

## **GE-International Journal of Management Research**

ISSN (O): (2321-1709), ISSN (P): (2394-4226)

Impact Factor- 5.779, Volume 5, Issue 12, December 2017

Website- www.aarf.asia, Email: editor@aarf.asia, editoraarf@gmail.com

# SOCIAL NETWORKING AND THE IMPACT ON MENTAL HEALTH OF EMPLOYEES

Dr. K. R. Subramanian

Professor of Management & Consultant

## **ABSTRACT**

During the past several years, online social networking has caused profound changes in the way people communicate and interact. It is to be seen, however, whether some of these changes may affect normal aspects of human behavior and cause psychiatric disorders. Several studies have indicated that the prolonged use of social networking sites (SNS), such as Face book, may be related to signs and symptoms of depression. In addition, some authors have indicated that certain SNS activities might lead to low self-esteem, especially in children and adolescents. Other studies have presented opposite results in terms of positive impact of social networking on self-esteem. Recently, however, some researchers have associated online social networking with several psychiatric disorders, including depressive symptoms, anxiety, and low self-esteem. Since social networks are a relatively new phenomenon, many questions regarding their potential impact on mental health remain unanswered. On the other hand, due to the popularity of these online services in the general population, any future confirmed connection between them and psychiatric diseases would pose a serious public health concern. This research paper focuses on the recent findings regarding the suggested connection between SNS and mental health issues such as depressive symptoms, changes in self-esteem, and Internet addiction.

**KEY WORDS:** Social networking, SNS impact on mental health, psychiatric disorders, depression and low self esteem.

## INTRODUCTION

According to Times of India dated 20<sup>th</sup> November, the burden of anxiety disorders is growing in India particularly among the literate among the urbanized states in India. In terms of DALYs (Disability Adjusted Life Years or lost years of healthy life) the Anxiety disorders were 40<sup>th</sup> in the list of causes across India in 1990. In 2016 it has jumped to 26<sup>Th</sup> place. It leads to crippling depression as per many Doctors, and drop in economic production. Dr. Pallabh Maulik, an AIIMS trained psychiatrist has stated "Urbanization is a contributor to higher levels of Anxiety Disorders and Depression". Mumbai based psychiatrist Harish Shetty has commented that anxiety disorder is the mother of all illness. Anxiety disorders can lead to Depression, self harm and suicides. Our traditional meditation practices can help check anxiety disorders as per Dr. Shetty.

During the past 10 years, the rapid development of social networking sites (SNSs) such as Face book, Twitter, MySpace, and so on has caused several profound changes in the way people communicate and interact. Although several studies have made the connection between computer-mediated communication and signs and symptoms of depression, this issue remains controversial in current psychiatry research. There are many potential reasons why a Face book user may have a tendency to become depressed, as there are numerous factors that may lead an already depressed individual to start to use or increase their use of SNS.

With the development of social networks, the time children and adolescents spend in front of the computer screens to have significantly increased. This has led to the further reduction of intensity of interpersonal communication both in the family and in the wider social environment. Although social networks enable an individual to interact with a large number of people, these interactions are shallow and cannot adequately replace everyday face-to-face communication. Since social networks are a relatively recent phenomenon, this potential relationship between their use and feelings of loneliness and depression has not yet been properly investigated. Most of the research on this issue has been published during the past few years, and so far, the scientific community has not been able to interpret and discuss the results fully.

One of the reasons why time spent on SNS may be associated with depressive symptoms is the fact that computer-mediated communication may lead to the altered (and often wrong)

impression of the physical and personality traits of other users. This may lead to incorrect conclusions regarding physical appearance, educational level, intelligence, moral integrity, as well as many other characteristics of online friends. It remains to be seen whether SNS addiction will ever be recognized as a separate mental disorder. It can be expected that in the future, this issue will be a focal point of many research studies, and that, in the years to come, it will become the subject of a wide debate among psychiatrists, psychologists, and other specialists. The final results and conclusions will have a substantial impact on the future organizations, particularly considering that online social networking affects such a large proportion of the world population.

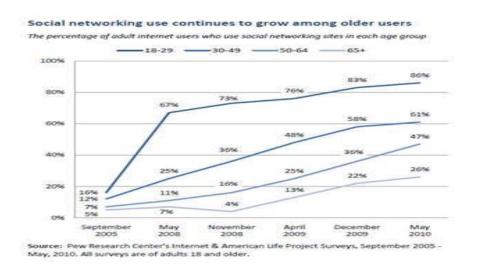


Figure 1: Social networks used by people of various

Age groups – Young and old

All of this is not to say that there's *no* benefit to social media—obviously it keeps us connected across great distances, and helps us find people we'd lost touch with years ago. But getting on social when you have some time to kill, or, worse, need an emotional lift, is very likely a bad idea. If you're feeling brave, try taking a little break, and see how it goes. And if you're going to keep using then at least try to use in moderation.

## **OBJECTIVES AND METHODOLOGY**

Recently there has been a growing concern and awareness about the effects of Social Networking on the health and mental stability of individuals. While there is rapid increase in social networking, the effects of that on individuals and communities and families of Employees

#### © Associated Asia Research Foundation (AARF)

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories.

working in industrial organizations has been a matter of discussion in all management circles. While social networking facilitates social contact and sometimes marketing of services and products, the impact of such exposure on the mental health of people is very much a matter of concern for the society at large and companies in particular. Present research will have the following specific Objectives and shall try and arrive at conclusions and suggestions for future.

- 1. A quick review of current environment of business.
- 2. How networking and computers are affecting business environment.
- 3. A review of social networking channels and impact on people.
- 4. Evaluation of networking impact on mental health of employees.
- 5. Conclusions from data analysis and specific recommendations

A research of this nature is fraught with problems of finding suitable methodology and data for analysis. On a review of literature available on the related topics it was found that adequate data is available for consideration. The challenge for the researcher was to identify the data and source, classify and collate the data for arriving at reasonable conclusions. However this has been done successfully and the result is the research paper as presented in the following pages. While every effort has been made to acknowledge sources of data, the author would like to apologize for any lapses in acknowledgement or reference, which is not intentional.

## **REVIEW OF LITERATURE**

In 1998, Kraut et al. published one of the first studies to indicate that Internet use in general significantly affects social relationships and participation in community life. In this research, the authors found that increased time spent online is related to a decline in communication with family members, as well as the reduction of the Internet user's social circle, which may further lead to increased feelings of depression and loneliness. This work was later followed by several other publications where it was suggested that computer use may have negative effects on children's social development.

Instagram is the most detrimental social networking app for young people's mental health, followed closely by Snapchat, according to a new report by the Royal Society for Public Health in the UK. Their study, called Status of Mind, surveyed almost 1,500 young people aged 14 to 24 on how certain social media platforms impact health and well-being issues such as anxiety,

depression, self-identity and body image. YouTube was found to have the most positive impact, while Instagram, Snapchat, Facebook and Twitter all demonstrated negative affects overall on young people's mental health. Instagram -- the image-saturated app with over 700 million users worldwide -- topped the list in terms of negative impact, most notably among young women, stated the report, published Friday. Instagram draws young women to "compare themselves against unrealistic, largely curated, filtered and Photoshopped versions of reality," said Matt Keracher, author of the report. "Instagram easily makes girls and women feel as if their bodies aren't good enough as people add filters and edit their pictures in order for them to look 'perfect,' "an anonymous female respondent said in the report.



Figure 2: Instagram addiction in UK

To tackle the problem, the Royal Society for Public Health has called for social media platforms to take action in order to help combat young users' feelings of inadequacy and anxiety by placing a warning on images that have been digitally manipulated. According to a British Psychological Society, approximately 90 percent of teenagers are on social media. Constantly seeing what their peers are doing on a day-to-day basis can be damaging to their mental health.

The effects that social media can have on teenagers' mental health can be summarized as below:

• Increased time, increased risk. The more time adolescents are engaged with social media outlets, the higher the risk there is for poor sleep, low self-esteem, and increases in depression or anxiety. The more emotionally invested they are in one site in particular, the more pressure and anxiety they may experience to be available and up-to-date at all times.

- **Poorly advised.** It's nothing new; teens have always been wary of asking parents or other adults for advice. With hundreds of friends on social media in the palm of their hands, teenagers often turn to social networks to seek advice that is often misguided.
- **Instigated fights**. Cyber bullying has become a concern for parents of adolescents. Strangers, even friends, are able to hide behind the screen and say things they often wouldn't be able to face-to-face. Teens often encounter fights on Face book, sub-tweeting on Twitter and hurtful comments on Instagram tactics often used just for the purpose of putting down others.
- Skewed perceptions and social comparison. It is common for teens, especially girls, to experience pressure to appear "perfect" online. The need to appear to have perfect hair, to look skinny or fit, to have the perfect group of friends or the need to get the right amount of likes can consume teens. Not meeting these invisible standards can cause self-loathing and self-doubt. Social comparison, loneliness and jealousy can result when friends on social media "appear" more popular and attractive or on a glamorous vacation, which can trigger depressive feelings.



Figure3: Youngsters wedded to their mobiles

With social media a simple click away, how can parents help their teens? Dr. Lara Jakobsons, PhD, Psychologist at North Shore suggests:

• **Education**. It is beneficial for parents to understand what social media is being used for by their teen and how. Being educated in how they use it will help parents understand the risks involved.

- Communication. Parents should have frequent conversations with their teens about the safety of social media, how much personal information should and shouldn't be shared and about cyber bullying. Studies show that teenagers who had their parents talk to them often, engaged in less risky behaviors.
- Monitor time. Enforce rules\_to limit excessive use of social media. Examples of limiting time may include no phones at the table, no phone in car rides during errands or turning off Wi-Fi at bedtime.
- **Healthy attitudes.** To minimize social comparison and envy, parents and teens should talk about the distorted views of friends' lives that are presented on social media. Teens should feel confident, not more depressed, after viewing social media. Encourage using social media not only to post about our best moments but our quieter ones.

While social media can be harmful, there are benefits that can come from it. Social media offers a safe environment and support for teenagers, which they may lack in traditional friendships. We need to teach children how to cope with all aspects of social media -- good and bad -- to prepare them for an increasingly digitized world. There is real danger in blaming the medium for the message.

In a recent study in a high school student population, it was found that a statistically significant positive correlation between depressive symptoms and time spent on SNS. As it is thought that Face book may be one of the factors influencing the development of depressive symptoms, it is also assumed that certain characteristics of online behavioral may be predictive factors in depression identification and assessment. However, it should be stressed that there is still no conclusive evidence that use of Face book and other SNS causes depression or even a single symptom of depression. Kraut et al., the authors of the above-mentioned study on Internet and depression, recently published results indicating that online communication with friends and family (done on SNS) is actually associated with a decline in depression. It seems that when social networks and the Internet in general are used to strengthen and maintain social ties, particularly within family members and close friends, the resulting social support has beneficial effects on mental health. On the other hand, extensive use of SNS outside these circles might weaken existing close family and friend interactions and increase feelings of loneliness and depression.

One of the possible explanations regarding the negative relationship between Face book and self-esteem is that all social networking platforms where self-presentation is the principal user activity cause or at least promote narcissistic behavior. Individuals with lower self-esteem are more active online in terms of having more self-promotional content on their SNS profiles. Objective self-awareness theory suggests that any stimulus causing the self to become the object (instead the subject) of the consciousness will lead to a diminished impression of the self. These stimuli include looking at oneself in a mirror, hearing one's own voice, writing one's own curriculum vitae, or any other situation during which the subject's attention focuses on the self. It is probable that a typical Face book user will every day have multiple visits to his/her own profile page during which he will view his already posted photographs, biographical data, relationship status, and so on. All of these events, especially in light of similar data obtained from other users' profiles, may lead to either a short-term or a long-term reduction in self-esteem.

It is probable, however, that the overall impact of SNS on self-esteem is much more complex. Constant self-evaluation on an everyday basis, competition and comparing one's own achievements with those of other users, incorrectly perceiving physical/ emotional/social characteristics of others, feeling of jealousy, and narcissistic behavior—these are all factors that may positively or negatively influence self-esteem. Unfortunately, despite several research efforts during the past decade, this issue still remains unresolved, and probably many years will pass before we comprehend the true nature of this relationship.

Addiction to online social networking, as well as Internet addiction in general, is recent and insufficiently investigated phenomena, frequently discussed and sometimes disputed in the psychiatric literature. The addictive nature of SNS is supported primarily by the mental preoccupation of many chronic SNS users who as a result tend to neglect other aspects of their social functioning such as family and offline friends. In addition, sudden cessation of online social networking (i.e., lack of Internet connection) may in some chronic users lead to signs and symptoms that at least partially resemble the ones seen during drug/alcohol/nicotine abstinence syndrome. Online social networking as a potential addiction disorder has so far been discussed in many publications. SNS addiction represents a relatively new issue in psychiatry research, and as with other potentially SNS-related disorders, many questions remain unanswered.

It should be noted that most of the research done so far on social networking and mental health was done on a healthy population (i.e., high school students, university students, adolescents in general). When it is stated that, for example, "time spent on social networking is related to depression," the authors usually mean that this time correlates with physiological mood oscillations (measured with various psychological scales), rather than depression as a clinical entity. We should always have in mind that not all of the social networks are the same. The largest and most popular SNS, Face book, is based on creating and updating personal profiles, where users can upload photos, videos, comments, statuses, and notes. It is clear that during the past 10 years, online social networking has caused significant changes in the way people communicate and interact. It is unclear, however, whether some of these changes affect normal aspects of human behavior and cause psychiatric disorders. In the future, additional research will be needed to identify and describe the potential relationship between the use of SNS and various mental health issues.



Figure 4: Addiction is a reality!?

Experts have not been in total agreement on whether internet addiction is a real thing, let alone social media addiction, but there's some good evidence that both may exist. A review study from Nottingham Trent University looked back over earlier research on the psychological characteristics, personality and social media use. The authors conclude that "it may be plausible to speak specifically of 'Face book Addiction Disorder'...because addiction criteria, such as neglect of personal life, mental preoccupation, escapism, mood modifying experiences, tolerance and concealing the addictive behavior, appear to be present in some people who use [social networks] excessively." (They also found that the motivation for people's excessive use of social

networks differs depending on certain traits—introverts and extroverts use it for different reasons, as do people with narcissistic traits. But that deserves a piece of its own.)

One study, a few years ago, found that Face book use was linked to both less moment-to-moment happiness and less life satisfaction—the more people used Face book in a day, the more these two variables dropped off. The authors suggest this may have to do with the fact that Face book conjures up a perception of social isolation, in a way that other solitary activities don't. "On the surface," the authors write, "Face book provides an invaluable resource for fulfilling such needs by allowing people to instantly connect. Rather than enhancing well-being, as frequent interactions with supportive 'offline' social networks powerfully do, the current findings demonstrate that interacting with Face book may predict the opposite result for young adults—it may undermine it."

Cyber bullying is an enormous concern, especially for adolescents. An organization that aims for internet safety, called Enough is Enough, conducted a survey that found 95% of teenagers who use social media have witnessed cyber bullying, and 33% have been victims themselves. This is an electronic aggressive behavior and needs a lot of attention, research and solutions.

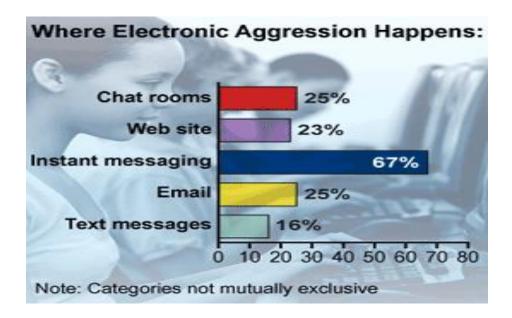


Figure 5: Cyber bullying

Part of the reason Face book makes people *feel* socially isolated (even though they may not actually be) is the comparison factor. We fall into the trap of comparing ourselves to others as we

scroll through our feeds, and tend to judge about how we measure up. But in the social network world, it seems that any kind of comparison is linked to depressive symptoms. It's no secret that the comparison factor in social media leads to jealousy—most people will admit that seeing other people's tropical vacations and perfectly behaved kids is envy-inducing. They add that it can become a vicious cycle: feeling jealous can make a person want to make his or her own life look better and post jealousy-inducing posts of their own, in an endless circle of one-upping and feeling jealous. Part of the unhealthy cycle is that we keep coming back to social media, even though it doesn't make us feel very good... But a follow-up experiment showed that people generally believed that they'd feel better after using, not worse, which of course turns out not to be the case at all, and sounds a lot like the pattern in other types of addiction.

A study that explored the relationship between teenagers, social media, and drug use found that 70% of teenagers ages 12 to 17 use social media, and that those who interact with it on a daily basis are five times more likely to use tobacco, three times more likely to use alcohol, and twice as likely to use marijuana. In addition, 40% admitted they had been exposed to pictures of people under the influence via social media, suggesting correlation between the two factors. Although a correlation is all it is, it makes sense that social media would amp up the amount of peer pressure to which teenagers are exposed. A study from the University of Michigan collected data about Face book users and how it correlated with their moods. Simply put, they found that the more avid users were unhappy than those who used the site less. Over more time, avid users also reported lower satisfaction in their lives overall.



Figure 6: Social media discretion

Social media usage and corresponding discretion in continuous usage is with the young and the author hopes that sanity will prevail.

## DATA ANLYSIS AND CONCLUSION

Current business environment is challenging for most companies because it is very difficult to predict. The speed of doing business is one of the more prominent features of this environment. Competition s quite fierce and only the fittest will survive. Present environment is characterized by usage of computer and hand held devices like mobile phones and other apps. Social interactions through networks and e-mails are more popular and have reduced the person to person contact.

Business is conducted through networking and social networks are quite popular. Social media interaction brings its own problems along with the attractions. Depression, Low self esteem and Addiction are the major negative consequences of exposure to social media and networks without discretion. Depression, low self esteem, Addiction to social networking, Feeling of unhappiness or sadness all have been illustrated in the above paragraphs. One other important reason cited in literature is the addiction which is becoming chronic.

Businesses have to employ people and young people are the targets. Some networking habit is useful for business as business contacts are possible and aster ways of doing business may emerge. Networking is encouraged by businesses, but social networking is in the domain of the individual employee. Employees are trained and the development programs emphasize the need for discretion in social networking. Now organizations are compelled to permit usage of certain handheld devices and mobile apps which cannot be avoided. However it has been seen from the experiences of employers and employees that social networking has positive and negative consequences. Continuous and indiscrete usage leads to depression and other associated symptoms. If these symptoms are not detected early and corrective actions taken the employee will be lost forever.

The growing usage of mobile devices and the proliferation of such devices, authorized and unauthorized have led to a lot of organization problems. 'Cyber bullying' is a recent phenomenon which is catching the attention of psychologists and parents. This is a major concern for present day organizations and they are in the process of finding ways and means to deal with this menace!

Story from Times of India dated 21<sup>st</sup> November 2017: In spite of the Government holding a series of discussions with Scientists, Information media specialists and Internet and social media companies, no solution could be found against the 'Blue whale' menace i.e. to spread the awareness and block the game. In spite of supreme-court seeking an opinion, from the government against banning of the game which has resulted in 200 suicides, the internet and social media companies like Google and Face book expressed their inability to block the game. On the same day Times of India carried and advertisement (Full page front cover – inescapable from view) from one of the leading Mobile manufacturing companies on the front page covering the headlines. The advertisement content is about smart phone usage. It is stated that about 66% people check their phones before getting out of bed in the morning. It goes on to say that it connects distant people and only about 45% of people would find it easy to stay away from smart phones for about a week than their families. For the first time, the advertisement quotes that will provide in depth 'analysis of possible causes and the overall impact' of new technologies Indian Society of Applied behavioral Sciences (ISABS) . It is claimed that this provide and understanding of the behavioral consequences.

On the same day and in the same paper, page 5, reports, findings of a study which conclusively states the impact of social networks on the teenagers leading to higher levels of depression and suicidal tendencies. The study indicated that the usage of smart phones for more than 5 hours per day has increased from 9% to 19% of the users, particularly the teens between the age of 13 and 18. One expert who wants to remain anonymous has stated, "The nature of social media, with its immediacy, anonymity and huge potential for bullying, the medium has a unique potential for causing real harm to young teens who spend hours glued to their telephones".

In conclusion the author would like to state that the consequences of over indulgence in mobile devices and loss of discretion among employees and the organizational response to such a problem are currently engaging the attention of management thinkers and research analysts. Since some irreversible consequences are possible Management of organizations are duly concerned and warned about it.

## RECOMMENDATION

It can be expected that future research regarding the potential effects of online social networking on mental health is going to be faced with numerous difficulties. First, so far, many authors investigating this issue have used a cross-sectional study approach in their methodology, followed by correlation analysis. The existence of a correlation does not necessarily equal causality. For example, Face book and self-esteem may be related in terms of Face book usage, causing lower self-esteem, but this may also mean that people with low self-esteem use Face book more often. In other words, it is very difficult, and sometimes impossible, to conclude which variable is the cause and which is the effect. In the future, longitudinal designs would be much more helpful in determining the effects of SNS use on mental health. Ultimately, the data obtained from experimental studies would enable us to draw definite conclusions on this relationship.

## REFERENCES -PRINT AND PUBLICATION

- 1. Kraut R, Patterson M, Lundmark V, et al. Internet paradox: A social technology that reduces social involvement and psychological well-being? The American Psychologist 1998; 53:1017–1031.
- 2. Subrahmanyam K, Kraut RE, Greenfield PM, et al., The impact of home computer use on children's activities and development, The Future of Children/Center for the Future of Children, the David and Lucile Packard Foundation 2000; 10:123–144
- 3. Pantic I, Damjanovic A, Todorovic J, et al. Association between online social networking and depression in high school students: behavioral physiology viewpoint. Psychiatria Danubina 2012; 24:90–93
- 4. Jelenchick LA, Eickhoff JC, Moreno MA. "Facebook depression?" Social networking site use and depression in older adolescents. The Journal of Adolescent Health 2013; 52:128–130
- 5. Pantic I. Social networking and depression: an emerging issue in behavioral physiology and psychiatric research. The Journal of Adolescent Health 2014; 54:745–746.
- 6 Chou HT, Edge N. "They are happier and having better lives than I am": the impact of using Face book on perceptions of others' lives. Cyber psychology, Behavior & Social Networking 2012; 15:117–121

- 7 Shaver PR, editor. eds., Measures of personality and social psychological attitudes, San Diego, CA: Academic Press, pp. 115–155
- 8 Trzesniewski KH, Donnellan MB, Moffitt TE, et al. Low self-esteem during adolescence predicts poor health, criminal behavior, and limited economic prospects during adulthood. Developmental Psychology 2006; 42:381–390
- 9 Sowislo JF, Orth U. Does low self-esteem predict depression and anxiety? A metaanalysis of longitudinal studies. Psychological Bulletin 2013; 139:213–240
- 10 Griffiths LJ, Parsons TJ, Hill AJ. Self-esteem and quality of life in obese children and adolescents: a systematic review. International Journal of Pediatric Obesity 2010; 5:282–304
- 11 Mann M, Hosman CM, Schaalma HP, et al. Self-esteem in a broad-spectrum approach for mental health promotion. Health Education Research 2004; 19:357–372
- 12 Fioravanti G, Dettore D, Casale S. Adolescent Internet addiction: testing the association between self-esteem, the perception of Internet attributes, and preference for online social interactions. Cyber psychology, Behavior & Social Networking 2012; 15:318–323
- 13 O'Dea JA, Abraham S. Improving the body image, eating attitudes, and behaviors of young male and female adolescents: a new educational approach that focuses on self-esteem. The International Journal of Eating Disorders 2000; 28:43–57
- 14 Obeid N, Buchholz A, Boerner KE, et al. Self-esteem and social anxiety in an adolescent female eating disorder population: age and diagnostic effects. Eating Disorders 2013; 21:140–153.
- 15 Orth U, Robins RW, Roberts BW. Low self-esteem prospectively predicts depression in adolescence and young adulthood. Journal of Personality & Social Psychology 2008; 95, 695–708.
- 16 Mehdizadeh S. Self-presentation 2.0: narcissism and self-esteem on Face book. Cyber psychology, Behavior & Social Networking 2010; 13:357–364
- 17 Buffardi LE, Campbell WK. Narcissism and social networking Web sites. Personality & Social Psychology Bulletin 2008; 34:1303–1314
- 18 Tucker JH. Status update: "I'm so glamorous." A study of Facebook users shows how narcissism and low self-esteem can be interrelated. Scientific American 2010; 303:32.
- 19 AIIMS, 2017, George Institute for Global Health, New Delhi as reported in Times of India, Chennai, and November 20. pp 11.

- 20 Szekeres A, Tisljar R., Narcissism in the world of Face book. An evolutionary psychopathological interpretation. Psychiatria Hungarica 2013; 28:440–453.
- 21 Kapidzic S., Narcissism as a predictor of motivations behind Face book profile picture selection. Cyber psychology, Behavior, & Social Networking 2013; 16:14–19
- 22 Gonzales AL, Hancock JT. Mirror, on my Face book wall: effects of exposure to Face book on self-esteem. Cyber psychology, Behavior, & Social Networking 2011; 14:79–83
- 23 Duval S, Wicklund RA. (1972) A theory of objective self-awareness. New York: Academic Press
- 24 La Barbera D, La Paglia F, Valsavoia R. Social network and addiction. Studies in Health Technology & Informatics 2009; 144:33–36
- 25 Kuss DJ, Griffiths MD. Online social networking and addiction—a review of the psychological literature. International Journal of Environmental Research & Public Health 2011; 8:3528–3552
- 26 Floros G, Siomos K. The relationship between optimal parenting, Internet addiction and motives for social networking in adolescence. Psychiatry Research 2013; 209:529–534
- 27 Echeburua E, de Corral P., Addiction to new technologies and to online social networking in young people: a new challenge, Adicciones 2010; 22:91–95
- 28 Koc M, Gulyagci S., Face book addiction among Turkish college students: the role of psychological health, demographic, and usage characteristics. Cyber psychology, Behavior, & Social Networking 2013; 16:279–284
- 29 Andreassen CS, Torsheim T, Brunborg GS, et al. Development of a Face book Addiction Scale. Psychological Reports 2012; 110:501–517
- 30 Wolniczak I, Caceres-DelAguila JA, Palma-Ardiles G, et al. Association between Face book dependence and poor sleep quality: a study in a sample of undergraduate students in Peru. PloS One 2013; 8:e59087.