

## **Information Technology (Internet): Effects on Social Participation and Well-Being of Users**

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Use of internet is rapidly increasing in the developing countries like India. Evidence concerning the social and psychological effects of the internet is mixed. Present study examined the effect of internet use on social participation and well-being of users. A sample of 120 internet users selected from various cyber cafes, organizations and houses in Rohtak, Gurgaon (Haryana) and Chandigarh, through personal contact. Age of subjects ranged from 17 years to 32 years. To achieve the objectives of the study an ex-post facto study design was used. First of all internet addiction scale was administered to 120 internet users. The subjects were divided in three groups viz, high addiction, moderate addiction and low addiction on the basis of their scores on the test. The subjects in all the three groups were then administered checklists for assessing the effect on social life and well-being. The design for second phase of the study was a multigroup design. In addition to the elementary statistics i.e. mean, standard deviation (SD), the data were analyzed following inferential statistical tests i.e. t-test and one way analyses of variance. Duncan's post-hoc test was used for group comparisons. Results revealed that internet use has significant adverse effect on social participation and well-being of the users.

**Keywords:** Internet, Social participation, Well-being.

Our world today has changed a great deal with the aid of information technology. Things that were once done manually or by hand have now become computerized and requires a single click of a mouse to get a task completed. Information technology now touches almost every aspect of life and has become the backbone for telecommunications, finance, governance, health care, and education (Gattiker & Kelly, 1997; United Nations, 1999). Information Technology is the latest medium for comprehending the facts and expressing ideas. This miraculous discipline has blessed the modern world with a wonderful tool to unearth hidden knowledge, gather scattered information and search for new wisdom. It helps one getting enriched and enlightened in all brands of knowledge, without much trouble, a little effort brings great results. (Ahmed, 2003). This new technology come

in the form of an international computing/telecommunication networks, known as the *Internet* and it has potential to change human culture and civilization as did others, e.g. telephone in the early part of 20<sup>th</sup> century and television in 1950's and 1960's. Internet can rightly be termed as the world information backbone, which is currently estimated to be increasing at a rate of 25% per month (Suri & Chhabra,2002).

Internet has exerted a powerful impact on the lives of the people at large. People can use computers and internet in many different ways and for diverse purpose including entertainment, education, information retrieval and communication (Wallace,1999). The main reason people use the internet is to communicate with other people over e-mail and the principal reason why people send e-mail messages to others

is to maintain interpersonal relationships (Hampton & Wellman 2001). The primary motives for using the internet include information seeking (Katz & Aspden, 1997) and fulfilling interpersonal needs (Papacharissi & Rubin, 2000), seeking information about health (Bernhardt, McClain & Parrott, 2004). While we are admiring the conveniences and advantages brought by the internet, there is growing concern about problematic internet use and whether this can lead to an addiction. In psychological field, the concept "Internet addiction" has been used to explain uncontrollable and damaging use of the internet, (Sally, 2006). Internet addiction disorder (IAD) is the term first proposed by Goldberg (1996) for pathological, compulsive internet usage. Young (1998) has described a syndrome called 'Internet Addiction', which consist of spending an inordinate amount of time on the internet and inability to control online use. There is controversy in the research literature about whether use of the internet increases or decreases user's social participation and the psychological and health benefits people generally receive from this participation? Some researcher claim that using the internet leads to the emergence of new social circle and the development of deep and long-lasting social relationship on-line ( Mckenna, Green, & Gleason, 2002), and augment involvement in existing communities by providing new social spaces for communication (Wellman, Haase, Witte, & Hampton, 2001).

Several studies have reported that internet has adverse effect on social life and well-being of the users e.g. Kraut, Patterson, Lundmark, Kiesler, Mukophadhyay, and Scherlis (1998) reported that greater use of the internet was associated with decline in participants communication with family members in the household, decline in the size of the social circle and increase in their depression and loneliness. Putnam (1995) also reported a broad decline in civic

engagement and social participation in the United States and attributed it to the internet. Nie and Erbring's (2002) reported that internet use heavily influenced people's social life as well as other activities. Specifically, the more time people spent online, the more likely it was that they spent less time with family and friends, talking with family and friends on the phone, attending events outside home. Siwach (2006) also reported harmful effect of internet on personal and social life of the users. Some people ignore their work, study, and other social responsibilities due to excessive use of Internet (Thatcher & Goolam, 2005). Internet has negative impact on friendships and family relationship and increase loneliness, depression and aggression (Yaberra, 2004). Dependents were found to delay other work and lose of sleep due to late night logons (Nalwa & Anand, 2003; Bulck, 2004). Some other researchers didn't find that the Internet use would lead to decrease of psychological well-being -being" seems to be too liberal, but reported negative relationship between Internet use and psychological well-being (Subrahmanyam, Kraut, Greenfield, & Gross, 2000; Weiser, 2001; Whitty & Mclaughlin, 2005). There are few studies which failed to find harmful effects of internet use. Yet findings of the available researches were suggestive of the importance of such studies. Therefore considering the relative paucity of such studies, present study was designed to assess the effect of internet use on social participation and well-being of users.

#### **Objectives:**

- i. To study the effect of internet on the social participation of users.
- ii. To study the effect of internet on the well-being of the users.

#### **Hypotheses**

To achieve the objectives of the study the following hypotheses were formulated

- i. Internet will have significant adverse impact on the social participation of the users.

ii. Internet will have significant adverse impact on the well-being of the users.

### Method

#### Design:

To achieve the objectives of the study an ex-post facto study design was used.

#### Sample:

In present study a sample of 120 internet users was selected from various cyber cafes, organizations and houses in Rohtak, Gurgaon and Chandigarh (India) through personal contact. Age of subjects ranged from 17 years to 32 years. Internet addiction scale (Young, 1998) was administered to 120 participants. On the basis of scores all the subjects were divided in three groups' viz. Low internet users (N=21), moderate internet users (N=74), and high internet users (N=25).

#### Tools:

*Internet Addiction Scale* (Young, 1998): It was used for assessing internet addiction. It consists of 20 items. It is a self reporting five point scale i.e., (1) not at all, (2) rarely, (3) occasionally, (4) often, (5) always. Scores ranged from 1 to 5, score-1 for not at all, 2 for rarely, 3 for occasionally, 4 for often and 5 for always. Total score may range from 20 to 100. On the basis of scores the users can be categorized in the following three categories: Minimal users (scores 20 to 39), Moderate users (scores 40 to 69), and Excessive users (scores 70 to 100).

*P.G.I. General Well-being Measure:* It was developed by Verma and Verma (1989). It consists with 20 items to be endorsed in Yes (Ö) or No (X) format. A score of 1 is given for 'Yes' and 0 for 'No' response. The scores range 0 to 20, high score indicate better well-being.

*A check list for assessing impact of internet use on social participation:* It was prepared with 14 items which were related to the impact of internet use on the social participation of the users. There were 4 items (item number 1,2,3,4,) relating to impact on

family, 5 items (item number 5,6,7,8,9) were relating to friends, 5 items (item number 10,11,12,13,14) were relating to social participation. For item number 1,3,6,10,12, there were five response categories (0-15 minute, 15-30 minute, 30-60 minute, 60-120 minute, and more than 120 minute) and the score ranged from 1 (0-15 minute) to 5 for (more than 120 minute). For item number 2,9 and 11 there were six response alternative (1-2 days, 3-4 days, 5-6 days, 7-8 days, 9-10 days, more than 10 days). And scores ranged from 1 (1-2 days) to 6 (more than 10 days) and for item number 4, 13, and 14 there were 5 alternative (Very low, low, uncertain, much very much) and the scores ranged from 1 (very low) to 5 for (very much). For item number 7 and 8 there were seven response alternative (1-day, 2-day, 3-day,4-day, 5-day, 6-day and Daily) and the scores ranged from 1 (1day) to 7 for (Daily). For item number 5 there were five response option (0-1, 2-4, 5-8, 9-12, more than) and the score ranged from 1(0-1) to 5 for (more than). The scores of 14 items were added to get a composite score for impact on social participation. Low scores indicate greater adverse effect on personal life and social participation.

### Results and Discussion

Table-1 revealed that the mean score on family participation before starting internet use was 13.05 (SD=2.39) and 11.17 (SD=2.68) after starting internet use. The t-value for differences between two means was 8.03 which was found to be significant at .01 level. Mean score on friendly activities was 13.75 (SD=4.95) before starting internet use and 10.65 (SD= 4.19) after starting internet use. The t-value was found to be 7.92 which was significant at .01 level. Obtained mean before starting internet use was 12.73 (SD= 2.88) and after internet use was 11.31 (SD=2.81) on social participation variable. It was found to be significantly different ( $t= 6.87$ ,  $df=119$ ,  $p<.01$ ). The respondents scored significantly ( $t= 11.47$ ,  $df = 119$ ,  $p<.01$ ) high score on well-being before starting internet

**Table 1. Mean and SD of scores on Family Participation, Friendly and Social Participation and Wellbeing, and t values of users for before and after internet use (n=120)**

Variable	Categories	Mean	SD	't'
Family Participation	Before internet use	13.05	2.39	8.03**
	After internet use	11.17	2.68	
Friendly Activities	Before internet use	13.75	4.95	7.92**
	After internet use	10.65	4.19	
Social Participation	Before internet use	12.73	2.88	6.87**
	After internet use	11.31	2.81	
Well-being	Before internet use	16.43	2.87	11.47**
	After internet use	14.05	3.42	

\*\*p<0.01

use (Mean= 16.43, SD= 2.87) than that of after starting internet internet use (Mean= 14.05, SD=3.47). It indicates that internet had a significant and adverse effect on well-being of the users.

To check the impact of internet use on family participation, friendly activities, social participation and well being of high, moderate and low users, one way ANOVA with Duncan's post-hoc test was computed. Results revealed that the low users group obtained a mean of 13.04 (SD= 1.98), average internet users group got a mean of 11.17 (SD=2.58) and high internet users group obtained a mean of 9.60 (SD=2.53) on family participation. These mean score of three groups differ significantly (F=10.99, df = 2, 117, p<.01). It indicates that there is a significant difference in three categories on family participation variable. Post-hoc comparisons revealed that the low internet users group had significantly higher scores on family participation than the group of average users and high internet users. Average internet users group had significantly higher scores on family participation than high users but lower scores from low internet users group.

Results shows that the low internet users group got a mean of 11.87(SD=2.32), average internet users group obtained a mean of 11.7 (SD = 2.66), and high internet users group got a mean of 9.64 (SD = 3.10)

on social participation. Results revealed that the mean score of three groups differ significantly (F=6.07, df = 2, 117, p<.01). It indicates that there is a significant difference in three categories on social participation. Post-hoc comparisons revealed that the low internet users group had significantly higher score on social participation than the group of high internet users. Similarly the average internet users also scored significantly higher on social participation than the high internet users. However, the low internet users and average internet users did not differ significantly in their scores on social participation.

Mean and SD of high, average and low users categories on well-being. The high users group obtained a mean of 11.08 (SD = 2.49), average internet users group got a mean of 14.43 (SD= 3.21) and low internet users group obtained a mean of 16.23 (SD = 2.84) on well-being. Results revealed that these mean score of three groups differ significantly (F=18.22, df = 2, 117, p<.01). It indicates that there is a significant difference in the well-being of three categories of users. Post-hoc comparisons (Table-2) using Duncan's test revealed that the low internet users group had significantly higher scores on well-being than the group of average users and high internet users. Average internet users group had significantly higher scores on well-being than high users but lower scores from low internet users.



Findings of the study revealed that the internet use has had significant effect on the user's life. About twenty one percent of the sample falls in the high internet users category and these are the person who have significant life problems associated with the use. It is more than the five percent incidence reported by Singh, Shyam and Siwach (2003) taking sample from metropolitan and suburban areas from India and ten percent by Wallace (1999) taking population from European sample, however it is less than sixty eight and thirty percent reported respectively by Young (1998) and Brenner (1996). It is not that the percent of people having life problems associated with internet, rather it is the increasing trend which reflect the seriousness of problem.

As far as the effect of internet use on social participation (family participation, friendly activities and social participation) and well-being of the users is concerned the findings of the study revealed that there was a significant adverse effect. It was found that there was a significant difference between two phases (before internet use and after internet use) on family participation, friendly activities and social participation. Significant reduction was found in the time devoted to family activities, friendly activities and social activities due to internet use. When we talk about the well-being, finding of the study show the adverse effect of internet use on the well-being of the users, low internet users had better well-being than the average users and high users. The findings support the results reported in studies conducted elsewhere pointing that internet have had significant effect on one's social life and well-being e.g. Kraut, Patterson, Lundmark, Kiesler, Mukophadhyay, and Scherlis (1998) reported that greater use of the internet was associated with decline in participants communication with family members in the household, decline in the size of the social circle and increase in their depression and loneliness. Putnam, (1995) also reported a

broad decline in civic engagement and social participation in the United States and attributed it to the internet. Nie and Erbring's (2002) reported that Internet use heavily influenced people's social life as well as other activities. The more time people spent online, the more likely it was that they spent less time with family and friends, talking with family and friends on the phone, attending events outside home. In an Indian study on a small sample Siwach, (2006) also reported harmful effect of internet on personal and social life of the users. Some people ignore their work, study, and other social responsibilities due to excessive use of internet (Thatcher & Goolam, 2005). Internet has negative impact on friendships and family relationship and increase loneliness, depression and aggression (Yaberra, 2004). Some researcher reported negative relationship between internet use and psychological well-being (Subrahmanyam, Kraut, Greenfield, and Gross, 2000; Weiser, 2001; Whitty & Mclaughlin, 2005).

Though significant, yet the results of the study need to be generalized cautiously as the sample included was taken incidentally and the tool used for effect on social participation was not a standardized tool and therefore the findings need to be verified on a larger sample. Despite the limitations, the study points towards the harmful effect of the technology and we must think of the ways and means to counter these well in advance.

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