capital. The study reports that demography plays vital role in influencing on the social capital.

There is a rapid growth of internet use in Pakistan. Every second person is using internet in the urban setup Pakistan. Internet is most frequently used for e-mails, face book, chatting with family, friends, colleagues, and unknown people. The study revealed that there is a reduction of face-to-face communication with the social capital. On the other hand Internet is isolating from the society. These finding are quite in line with the results of previous studies.

The study testified Putnam theory of Time Displacement as the use of internet affected interpersonal communication and sociability with social capital in the target population. The use of internet showed impact on the relationship on family, friends, and community involvement. Hypothesis of study that the use of internet leads users to connect them virtually with the social capital' was substantiated. Additionally, the more the people travel, the greater they use the internet to maintain relationship with social capital. Use of Internet also helped user to socialize with new people. On the other hand, the use of internet reduced physical relationship with the social capital. Excessive usage of Internet decreases the want for face-to-face communication, with family members and close friends, thus Internet users are losing some of the vital aspects of their life such as: family relationships and friendships which is severe threat for maintaining the fabric of the society, particularly, the traditional society.

Conclusion

It is concluded that the use of internet has an impact on the real life relations in the urban setup of Pakistan as it reduced physical relationship with the family and friends and involvement on the community activities. On the other hand, the use has significantly increased virtual relationship with close friends and family members. Other impact of the use of internet on the individual's life was the loss of time, emotional disturbance. Reliance on the internet increased immensely among the urban youth of Pakistan. As a result young people are not taking interest in the, family and community matters.

About the Author

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