

To study the influence of access use of internet on academic performance of adolescents

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■ **ABSTRACT :** Present study was conducted to know the influence of access use of internet on academic performance among intermediate adolescents. The study also focused to examine the gender differences among adolescents on excess usage of internet. Undoubtedly, Internet has brought a great revolution worldwide and the world is in its feast. It has delimited the whole world and made a man able to access anywhere, anytime and in any field of life. Facilities are available at one's door step. But, it is well said that excess of everything is bad. Likewise, excess use of internet has become a problem today. This part of research contribution will analyze the reality and gap between the positive and negative impact and aspects of usage of internet on education. The sample comprised of 300 adolescents. Their responses to the "Internet Usage Scale" and GPA for the previous year were collected and analyzed using methods including descriptive statistics. The results suggested that excess use of internet was a significantly negatively correlated with academic performance of intermediate adolescents. Results also suggested gender difference in excess usage of internet. Male adolescents had higher user of internet than female ones. The paper concludes with recommendations for future study in order to better understand the growing impact of internet on our youth

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The use of the internet in the educational environment has enabled easy access to many resources, and information sharing has, therefore, significantly increased. Moreover, the prevalence of this sharing has brought additional benefits in that these resources can be used in any location and any time. Although the efficiency of this technology, it is evaluated with use of proportion of the desired results in student achievement does not exactly come out and is difficult

to determine. Hence, much research has been conducted over time to understand the reasons for this situation.

Internet is becoming a widely accepted channel for information exchange and networking. It is experiencing tremendous growth and development in its size and numbers of users all over the world. The benefits of the internet have been widely researched and include keeping in touch with friends, making vacation plans, managing finances, assisting with educational needs etc.

Despite the positive effects of internet, there is growing literature on the negative effects of its excessive use.

Academic Achievement assumes primary importance in the context of an education system aimed at progressive scholastic development of the child and human resources development at the macro level. The scientific rearing and education of a child is monitored on the basis of his academic achievement. Academic achievement is the core of the wider term *i.e.* educational growth. The importance of academic achievement in one's life cannot be over emphasized. It acts as an emotional tonic. Sound academic records are the pillars on which the entire future personality stands.

Academic achievement have always been the centre of educational research and despite varied definitions about the aims of education, the academic development of the child continue to be the primary and most important goal of education. Life in general and for a student in particular has become highly competitive. Today there is no place for a mediocre student. There is limited room at the top that too only for the best. The importance of scholastic and academic achievement has raised important questions for educational researchers.

Adolescence is a crucial period in one's life. Every human being has to pay through this period and this stage brings its immense problems along with it. Adolescence is the time when the individual is confronted with various families, schools, social and personal problems. However, adolescence is not a problem period but a stage in human development which has certain but natural problems. In other words, the adolescent years are, pre-eminently, a period of social development and adjustment. During the preceding years of childhood there have been, to be sure, a beginning of socialization and some acquisition of fundamental social skills.

The Internet is a global system of interconnected computer networks that use the Standard Internet Protocol suit to serve billions of users worldwide. It is a network of networks that consists of private, public, academic, business and government networks of local to global scope that are linked by a broad array of electronic and optical networking technologies. The foremost target of internet has always been the communication and internet has excelled beyond the expectations. Still innovations are going on to make it faster and more reliable. By the advent of computer's internet our earth has reduced and has attained the form

of a global village. Any kind of information on any topic under the sun is available on the internet. Adolescents and children are among the top users who surf internet for learning, entertainment and research. As the internet increasingly becomes part of our lives, internet addiction disorder has received much attention. Internet addicts may withdraw from social and inter personal interaction. Their family relationships and academic or occupational functioning may deteriorate. Several withdrawal Symptoms have been identified, including nervousness, agitation, aggression as well as addiction syndromes.

Significance of the study :

The study will be of immense benefits to adolescents, Parents and Guardians and School Teachers. The study will be most beneficial to adolescents who need to learn to manage and balance their time so as to be great contributors to the development of the society. They should learn to explore the social networking potential benefits as it will boost their creativity and technical skills but not at the expense of their primary responsibility which is reading.

It will equally benefit parents and guardians as they need to wake up to their roles of monitoring their children and wards. They should ensure their adolescent pay more attention to their studies.

This study will also serve as a guide to school teachers in order to teach the adolescents' on the need to develop good reading habit and best ways to maximize the benefits of social networking sites.

Objective of the study :

The present study was aimed at achieving the following objectives

- To determine the purpose of using Internet among adolescents.
- To compare the internet usage on the basis of gender.
- To examine the impact of excessive use of Internet on academic Achievement of adolescents.
- To identify the intensity of using Internet by adolescents
- To identify the effect of internet among adolescents.

Limitations of the study :

It is not possible in a single research study to cover

every aspect of variables associated with the problem under investigation. Although, the problem is very natural and is prevalent everywhere yet due to shortage of time and resources all the aspects variables could not be covered and the study is limited in several ways. It had to be determined in terms of population covered, sample selected, scope of variables studied and the scope of generalizability of finding and so on.

- Due to the shortage of time and resources the study was carried out only on adolescents of class XI and XII although problem of achievement is common to elementary classes yet the focus of the study has been on the higher secondary stage only.

- The phenomenon of achievement has been studied on in relation to gender and socio-economic status only.

- The scope of study covers only urban areas of Ghaziabad city of Uttar Pradesh One cannot generalize the finding of this study to all the schools of India due to number of differences in their conditions and circumstances.

- It is desirable that the researcher reaches first hand or original sources for the study, but as access to some material was not possible materials taken from available secondary sources has been used.

- Though the stratified random sampling is adapted for selection of samples at which extent it was practicable but due to some other factors like permission for administration of the tests and availability of schools made the researcher forced to adopt the purposive sampling as an alternative measure for the study.

According to Young (2004), obsessive Internet use can be described as an addictive behaviour that involves the user escape from the day-to-day struggles and unhappiness of his or her world by going online on the Internet. Meanwhile, according to Mushin Ahmad Zahari in Solomon (2009) defines Internet usage as problematic or maladaptive use of the Internet that leads to social and functional impairment. This supported by Vellutini (2003) which she classified five types of Internet usage. The first type of Internet usage is usage to online chatting. It can be defined as an obsessive involvement in on-line chat rooms. Often, virtual relationships take precedence over real relationships between family and friends. The second type of Internet usage is usage to online pornography. It can be defined as compulsive surfing for pornography, viewing it and downloading it.

The third type of Internet usage is usage to games. This may be described as obsessive playing of cyber games, including interactive-type games such as Counterstroke and non-interactive games like Solitaire. The fourth type of Internet usage is usage to money web sites. It may include compulsive online gambling, compulsive online shopping or compulsive online tracking of investments and international markets. Without restraint, people with this type of usage can find themselves in financial ruin. The fifth type of Internet usage is usage to surfing the Internet. This can be described as spending too much time searching and gathering information that is available on the Internet as well as constantly following irrelevant links.

However, the use of Internet has been shown to have both positive and negative effects on the users especially to the adolescents. Most of the research on the impact of Internet use shows adolescents being the early adopters and heavy users of the Internet as compared to the general population.

Morahan-Martin and Schumacher in Suhail and Bargees (2006), focused on problems of loneliness and heavy Internet use in college adolescents. They classified users into three groups: Pathological users averaged 8.5 hours of Internet use per week, persons with limited symptoms averaged 3.2 hours per week, and those with no symptoms averaged 2.4 hours per week.

Suhail and Bargees (2006) also added that general Internet users suggest that some people may experience psychological problems such as social isolation, depression, loneliness, and time mismanagement related to their Internet use. He also added that changes in people's use of the Internet over 12-24 months can bring changes in their social involvement and psychological well-being.

According to a survey conducted by University of Minnesota Boynton Health Service in 2007, 28.7 per cent of adolescents surveyed report excessive computer/Internet/TV use and 41.8 per cent indicate the activity affected their academic performance and it suggested that that members of the public, higher education leaders and policymakers should pay attention to the findings and make the health of college adolescents a priority.

According to Solomon (2009), there are extreme cases where the Internet addicts may even be stealing money so they can go online at the cyber café. He added that to tackle Internet usage, it should start at this early

age and the public should be exposed to the negative effects of excessive Internet use. Few studies had been done on the relationships of Internet use and on the users' emotional states as well as social support networks which have capitulated variety findings Shaw and Gant (2002).

Hardie and Tee (2007) found that greater Internet use was associated with a decrease in loneliness and an increase in perceived social support. A number of publications have studied internet usage among university and college adolescents. They have Attempted to show there can be negative effect of internet use on these adolescents, which may cause the adolescents to become addicted and to digress from their educational studies. In order to assess internet usage, many new diagnostic tools have been developed in literature.

Chang and Law (2008) evaluated the Young's Internet Usage Test (YIAT) for better understanding the structure, validity and reliability of such assessment tools. In their study, they defined the three dimensions of the problem: Withdrawal and social problems, time management and performance, and reality substitution. Moreover, this study showed clearly that academic performance was negatively correlated with internet usage. Furthermore, they presented another and very important finding that internet usage is highly related to online activities, cyber-relationships, and online gambling and hence, these kinds of internet sites and usage can be seen as trap sites for education. In the literature, there are other studies about internet usage and its effects on adolescents and adolescents, the relationship between internet use and culture, and the relationship between educational performance and internet usage (Siomos *et al.*, 2008; Ghassemzadeh *et al.*, 2008; Del Castillo *et al.*, 2008; Anuradha, 2015); Recabarren *et al.*, 2008 and Tahiroglu *et al.*, 2008). Many of these studies indicate that there is a strong relationship between internet use trends and educational performance, and wrong use of the Internet can cause a major decrease in adolescents' academic performance. In our study, the effects of those internet sites which can easily be accessed and are thus called Trap sites are also investigated.

■ RESEARCH METHODS

Keeping in view the objectives of the present study, the researcher has organized the procedure of the study under the following heads:

Methods of the study :

I have used descriptive method for this study.

Hypothesis of the study :

- Internet usage in not a rising problem among the adolescents.
- There is no significant difference in excess use of internet among adolescents on gender basis.
- Access use of Internet does not affect the academic achievement of adolescents.

Selection of sample:

The sample was selected on random basis and the sample drawn for the study was the intermediate school adolescents of Ghaziabad city. For this study I have taken 300 adolescent (boys and girls) of 16-17 years of xi and xii grade. In this study for data collection I have taken 1 standardized questionnaires. The questionnaire adopted for this study was from Young (1998), Internet Usage Test (YIAT) and the items are rated on a 5-point scale as shown in the Table A.

Table A : Instrument's scale descriptions	
Scale	Description
1	Never
2	Rarely
3	Sometimes
4	Often
5	Always

The split half reliability of this tool is 0.859 and Cronbach's Alpha is 0.902. In order to determine the academic achievement of the adolescents a self completed questionnaire were used by the investigator. (short survey method also completed before applying questionnaire). Academic performance of the adolescents was measured with the Grade Point of Average achieved in previous year. After getting the formal permission from the principles of concerned public schools" data was collected in two sessions. Adolescents were briefed about the nature and the purpose of the current study. Adolescents were assured about the confidentiality of the data. Instructions were given regarding to the questionnaires. Average time taken by adolescents in filling questionnaire was 30 minutes. After the data collection was completed the scores were tabulated respondent wise and were arranged in the tabular form and computed for statistical analysis,

interpretation and discussion. After this I have used appropriate mean, standard deviation, student t-test and correlation co-efficient for analyzing the data.

■ RESEARCH FINDINGS AND DISCUSSION

Focusing upon the above information the results was interpreted according to objectives and hypothesis in the following section:

Usage pattern of Internet among intermediate adolescents :

The result shows that ninety four adolescents scored less than 20 points in Young's' Internet Usage Test which is 31.3 per cent of total sample called never or rarely user of internet. A total of 96 out of 300 adolescents are average users of internet and constitute 32 per cent of the total sample, scoring 20-49 points. 80 adolescents use internet at high rate and their score is between 50-79 showing highly usage pattern. Only 30 adolescents (10%) had extremely high usage of internet and this is the condition of internet usage.

On the basis of the above result we found that hypothesis 1 which states that internet usage is not a rising problem among the secondary school adolescents is rejected. It indicates that internet use is becoming a problem today, though usage is still under context but it is rising. This is not a good sign for future generations.

Compare the internet usage on the basis of gender :

Result reveals that there were 166 male and 134 female adolescents. The mean score of the internet usage pattern of male adolescents is 46.54 and that of female is 26.99. The standard deviation score of male adolescents is 27.08 which are more than the standard deviation score of female adolescents *i.e.* 29.13. The *t*-value is 5.967 which are significant at 0.05 and 0.01 level of significance. So the null hypothesis which states that there is no significant difference between internet usage pattern of male and female secondary school adolescents shall be rejected. The result also shows the internet usage patterns of male adolescents is quite higher than that of their female counter parts. It indicates that male adolescents are more addicted to internet than girls. It further shows that boys might have more access to internet facility. One of the objectives of the present research was to study the impact of gender on the scores of internet usage. To meet the stated objective it was

hypothesized that male gender is significant predictor of the internet usage which is consistent with the findings of Scherer (1997). However, this finding may simply be due to the fact that more males than females use the Internet across the world. Another explanation for the lower percentage of internet usage among females, involves the fact that female college adolescents often receive more family supervision than male especially in eastern cultures, which may prevent females from spending as much time on the Internet (Tsai *et al.*, 2009).

Impact of excessive use of Internet on academic Achievement of adolescents :

Researcher finds that the sum of squares of Academic achievement between different internet usage Categories is 3417.47 at degree of freedom 3 and mean Square is 1139.15 whereas the sum of squares of academic Achievement within group is 23199.43 at 296 degree of Freedom and mean square is 78.37, respectively. The calculated F-value is greater than the critical F-values at 0.01 levels. Therefore the hypothesis which states that internet usage does not affect the academic achievement of the secondary School adolescents shall be rejected. It means that internet usage patterns effect the academic achievement of the children. It was observed that percentage marks obtained by adolescents with average use were 64.04 ± 7.90 and that of adolescents with Internet usage was 58.63 ± 8.95 , thus showing that average to high use of internet positively influenced the academic Achievement while no usage and extremely high usage had a negative impact on academic achievement. Statistically, this association was significant.

Effect of internet among adolescents behaviour :

The advent of computers and the internet has led to a series of dramatic changes and developments in the ways of generating, storing and sharing knowledge. Teenagers of today find internet and computer as their basic necessities, otherwise they will get behind in this information age. The investigator in the present study has found that out of 300 secondary school children internet usage pattern is extremely high among them. Only 10 per cent adolescents *i.e.* they are not addicted to internet, though this is a small figure, but it shows a rising trend as compared to the trends found at the advent of internet and its usage. Application of t-test while analyzing the gender wise internet usage pattern reveals

that male and female secondary school children differ significantly in their usage pattern. The result shows that the male adolescents are more addicted to internet usage. This further indicates that male adolescents are more access to internet than the female adolescents. Today male child is privileged with numerous facilities and preferences as compared to the girl child, specifically in traditional and orthodox society. The result shows usual behaviour issues like lack of attention in studies and misbehaving with teachers as well as parents. It was observed that they are suffering from cyber usage, which makes a child irritable and affects his academics and social relations.

Intensity of using Internet by adolescents:

Result shows that 70 per cent boys work more time on internet than girls. On the basis of secondary data it was hypothesized that internet usage would have negative impact on the academic performance of the adolescents. The result is in accordance with the stated hypothesis. Same result has been stated by various studies that the greater use of the internet by dependent users will increase the probability of the missing classes and lower grades (Young, 1998 and Scherer, 1997). Being a student, one can hardly live without exams, assignments, group projects, various extracurricular activities etc. Whether a student can have good academic achievement greatly depends on the student's health, his/her time management for every school work, as well as how hard he/she works. There are some researches showing that the Internet can distract adolescents from their study (Barber, 1997; Mahal and Chawla, 2015; Brady, 1996; Young, 1998 and Sodha *et al.*, 2015). This could also be explained by the fact that adolescents tend to spend so much time in online activities, which leaves them with little or no time for studies (Griffith, 2000). It can also be clarified by the fact that a student loses his capacity to concentrate, most probably because of the late night internet sessions (Frangos and Frangos, 2009). All these previous studies support current findings that academic performance is the most important predictor of Internet usage.

As a result, the findings of most studies showed that use of the internet is useful for education, in that it can supply many beneficial opportunities to find different resources. However, a basic rule should be considered while using the internet for successful research, that is, how the resources should be properly

accessed by the adolescents. Furthermore, the adolescents must be disciplined in keeping themselves away from trap sites and entertainment in order to obtain the best achievements in their studies.

In conclusion, the high intensity of Internet use will bring negative effects if the users do not know their priorities. While much of the time on computers is spent alone, moderate computer use does not negatively impact adolescents' social skills and activities. On the contrary, e-mail and the Internet may actually help maintain interpersonal communication and sustain social relationships. However, we need to determine the impact of excessive computer and Internet use on children and adolescents' loneliness, social relationships, and psychological well-being. Last but not least, problem of excess use of internet although not that serious but this should be aware to prevent the growing of negative internet usage.

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