

Original Article

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Social media addiction is a new smoking

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Abstract

Background: Addiction is the behavior of a human in which they depend fully on the substance. According to the World Health Organization (WHO) 2015, over 1.1 billion people smoked tobacco whereas; over 2.14 billion people used social networks. The objective of this study is to assess that is there any similarity between the addiction level of smoking and social network usage. **Methodology:** This is a Cross-sectional study in which 80 participants were selected on a convenience based sampling of age 18-25 which were divided into group A (social media users) and group B (smokers). Inclusion criteria for Group A were Social network user since 5 years with user I.Ds on more than 2 social network sites and check notifications every minute however group B includes smokers who were smoking since last 5 years (1 packet per day) with no known co-morbid. All participants were asked to fill the questionnaire constructed on the basis of the Bergen Addiction Scale (BAS). Blood pressure measurement and time required to complete the cognitive task was also recorded. Data analysis was done using SPSS version 21. **Result:** Results showed 30% mild addicts, 30% moderate addicts and 40% severe addicts in group A while 40%, 22.5% and 37.5% in group B, respectively. According to mean withdrawal effects on cognitive skills, 97.6% participants in group A were able to complete task within assigned time before cessation and after cessation only 57% participants were able to do so, while in group B 94% were able to complete task before cessation and only 72% of participants were able to do so after cessation. Lastly, the mean BP reading checked in group A before cessation was 114.54/82.34mmHg and after cessation, it increased to 122.47/90.34mmHg whereas in group B, before cessation the mean BP reading was 118.32/84.88mmHg and after cessation it was 121.42/88.63mmHg. **Conclusion:** It is concluded that the addiction status of social media users and smokers is almost similar. This leads to the outcome that social network abuse is as harmful as smoking on focus, concentration, cognitive skills and increment of anxiety and BP.

Keywords

Social Media, Addiction, Cognitive Skills, Bergen Addiction Scale

Introduction

According to the American Society of Addiction Medicine, addiction is a chief, chronic illness of brain incentive, stimulus, reminiscence and related circuitry (Kirik et al., 2015). A malfunction in these circuits contributes to typical biological, psychological, social and spiritual symptoms. This is seen in a human being pathologically desiring remuneration and/or satisfaction by substance use and other behaviors like the use of social media.

Addiction is represented by failure to persistently refrain, deterioration in behavior management, lust, abate awareness of considerable troubles with one's actions and communal relationships, and a debilitated emotional acknowledgment. As other chronic disorders, addiction can also implicate periods of relapse and remission. Addiction can be progressive and can result in

disability if an individual is not treated or involve in recovery activities.

It is necessary to mention Internet addiction prior to elaborate social media obsession. The Internet is not a cause of addiction by its own. Addiction is distinct as the extreme use of the Internet that it starts to spoil day by day, societal and working life (Kirik et al., 2015). With the evolution of being a knowledge-based civilization, the practice of using the internet has to turn out to be an exceptional element these days. Today the internet tradition has taken a peculiar aspect. The progression that initiates with connection then gradually drifts into an addiction (Cam & Isbulan, 2012).

According to a study, excessive use of Facebook leads to poor impulse control as well as emotional regulation. The bunch of demands of social networks on the internet could possibly be a source for worry, mainly when people attempt to waste their time online (Kuss & Griffiths, 2011). People are usually involved in diverse activities via the internet and social media that can probably be addictive. Instead of becoming addicted to the means as such that is the Internet itself, some of them may build up an addiction to explicit activities they perform online. Researchers believed that Facebook can cause addiction-like syndrome. They have also proved that social networking has the quality of real addictions and heavy use of it can add different types of addiction (Kuss & Griffiths, 2011).

A report verified that youth with substance abuse troubles have additional rigorous psychiatric symptoms. Like substance abuse, Internet addiction has been reported to be linked with depression and attention-deficit-hyperactivity disorder (ADHD) (Yoo et al., 2004). Moreover, intense use of the internet has more brutal psychopathology on the symptoms. It is evident from previous literature that the changes in brain structure as revealed by MRI are caused by substance abuse and

excessive use of social media (Yen et al., 2008).

Drug addiction is neuroadaptation within the brain reward system throughout the progress of addiction, and one ought to recognize the neurobiological basis for acute drug reward to know how the reward systems alter with the growing addiction. Activation of the circuit related to the genesis and terminal of the mesocorticolimbic dopamine system occurs due to constructive reinforcing effects of drugs dependency. The same circuit develops in the progression of Social Media dependency (Koob & Le Moal, 2008).

According to a study, brain anatomy inflection in the grey matter of brain regions, which are possibly connected with social networking addiction and are recumbent to anatomical changes. These variations are supposed to occur in central and essential regions of the dual-system which manages behavior, the lacking of which is due to addictions. The regions include the Nucleus Accumbens (NAc), the amygdala, the midcingulate cortex (MCC) (He et al., 2017).

Observations based on the number of people addicted to social networking, discussions regarding the best solution to this upgrading problem of society, were made by psychologists and therapists. To sort out social network addiction of people, some remedies were observed which reveals that people of social addicts should be involved in other physical activities like daily exercises, gatherings with their mates and people whom they like and trust, interacting with people not through social network but in real (Kuss & Griffiths, 2011). The therapist suggested CBT that is Cognitive Behavioral Therapy. In this therapy, patients have group interaction with psychologists and therapists to how to improve their daily lives (Kuss & Griffiths, 2011).

The main motive of this study is to get people to know that even though if they don't realize that they are addicted to social networking, they are addicted to this kind of drug in actual. The aim of this study was to compare the addiction level by using Bergen Addiction Scale (BAS), Blood Pressure Reading and completion of cognitive tasks in assigned time before and after cessation of the type of addiction in people of social networking users and smokers.

Methodology

This cross-sectional study had a total of 80 participants with age between 18-25 years recruited randomly on convenience based sampling from LNH. The participants were divided into two groups (i.e. 40 participants per group), group A (social media) and group B (smokers). All participants in Group A were the social network user since 5 years, Accounts on more than two social network sites, check notifications in every 1 minute. While those who were smokers since 5 years and those with no known co-morbid were included in group B.

Before the start of the study procedure, consent was taken from participants. Data was collected by means of a structured questionnaire based on BAS (Andreassen et

al., 2012). Blood pressure reading and time is taken by the participant to complete cognitive tasks were also recorded, before and after cessation of at least 3 hours of individuals' type of addiction.

Additionally, both groups were further divided into mild, moderate and severe addictions according to their answers to the questionnaire. Furthermore, mean withdrawal effects on blood pressure reading and cognitive skills were also calculated. The collected data was then analyzed using SPSS version 21. Bar graphs and tables were used to show the comparison between the percentage of the population of both the groups related to addiction to social network and the similarity between the addiction levels of both groups.

Result

Significant results were surmised from the collected data as both the groups showed almost similar extent of addiction. Responses of social network addicts on the designed questionnaire showed a 100% positive response for question no.1, 92.5% reported the daily use of social network sites, 60% agreed that their work performance was suffered due to social networking (Table 1).

Table 1: Shows the results of the questionnaire designed for group A based on questions related to social media addiction according to Bergen Addiction Scale.

Questions related to social media addiction	Yes n(%)	No n(%)
Present on any social network.	40 (100%)	0
Present on any other social network site rather than facebook and twitter.	37(92.5%)	3(7.5%)
Use of Social Media on daily basis.	37(92.5%)	3(7.5%)
Complain from parents or spouse about involvement with social network.	19(47.5%)	21(52.5%)
Fights under the influence of social network.	16(40%)	24(60%)
Work performance and productivity suffer due to internet.	24(60%)	16(40%)
How much anticipating when you go on-line again.	27(67.5%)	13(32.5%)
Life without internet would be boring, empty and joyless.	33(82.5%)	7(17.5%)
Become defensive or secretive when anyone asks about what you do on-line.	15(37.5%)	25(62.5%)
Lose sleep due to late night log-ins.	20(50%)	20(50%)

Group B results revealed that 70% found it difficult not to smoke in non-smoking areas; question no.3 showed 77.5% that they will still smoke when they get ill and 82.5% showed a positive response that their work was influenced by smoking (Table 2).

Table 2: Shows the results of a questionnaire designed for group B was based on questions related to drug abuse and smoking according to Bergen Addiction Scale.

Questions related to drug abuse and smoking	Yes n(%)	No n(%)
Difficulty smoking in place like cinemas, buses or restaurants	28 (70%)	12 (30%)
Smoke more in the morning than during the rest of the day	24 (60%)	16 (40%)
Smoke even if ill	31 (77.5%)	9 (22.5%)
Drug abuse with more than one drug at a time	15 (37.5%)	25 (62.5%)
Irritated without using cigarette	29 (72.5%)	11 (27.5%)
Intentionally resist smoking whenever wish to or not	33 (82.5%)	7 (17.5%)
Spousal (parents or colleagues) complains about involvement in smoking	32 (80%)	8 (20%)
Family problems created due to smoking	29 (72.5%)	11 (27.5%)
Lost job due to smoking	20 (50%)	20 (50%)
Been in fights when under the influence of smoking	28 (70%)	12 (30%)

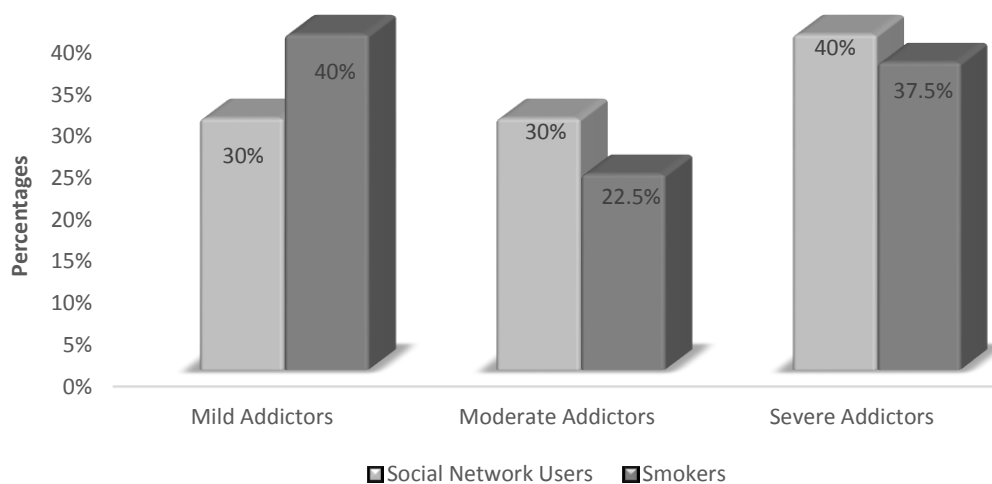


Figure 1: Mean comparison between addiction status of social media users and smokers according to Bergen Addiction Scale (BAS).

On the basis of scores of questions of questionnaire structured according to BAS, the mean comparison between addiction status of social media users and smokers was calculated. The results reported that mild addicts were 12(30%) in group A while 16(40%) in group B. Moderate addicts were 12(30%) in group A whereas 9(22.5%) in group B. Severe addicts were 16(40%) in group A while 15(37.5%) in group B (Figure 1).

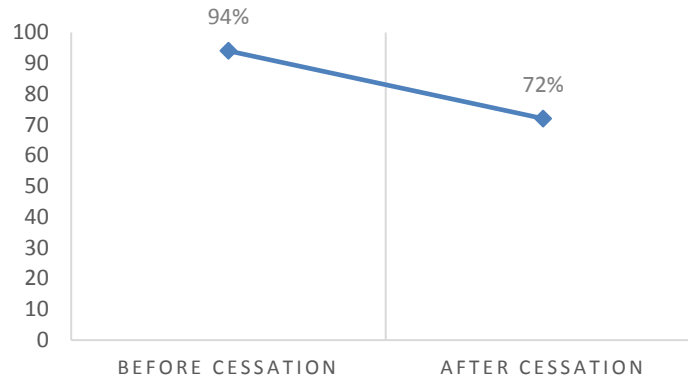


Figure 2a: Smokers Group

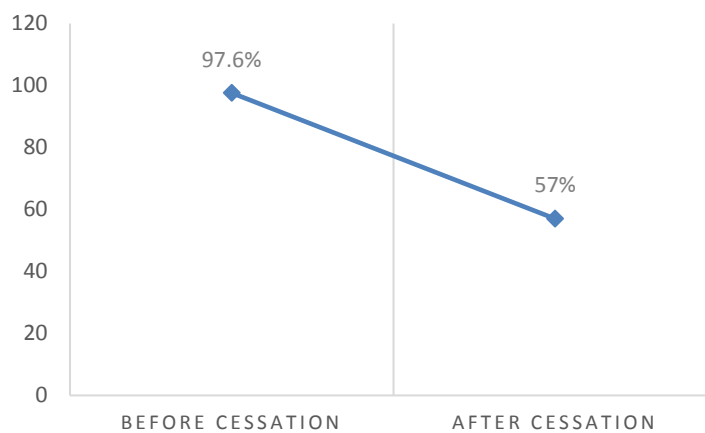


Figure 2b: Social Network Group

Figure 2a & 2b: Shows the mean withdrawal effects on cognitive skills after cessation of individuals' type of addiction. Cognitive activities included were quick basic IQ questions, video games, task sequencing.

According to mean withdrawal effects on cognitive skills, in group A 97.6% of participants were able to complete task in assigned time before cessation and after cessation only 57% participants were able to do so whereas in group B 94% of participants were able to complete cognitive tasks in assigned time before cessation while after cessation only 72% of participants were able to do so. Cognitive activities included were quick basic IQ questions, video games, task sequencing (Figure 2a &2b).

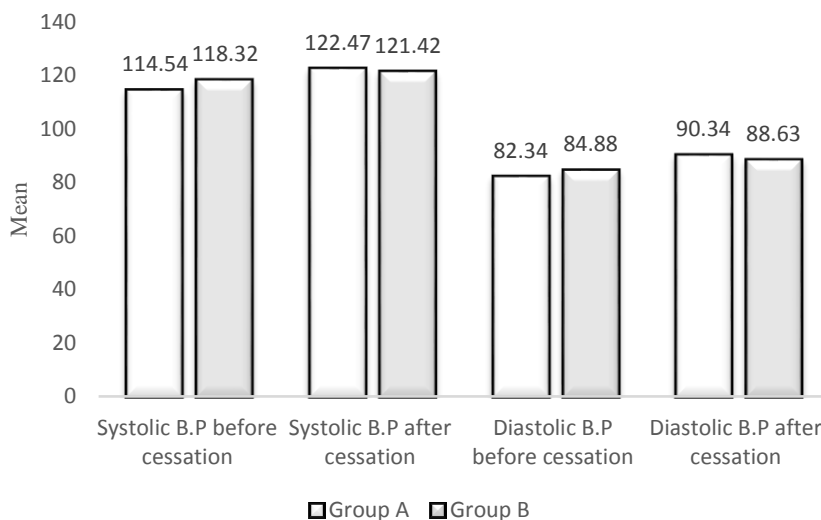


Figure 3: This graph shows the mean withdrawal effects on Blood Pressure Reading after cessation of individuals' type of addiction.

Lastly, the mean Blood Pressure reading was calculated before cessation in group A was 114.54/82.34 mmHg and after cessation was 122.47/90.34 mmHg. The mean Blood Pressure reading in group B calculated before cessation of smoking was 118.32/84.44 mmHg and after cessation was 121.42/88.63 mmHg. These results showed an increment in blood Pressure after cessation of individuals' type of addiction (Figure 3).

Discussion

This study shows that people with smoking addiction and social media addiction are more or less on the same level of catastrophic effects on behavior, cognitive skills and blood pressure (Figure 1, 2a, 2b & 3). Similar types of studies in which scans of the brain have been compared between the individuals with social media addiction and substance abuse showed that both types of dependencies can cause adverse effects on brain anatomy and morphology (He et al., 2017).

substance abuse. People with substance use had more severe psychiatric symptoms than those without. These Psychiatric signs might also be caused by the onset of Internet dependency, and this Internet dependency might also precipitate psychiatric signs (Koob & Le, 2008). This can be related to the study that social media addiction has dreadful effects on cognitive skills as substance abuse. People start to become less focused, tries to get relief from social media sources and gradually start to become addictive of it (Figure 2a & 2b).

The reward system of brain and dopamine circuit system acts similarly in people with social media addicts as in people with

A person becomes addictive of a particular thing when he/she wants to distract him/herself from everyday stresses of life

like emotional stress, financial problems, lack of interest in the particular job (Table 1). Now a day, people have more and easy access to social media and via this resource; they distract their focus from real life to virtual life. They get relief for the time being from this resource but the progression of its dependency ultimately cause cognitive problems, anxiety problems which can increase blood pressure and social isolation. This statement can be supported by a previous study which says that the Internet can provide social support, accomplishment and contentment of having power and provides break away from emotional and social life difficulty. Thus, people with high-level psychiatric symptoms may exploit the Internet to deal with emotional grief. Without helpful intervention for psychiatric symptoms, the utilization of the Internet might develop addiction (Koob & Le, 2008).

It is proved that those people obsessed to using social media encounter symptoms alike to those experienced by those who go through from addictions to substances or other behaviors (Figure 1, 2a, 2b & 3). This has important implications for clinical practice because it is distinct from other addictions; the aim of social media addiction management cannot be entire abstaining from the use of Internet as such since it is a vital component of today's professional and spare time culture. As an alternative, the eventual therapy intention should be restricted use of the Internet and its relevant purposes, mainly social networking applications, and waning avoidance via tactics evolved within cognitive-behavioral therapies (Kuss & Griffiths, 2011).

Conclusion

Our study showed that the addiction status of social media users group and smokers group was similar, social network abuse is as harmful as smoking for cognitive skills and blood pressure. As by now, it has been proved that social media addiction can

cause adverse symptoms as substance abuse addiction through many sources like brain scans, reduced cognitive skills, increased anxiety and blood pressure and social isolation, further studies could be done as to how this addiction can be improved, what treatment strategies should be used to overcome this type of emerging addiction.

Conflicts of Interest

None

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