IMPACT OF FACEBOOK ADDICTION DISORDER (FAD) ON STUDY HABITS AND ACADEMIC ACHIEVEMENT OF ADOLESCENTS

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With the present era being technology driven, social media has become an indispensable part of many people irrespective of their age. Among different age groups, the maximum users are adolescents and among different social networking sites (SNS), Facebook shares the major part of usage by them. Many adolescents are tending towards excessive usage of Facebook leading to its addiction. Does this addiction have negative influence on adolescents or it actually helps them to keep up with their counterparts and be socially connected to them for their betterment? This question is unanswered specifically when it concerns the impact that it has on the study habits and academic achievement of adolescents. The hypotheses were tested in order to explore the impact of six dimensions (mood modification, deficient self-regulations, salience, loss of control, withdrawal, and relapse) of Facebook Addiction Disorder (FAD) using Bergens' Facebook Addiction Scale (BFAS), developed by Andreassen (2012). The results are based on the survey conducted on 200 adolescents studying in different schools of India. The findings indicate that there is a significant negative impact of Facebook Addiction Disorder (FAD) on study habits and academic achievement of adolescents. The major implication derived is that the higher the addiction to Facebook the study habit become poor and academic achievement decreases resulting in lower grades.

KEYWORDS: Social Networking Sites (SNS), Facebook Addiction Disorder (FAD), Study Habits, Academic Achievement

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INTRODUCTION

In 21st century the communication has become faster, better and efficient. The credit goes largely to spurt in the development of Information and Communication Technology (ICT). Internet is a prime source to connect people beyond geographical boundaries. All internet users say that one of their primary purposes of going online is for communication (Gemmill & Peterson, 2006). The primary tools that enable social organization on internet are social networking sites and instant messages (Ellison, Steinfield & Campe 2007; Jones 2009; Lenhart, 2009; Raacke & Bonds, 2008 as cited in Correa, Hinsley & Zúñiga, 2009).

Social Networking Sites (SNS) allow individuals to construct a public or semi-public profile within a boundary system by articulating a list of other users with whom they share the connection (Boyd & Ellison, 2008). Some of the popular SNS includes Myspace, Twitter, Youtube, Meetme, LinkedIn, Hike and Facebook. Among these, Facebook is believed to be the most commonly used SNS.

Facebook as a social network was the 4th most visited website in 2010 (Bowe, 2010) attracting over 800 million users to date (Elphinston & Noller, 2011). SNS like Facebook has become a social phenomenon (Zaremohzzabien, Abvsuman, Omar, Bolong & Kamarudin, 2014). Mark Zuckerberg created Facebook in 2004 in order to access student information through a social network. Facebook was first used as a virtual medium for students of Harvard University for identification of each other and for making new social relationships (Mark off, 2007). The wide spread Facebook usage was spread to other universities and eventually became a public domain in 2006 (Boyd & Ellison, 2007).

Today, there are more than 500 million Facebook users who are active participants in the social networking site (Facebook, 2011). A study by Kuss and Griffiths (2011) suggests that between 55% and 82% of teenagers and young adults respectively use Facebook on a regular basis.

Although Facebook could be a great tool to connect with friends and maintain relationships, there is a line that could be crossed in which adolescents utilize Facebook too much where they cross the limit from simply using the site to devoting all of their time and energy to checking their news feeds (Sharma, 2011). Excessive use as well as ease of its use makes many adolescents addicted to it.

Addiction is a condition that results when a person ingests a substance (alcohol, cocaine, nicotine) or engages in an activity (gambling) that can be

pleasurable but the continued use of which becomes compulsive and interferes with ordinary life responsibilities, such as work or relationships, even health (Psychological Today.com, 2011). The sudden excessive use of Facebook has opened the gateway to Facebook addiction as a psychological disorder that is mostly found in adolescents. Facebook addiction refers to spending so much amount of time on Facebook that it interferes in everyday life.

When adolescents exceed the limit of being addicted to Facebook it starts changing into a psychological disorder known as Facebook Addiction Disorder (FAD), which means spending an excessive amount of time on Facebook, which may restrict adolescents to devote their proper time to real life activities such as work, school, or maintaining relationships with family and friends. FAD includes mood modification, deficient self- regulations negative outcomes (Lee, Chung & Thadani, 2012), salience, loss of control, withdrawal, relapse (Balakrishnan & Saman, 2013) and tolerance (Zaremonzzabien, Saman, Omar, Bolong & Kamarudin, 2014).

FAD is most commonly observed in adolescents because of lack of awareness among them regarding the use of internet and social networking sites. The adolescent stage is the stage of stress and storm, strain and strife (Hall, 1904) and because of this, they are unable to discriminate between right and wrong. Facebook addiction may make adolescents experience problems and erosions in their academic life, as this habit interferes with their daily life activities including most important aspect of their academic life i.e. their study habits and academic achievement.

Facebook is mainly used to keep up with social aspects of college life and it is a part of most students' daily routine (Madge, Meek, Wellens & Hooley, 2009). Facebook offers many different options for social networking and entertainment. As far as communication goes, Facebook offers a chat option in which people can send messages instantly to one another. These are not the only things Facebook does as the adolescents can also use this site to create academic groups in order to share the important information. However, students did not seem to agree on the fact that Facebook helped their academic life (Madge et. al., 2009).

In India, the main documented concern for many ailments among school adolescents is for academic achievement (Deb, 2001 as cited in Singh & Mishra). Each year, failures and lesser scores in exams than expected, consummates the lives of many students (National Crime Records Bureau, Ministry of Home Affairs, Government of India, 2000). Thus, the main focus of nation should be improvement in academic performance of adolescents. But past researches have shown how internet use had interfered in students' academic work and their social lives So, it is concern of many schools to monitor and limit the use of Facebook for fear that they cannot perform other tasks if they would cross the limit of using the site.

Although from the discussed facts, it can be hypothesized that FAD will have negative impact on academic achievement of adolescents, but Hargittai (2008) mentioned in his study that there is no evidence correlating Facebook with academic achievement (as cited in Kirschner, Aryn & Karpinsk, 2010). Thus, the issue raised is whether excessive use of Facebook affects the performance of adolescents specifically their study habits and academic achievement.

REVIEW OF LITERATURE

Social network sites particularly Facebook has become a global phenomenon. Today, more than 68.5% of young adults and teenagers use Facebook on a regular basis (Kuss & Griffiths, 2011). Lenhart, Purcell, Smith, and Zickuhr (2010) found that about 57% of social network users are 18-29 years old and have a personal profile on multiple social media websites. Younger students tended to use Facebook more frequently than older students to keep in touch with friends from high school or from their hometown (Pempek, Yermolayeva, & Calvert, 2009 as cited in Asante & Martey, 2015).

Users use Facebook to learn about each other and to develop social networks with their friends at university which are so vital for their socialization, this procedure can mark a turning point in an addictive behavior and it makes user to wasting time more and more on Facebook (Stutzman,2005 as cited in Govani & Pashley, 2005). Karpinski & Duberstein (2009) stated that among various unique distractions of every single generation, Facebook remains a major distraction of current generation (as cited in Rouis, Limayem & Sangari).

Nielsen Media Research study conducted in June 2010 stated that almost 25% of students' time on the internet is spent on social networking sites (as cited in Jacobsen & Forste, 2011). The American Educational Research Association conducted a research and declared at its annual conference in San Diego California (2009), that social media users study less and generate lower grade (Abaleta, Centaza & Calimlim, 2014 as cited in Rahman, Junayed & Masoom,2015).

Vallerand et al. (2003) reported that the overuse of sites can become disruptive to daily life or lead to negative outcome such as loneliness, depression, anxiety, and phobias (as cited in Zaremohzzabieh, Samah, Omar, Bolong & Kamarudin, 2014). Many researchers such as Choney (2010), San

Miguel (2009) and Enriquez (2010) studies on students' use of the social media sites revealed a negative effect of the use of social media sites on students' academic performance (as cited in Acheaw & Larson, 2015).

Enriquez (2010) reported in his study that those students who multi-task between social networking sites and home work are likely to have 20% lower grades than a student who does not have a social networking site (as cited in Mehmood & Taswir, 2013).

Facebook is so risky as it turns into an addiction when people employ it unintentionally and there are so many side effects of these kinds of social networking sites, which can come into picture more and more in a short time (Wilkinson, 2010 as cited in Zaremohzzabieh, Samah, Omar, Bolong & Kamarudin, 2014). Excessive Facebook use has been found to harm psychological and social well-being of individuals and their personality (Harzadin, 2012).

Similarly, Englander, Terregrosa and Wang (2010) put forward the idea that social media is negatively associated with academic performance of student and is a lot more momentous than its advantages. Jocabsen and Forste (2011) also found a negative relationship between the use of various media, including mobile phones, and self-reported GPA among first year university students in the United States. Yen, Tang, Lin, Huarng, and Liu (2009) identified an association between mobile phone use and respondents and report that respondents have allowed phone use to interfere with their academic activities.

However, studies of Ahmed and Qazi (2011), Hanqittai and Hsich (2010), Pasek and Hanqittai (2009), revealed no correlation between social media and students' academic performance. A study conducted at Whittemore school of Business and Economic on one thousand, one hundred and twenty-seven students revealed that there is no correlation between how much time is spent on social networking sites and grades (Martin, 2009 as cited in Asante & Martey, 2015). Again, a University of New Hampshire (2010) study also revealed that students' use of social media sites do not affect grades.

Researches clearly indicate that Social Networking sites (SNS) have negative impact on students' grades, study hours and level of adjustment (Choney, 2010; Devin, 2011; Karpinsk & Duberstein, 2009; Enriquez, 2010; Zaffar, Mahmood, Muhammad Saleem & Zakaria, 2015). Some studies found that Social networking Sites have no correlation with academic achievement of adolescents (Ahmed & Qazi, 2011; Hanqittai & Hsich, 2010; Pasek & Hanqittai, 2009).

Although several studies have traced out the negative impact of social

networking sites, internet addiction on grades and study habits of college going students in general not with reference to any particular Social Networking Sites. So, the question arises whether the use of Facebook in particular reduces grade or not? Studies have also shown the positive impact of Facebook like Simoncic (2012) found that for females' high levels of Facebook activity were associated with lower levels of depression.

Boyd (2007) also stated that teenagers and young adults have especially embraced Social Networking Sites as a way to connect with their peers, share information, reinvent their personalities, and showcase their social lives. The use of Social Networking sites and its' impact on grades, anxiety, depression level, personality have been studied. However, the researcher did not come across any study giving comprehensive view of Facebook Addiction Disorder (FAD) and its impact on academic achievement and study habits of adolescents. Thus the question unanswered is that does excessive usage of Facebook i.e. Facebook addiction reduce grades of students or it just helps students to connect with others and be socially active without any impact on their academic performance. The present study aims at addressing the above research questions.

RESEARCH METHODOLOGY

Sample

The study reports a total of 200 adolescents randomly selected from four classes in secondary schools (age range: 15-18, 100 boys and 100 girls). All students were of families with intermediate social economic status. Over the days of testing 22 students did not complete all measurements. Therefore, the effective sample is 178 Students (90 Boys, 88 girls).

Instruments Used

The Bergens' Facebook Addiction Scale (BFAS, 2012) by Andreassen was employed in order to identify the addicted adolescents from the total sample. The scale consists of 18 items, three reflecting each of the six core elements of addiction -salience, mood modification, tolerance, withdrawal, conflict, and relapse. These 18 items were scored on a 5-point scale ranging from 1(very rarely) to 5 (very often). Higher scores indicate greater Facebook addiction. Adolescents who marked very often on at least 9 items out of 18 were considered Facebook addicted.

The study also employed the Study Habit Inventory by Chandel, Lajwanti and Paliwal (2013) to assess the study habits of adolescents. This inventory consists of 40 items covering 8 dimensions of study habits—Comprehension,

Concentration, Task- Orientation, Interaction, Drilling, Writing & Recording and Supports. The marks of previous grade accounted for the academic achievement score.

OBJECTIVES AND HYPOTHESES OF THE STUDY

The preliminary investigation was intended to identify the Facebook addicted and Facebook non-addicted adolescents.

The second survey was aimed at investigating and comparing the study habits and academic achievement of adolescents of both the groups in order to find out the impact of FAD on study habits and academic achievement of adolescents.

In context with the specific objective of reaching a deeper understanding of impact of Facebook Addiction Disorder (FAD) the following null hypotheses were explored.

HYPOTHESES 1:

There will be no significant impact of Facebook Addiction Disorder (FAD) on study habits of adolescents.

HYPOTHESES 2:

There will be no significant impact of Facebook Addiction Disorder (FAD) on academic achievement of adolescents.

FINDINGS OF THE STUDY

The first part of the study was aimed to identify Facebook addicted adolescents and classifying the sample into two groups: Facebook addicted and nonaddicted. The second part of the study aimed at comparing the two groups on the basis of their study habits and academic achievement and thus investigating the impact of Facebook Addiction Disorder (FAD) on study habits and academic achievement of adolescents.

In order to identify Facebook addicted adolescents, the BFAS questionnaire was distributed to participants of study. This questionnaire consists of 18 items rated on five-point scale (very rarely, rarely, sometimes, often, and very often). The adolescents who marked very often on 9 items at least were considered as Facebook addicted (Andreassen, 2012).

Table 1
Number of Identified Facebook Addicted and Facebook Non-Addicted Adolescents.

Gender	Group		
	Facebook Addicted	Facebook Non- Addicted	
Male	30	60	
Female	20	68	
Total	50	128	

The second part of the study was aimed at examining the impact of FAD on study habits and academic achievement of adolescents.

TESTING OF HYPOTHESIS

H1: there is no significant impact of facebook addiction disorder on study habits of adolescents.

To test the above hypothesis, the data related to the study habits and academic achievement of both the groups was collected. The descriptive statistics of data is presented in the Table 2.

Table 2
Summary of Scores of Study Habits of Facebook Addicted and Facebook Non-Addicted Adolescents.

Group	N	M (SD)	t
Facebook Addicted	50	108.1(9.32)	
			5.10*
Facebook No n- Addicted	128	144.1(11.5)	

^{*}Significant at .01 level

The calculated t-value (5.10, p < 0.01) of study habits of the two groups reflects that the difference between the groups is significant. Hence, the null hypothesis is rejected and it was found that there is a significant impact of Facebook Addiction Disorder (FAD) on study habits of adolescents.

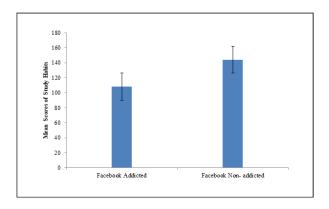


Figure 1. Study Habits Scores of Facebook Addicted and Facebook Nonaddicted. Bars represent Standard Error.

H2: There is no significant impact of Facebook Addiction Disorder on academic achievement of adolescents.

To test the above hypothesis, the data related to the academic achievement of both the groups was collected. The descriptive statistics of data is presented in the Table 3.

Table 3 Summary of Scores of Academic Achievement of Facebook Addicted and Facebook Non-Addicted Adolescents.

Group	N	M(SD)	t
Facebook Addic ted	50	7.20(1.09)	
			6.78 *
Facebook N on- Addicted	128	8.28(1.17)	

^{*}Significant at .01 level

The calculated t- value (6.78, p < 0.01) of academic achievement of the two groups reflects that the difference between the groups is significant. Hence, the null hypothesis is rejected and it was found that there is a significant impact of Facebook Addiction Disorder (FAD) on academic achievement of adolescents.

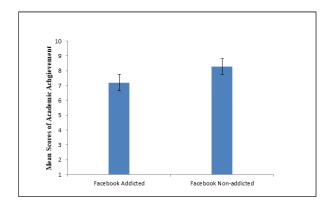


Figure 2. Academic Achievement Scores of Facebook Addicted and Facebook Non-addicted. Bars represent Standard Error.

DISCUSSION

The major fact that has emerged out of the detailed description of the findings of the study is that there is a significant impact of Facebook Addiction Disorder (FAD) on study habits and academic achievement of adolescents. The mean of study habits of two groups shows that the adolescents who are addicted to Facebook shows poor study habits as compared to those who uses Facebook within a certain limit. The poor study habits ultimately affect their academic achievement and it was found that adolescents who are addicted to Facebook get lower grades in their exams. The results show that Facebook Addiction Disorder (FAD) has negative impact on the study habits and academic achievement of adolescents.

Furthermore, the study has found out that apart from being statistically correlated, Facebook addiction has a statistically significant influence on study habits. An increase of the former may result in the decrease of the latter. As far as the impact of FAD on academic achievement is concerned, it is clear that FAD in some or other way is distracting adolescents and it is harming the academic success of those who have the potential to achieve a higher-grade point average.

This is in line with Helton (2012), who found that the more the time people spend on Facebook the lower their Grade Point Average seems to be. The results of the study also corroborate the findings of Gok (2016), who found that the digital technologies and social networking sites have negative impact on students' studying and habits.

However, in order to confirm these results, further studies can be conducted in different demographic conditions. The same study can also be conducted on large sample to facilitate predictions with accuracy. In this light, follow up studies aiming to find out the appropriate methods for solving the problem of Facebook Addiction Disorder (FAD) among adolescents should also be conducted to enhance their achievement in academic life.

RECOMMENDATIONS

Adolescents should be encouraged to use phones and internet for educational purposes rather than the usual chatting with friends all the time. They should be advised to delimit the use of Facebook and be encouraged to rather substitute the time to read novels and relevant academic books to improve their knowledge. Since the study confirmed that the excessive use of Facebook affects the study habits and academic performance of students negatively, there is the urgent need for the introduction of students to the availability of information resource or materials in the library that can help them in their studies. It is further recommended that adolescents should be made aware of dangers of addiction to Facebook. They should be introduced to sites that can add values to their academic work and research.

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