Review Paper

The Impact of Internet Addiction on Emotional Regulation and Communication Skills: Review

Sonam Yadav[1]*, Dr. Dolly Bansal[2]

ABSTRACT

Internet has become a significant part of our life in today's world. Internet addiction has become so common in present time with increasing number of individual's experiencing compulsive and excessive internet use. This review paper analyses the existing literature to examine the impact of internet addiction on emotional regulation and communicational skills. Various studies have showed that excessive internet use is associated with enhanced level of stress, loneliness, anxiety, depression and low self-esteem as well. Individual with internet addiction shows difficulties in emotional recognition and emotional regulation. Internet addiction can play a crucial role in emotional numbing and desensitization which impair the individuals' ability of expressing emotions and empathy towards others. Following the impact of internet addiction on emotional regulation, the review also examines the impact of internet addiction on communication skills. Research findings demonstrate that excessive internet use adversely affect the communication skills. Internet addiction adversely affects face-to face interactions, enhance dependency on digital communication platforms and hinder interpersonal interaction. Individuals who suffer from internet addiction are likely to have difficulties in starting and sustaining conversations, misinterpreting social cues, and face difficulty while interpreting complex social situations. The review clearly point out the negative effect of internet addiction on emotional regulation and communication skills. The review also highlights the need of multifaceted intervention for promoting adaptive emotional regulation intervention and enhancing communication skills and designing intervention for healthy internet usage.

Internet addiction is recognized as compulsive use of the internet. Internet addiction has recently been in focus as a disorder that negatively impacts different facets of the affected individual's life. Internet addiction, as proposed by Davis (2001), is understood as an individual's lack of control over the use of the internet which causes such feelings of distress, and social, occupational, academic or recreational malfunctioning. Internet addiction which also can be referred to as problematic internet use, compulsive internet use, or pathological internet use pertains to the behaviour that includes excessive and

---

[1]Assistant Professor, R. C. A Girls' PG College, Mathura, UP, India.
[2]Scientist 'F', Defence Institute of Psychological Research, Timarpur, Delhi, India.
*Corresponding Author

uncontrollable use of the internet making the individual experience repercussions in several spheres of his or her life. This comprises inability to regulate or restrain use of the internet while being fully conscious of the detrimental impact that it has to individuals' physical and mental health, on social interactions, academic or work productivity, and in other spheres of life (Young, 1996).

Internet addiction encompasses a range of online activities, like:
Gaming Addiction: A problem characterized by an inability to manage everyday responsibilities and the presentation of both physical and emotional symptoms when one is deprived of gaming, particularly in MMORPGs (massively multiplayer online role-playing games) or other similarly engaging environments (Griffiths et al., 2012).

Social Media Addiction: Excessive use of social networking sites (for instance, Facebook, Instagram, Twitter) has negative impact on the social relations, interpersonal relationships and self-esteem (Andreassen et al., 2017).

Online Shopping Addiction: Compulsive buying – inability to control one's buying or shopping, whereby one experiences such consequences as financial difficulties, excessive acquisition of products or items, emergence of guilt, or feelings of regret (Müller et al., 2015).

Cybersex Addiction: Excessive use of the internet for sexual purposes, including use of pornography, using cybersex chat rooms or dating apps to find partners for sex, resulting in a deterioration of the individual's capability to maintain healthy sexual relationships in real life (Kraus et al., 2016).

Information Overload: Compulsive use of online websites, news and entertainment content leading towards decrease in attention span, adversely affect the productivity and create cognitive burden (Dong et al., 2013, Lee et al., 2017, Lin et al., 2015). Although not categorized as a disorder in DSM-5 or ICD-11, internet addiction is acknowledged as an important public health issue based on its adverse effects on the lives of Individual's (Cash et al., 2012 & Young et al., 2011). While the detrimental consequences of internet addiction on mental health and social functioning are well-documented, its specific impact on emotional regulation and communication skills needs to be further investigated. This paper aims to study the impact of internet addiction on emotional regulation and communication skills. For this purpose, investigator reviewed and synthesized available related literature on this topic.

METHODOLOGY

The database used for this review paper were Google Scholar, Scopus, Research Gate, Academia.edu, APA PsyINFO, National Library of Medicine and ScienceDirect with the following keywords: Internet Addiction, Problematic Internet use, Internet Addiction and Emotional Regulation, Internet Addiction and Communication skills, Internet use, Social Media Addiction, Gaming Addiction and Social Network Addiction. Total 20,200 research papers were available regarding the given key words. Inclusion Criteria for the present review paper were (i)Studies published from 2014 to 2024 (ii) Studies published in English (iii) Studies related to Internet Addiction, Emotional Regulation and Communication skills. Exclusion Criteria for the present review paper were (i) Studies containing scale validation, dissertations and Conference Proceedings. (ii)Studies having imprecise data and lack of basic information. (iii) Population with previous disorders or pathologies other than Internet

addiction. After analyzing studies for inclusion and exclusion criteria, only 28 studies were retained and used for this review paper.

DISCUSSION

Internet Addiction and Emotional Regulation

Internet addiction due to its overindulgence and compulsive nature has been recognized as a serious problem in the contemporary society. In addition to its effects on efficiency and interactions with other people, internet dependency can alter the method of experiencing, demonstrating, and controlling feelings. (Effatpanah, 2020). Emotion regulation refers to the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions. (Gross, 1998).

Dysregulation of Emotional Responses: Emotional responses may be altered due to excess internet use like increased reactivity or impulsivity, or lack of affect altogether. Gaming and related activities can activate states of excitement and frustration or anxiety, which individuals may find difficult to control; hence they are addicted to it. The fast-paced and disruptive manner of people's interaction on the Internet can override the ability to regulate feelings and lead to various psychopathological conditions or avoidance behaviour (Gioia et al., 2021).

Escapism and Emotional Avoidance: One of the main patterns of Internet use is escapism, when people do not deal with bad feelings and distract themselves by Internet usage. Individuals turn to the internet and compulsively engage in its use as an attempt to escape the stressors or emotional issues, thus, simply avoiding them and becoming emotionally dependent on the internet. Nevertheless, it has also been reported that chronic emotion regulation may harm the development of healthy coping strategies and even worsen the level of emotional suffering, thus promoting addiction (Melodia et al., 2020 & Yildirim Demirdöğen et al., 2024).

Impaired Emotional Awareness and Expression: Regardless of gender, constant use of the Internet may result in a decrease in awareness of their emotional states because constant exposure to stimuli from the external environment weakens sensitivity to internal cues and a person's ability to reflect on his or her own feelings. In cyberspace communication, there is sense of detachment and anonymity which inhibits people to express them emotionally. A superficial or idealised presentation of self on internet leads towards emotional vulnerabilities. Individual may feel difficulty in expressing feelings coherently or one's emotions being less clear to them; or one may run to look for social validation and support on social networks, which re-affirms the culture of repression or seeking external approvals. (Chen et al., 2017)

Interference with Social Bonds and Empathy: Internet addiction can deteriorate the quality of real-life social interaction, limits the opportunities for developing true social relations, experiencing close affection and decrease in understanding of other people's emotions. Relying on computer-mediated communication may reduce the individual's ability to understand the emotional cues of their counterparts, rendering empathy and understanding of other person's perspective which is important for a healthy social relationship to maintain. User interactions on social network sites are strictly impersonal, online communication may foster disinhibition and desensitization to the emotions of others which causes interpersonal conflicts or social alienation. (Jiao et al., 2017)

In a review by Gioia et al., (2021) found that Problematic Internet Use (PIU) may act as a coping strategy for young people to deal with Emotional regulation deficits. The lack of social support and poor parent adolescent relationship seem to affect the Emotional regulation skills of the adolescents hence increasing the vulnerability to develop the Problematic internet use. Also, high level of metacognition might act as a safeguard towards emotional dysregulation and Problematic internet use. Additionally, it's pointed out that men who experienced emotional dysregulation are likely to engage in more problematic Internet use than women. Therefore, these findings have major practical relevance to the construction of health prevention and promotion intervention, intervention based on emotion regulation training and training/therapy. A study by Garcia & Rodriguez (2020) revealed that internet addicted adolescents exhibited poorer emotional regulation skills than non-addicted adolescents. Lack of control on one's emotions was deemed to lead to overuse of the internet. A study conducted by Chen et al., (2017) revealed a positive correlation between deficits in recognizing disgust facial expressions and Internet addiction. Perceived stress was found as a mediator in this association. However, the same findings did not apply to other facial expression as Ad hoc analyses showed that recognizing disgust facial expression was more difficult in comparison to other facial expressions. Means it involves highly developed social skills based on cognition. These studies establish a relationship between the deficit of social skills and Internet addiction more clearly and can provide recommendations for practitioners to work to enhance the social skills. Such interventions could possibly help to reduce perceived stress and Internet addiction.

Karaer & Akdemir (2019) in a study discussed about the emotional problems reported in adolescents with Internet Addiction, they are impaired in the ability to process, describe and manage their feelings and prevent impulsivity when undergoing through certain negative emotions. They also distinguished that those, who are inclined to internet addiction, have shortcomings in the sphere of effective regulation of emotions. Hormes et al., (2014) have mentioned that internet addiction affects self-regulation of emotion; the symptoms involve avoidance, reluctance to accept the feelings, lack of availability of the effective methods to regulate feelings, poor control over impulses and problems with staying on track towards a goal. Thus, this pattern of emotion regulation skills in internet addicted individuals may increase the susceptibility to addiction, irrespective of substance use.

A research finding by Wu et al. (2015) suggested that adolescents who have secure parental attachment with their parents have better emotional regulations skills which may prevent them from internet addiction, whereas adolescents with insecure parental attachment are more likely to have emotional dysregulation and that might lead them towards internet addiction. Secure parental attachment might serve as protective factor for internet addiction. A study by Evren et al., (2018) highlighted that internet addiction in the youths was significantly correlated with poor emotional regulation and this is provided that it would be moderated by experiential avoidance and desire (Faghani et al., 2020). Concerning the strategies that may help to reduce the negative impacts of internet addiction must focus on increasing emotional regulation skills and design interventions for enhancing emotional regulation.

The findings of the study by Nabila et al., (2017) identified that the internet addiction has a very significant relationship with emotional instability among students. Thus, this variation in the emotional stability may be proven to cause low performance as perceived from the aspect of academics. Findings of the study also reveal that internet addiction negatively affects the academic performance of students directly. Ha & Hwang (2014) study showed it

can be stated that boys are more likely to suffer from Internet addiction than girls. Surprisingly, girls with emotional problems that would make them subjectively unhappy or exhibit depressive symptoms were more vulnerable to Internet addiction if the boy had the same type of problem. These results imply the need to develop the Internet Addiction prevention and treatment programs that target the specific needs of both boy and girls. In a systematic conceptual review by Marciano et al., (2022) suggests that neuroticism acts as predictor of Internet Addiction, which may leads to various health impacts including decrease in well-being and poor academic or cognitive performance. The model also suggests that coping styles, maladaptive cognitions, and low cognitive control are the partial mediators between Neuroticism and Internet addiction.

Focusing on emotional regulation deficits is integral part in the treatment of Internet addiction, an multifaceted approach is required for internet addiction intervention which must encompasses cognitive-behavioural therapy, emotion-focused therapy, and mindfulness-based interventions (Sinha et al., 2021). Internet addiction alters the person's ability to regulate emotions greatly, leading to emotional dysregulation, avoidance behaviour and interpersonal difficulties (Trumello et al., 2018). By focusing on emotional vulnerabilities and enhancing coping strategies, it is possible to enhance greater emotional self- resilience and decrease maladaptive internet use (Marciano et al., 2022). These studies also consistently confirm that the relationship between Internet addiction and emotional regulation. Therefore, it might be concluded that the shortcoming of emotional regulation skills is a crucial component to consider in intervention programs when dealing with Internet addiction.

Internet Addiction and Communication Skills
Communication skills refer to the ability to interact with others effectively, convey information, thoughts, ideas and feelings to others and vice versa, listen actively and understand the signs and signals which includes verbal and non-verbal cues that are pertaining in communication (DeVito, 2019). The internet had dynamically revolutionized the way people communicate and interact with others. There are many benefits of internet usage but at the same time excessive internet usage may lead towards the internet addiction and have negative impact on various aspects of life like communication skills - individuals may face issues in expressing themselves in social setting due to internet addiction (Chou et al., 2017 & Ahmedi et al., 2012).

Impaired Face-to-Face Communication: The excessive use of internet negatively affects face-to-face communication, as individual spends significant time engaging in online activities rather than interacting with others in real life social situations. This lack of interpersonal interaction hinders the ability to express emotions, keep eye contact, and interpret other people's body languages which are crucial aspects of effective communication. Social interaction happens through screen or chat only may lead to poor communication skills (Hao et al., 2022 & Chou et al., 2017).

Reduced Social Skills: Internet addiction has been linked to declining social skills, including initiating and maintaining conversations, understanding others' emotions and resolving conflicts. Too much reliance on online communication platforms might impede vital social skills because people may find it difficult in dealing with real-life social relationships and also discerning social cues. Less chances of face-to-face interaction and social involvement alienates people from society leading to a feeling of being socially isolated, loneliness, and

the difficulty in forming meaningful connections with others. (Chou et al., 2017 & Engelberg, 2004).

Impact on Verbal and Written Communication: Internet addiction is known to have a negative effect on verbal and non-verbal communication. People might encounter challenges in being able to express ideas in a structured manner or in social interactions, in the ability to have fluent communication, or to explain ideas when speaking out. When communicating in writing through social media posts, emails or texts, internet addiction may result in use of acronyms or casual language which affects the clarity or leads to lack of professionalism. Consequently, overusing digital communication platforms might lead to reduced vocabulary knowledge, fluency of the language and enhanced spelling errors which affects the quality of written communication. (Darani et al., 2022 & Özer et al., 2023).

Problems with active listening and empathy: Internet addiction can impair the capacity of active listening because people easily get distracted by notifications, engage in multitasking or are lured by online contents whilst conversing. The decreased ability to actively listen can hamper empathy and comprehension between individuals during interpersonal interactions since they may not fully understand the other person's viewpoint and feelings. Lack of empathy towards others experiences or emotions can strain interpersonal relationships leading to miscommunications or arguments (Collins, 2014).

A study by Hao, et. al, (2022) found that internet addiction and interpersonal relationship problems are positively correlated. In particular, Internet Addiction had been linked to difficulties in various aspects of social interaction including communication skills, forming new bonds, handling social situations and social interaction with the opposite sex. This research provides new direction in the designing of intervention for Internet addiction. A study by Reddy et al., (2022) indicated that there is negative correlation between internet addiction and emotional expressivity as well as social sensitivity. Lower levels of emotional expressivity and social sensitivity were also predicted by internet addiction. Decreased ability of emotional expression and lack of social recognition cues were linked to internet addiction.

The findings of the study by Ozer et al., (2023) indicate that internet addiction has a significant correlation with impairments in emotional regulation and communication skills. Specifically, students who are categorised in the 'risky group' for the internet addiction showed adverse communication skills and higher levels of difficulty in regulating their emotions when compared to other students. This suggests that, internet addiction could be damaging not only in the concern to internet usage but also interpersonal communication and individual's emotional regulation and health. In a study by Samantray, (2015) stated that virtual relationship create a hug gap in face to face conversation. Virtual relationship lacks the elements of nonverbal communication like facial expression, gesture, tone and touch. Individuals usually live in their imagination and create a beautiful of image of online partner. This ultimately diminishes the need for genuine communication and intimacy with their real life partners. Internet addiction also adversely affects relationship with family as the individual avoid taking up family responsibilities, not showing up to the family in need and avoiding communication with family. Due to internet addiction individual cut their social ties, live in isolation and their self-created world where they can't demarcate between real and virtual world. In a study by Cai et al., (2021) talks about the Parent –child communication and internet addiction. In the study it was found that the lack of parent supervision may contribute to the internet addiction in children. It was suggested to the

migrant parents to improve their quality of communication with their children for avoiding the risk of internet addiction. A study by Jaiswal et al., (2020) indicated that there is relationship between internet addiction and communication anxiety. It was found that those individuals who are addicted to internet reported higher level of communication anxiety compared to non-addicted individuals. Internet addiction was also associated to face-to-face communication and social interaction as on social sites there is lack of verbal and nonverbal clues.

The study by Öztekin et al., (2024) revealed that internet addiction is related with increased psychological distress and decreased school engagement. Study also revealed the negative relationship between psychological distress and school engagement. This study also found that depression, stress and anxiety acted as mediators in the relationship between internet addiction and emotional, behavioural and cognitive engagement. Students who excessively engaged in internet use will show adverse engagement in college and may face psychological problems as well. Findings of the study also highlighted the need for special education intervention technique for encouraging the college for limiting internet usage due to its adverse effects. A study by Wang & Zhang (2024) indicated that there is an adverse relationship between internet addiction and loneliness and that this relationship is mediated by impaired communication. Poor communication ability may leads towards the feeling of isolation and loneliness among the internet addicted individuals.

These studies emphasizes the deleterious impact of internet addiction on various aspects of communication skills, emphasizing on the requirement of interventions aimed at improving face-to face communication and encouraging healthy social relationships. Psychological issues may also bring Internet addiction and/or communication skills deficits including low self-esteem, social anxiety and depression. (Albikawi, 2023 & Bayzan et al., 2024). Focusing on these underlying issues through intervention and various therapy techniques may help in decreasing the symptoms of internet addiction and enhancing the communication skills which may lead to improved social interactions. The impact of internet addiction may vary across cultures and context. Cultural norms regarding the communication styles and the perception regarding the online interaction may affect the extension and intensity of the Internet addiction as well as its impact on the dispositional abilities in communicating (Ko et al., 2015). Communication skill and pattern of internet usage were significantly affected by the age and developmental stage factors. Young adults and adolescents are more prone to Internet addiction due to developmental changes and peer pressure which highlighted the importance of early intervention for internet addiction. Raising awareness for internet addiction during this stage also become crucial for proper internet use and prevention of internet addition (Odgers et al., 2020 & Sundqvist et al., 2021).

CONCLUSION

The impact of internet addiction on emotional regulation is a serious concern, as stated by numerous studies indicating its detrimental effects on many sphere of individual's life. Internet addiction triggers a deep disturbance of the regulation of emotions and, consequently, the resulting negative effects on the mental state and relational context for an individual. Researches have revealed that excessive use of the internet is linked with an increase in stress, anxiety, depression, and loneliness among users. (Caplan, 2007, Ko et al., 2012 & Mei et al., 2016). Individuals often use internet as a maladaptive coping strategy to escape from their real life situation or avoid negative emotional state temporarily (Kuss & Griffiths, 2012). Although, depending on online platforms may deteriorate emotional

regulation strategy in future (Gioia et al., 2021). Internet addiction can also contribute in the emotional numbing and desensitization of the individual as they use internet as a medium to escape the reality and avoid unpleasant emotional stimulus. Individual who spent a significant amount of time consuming online content may become desensitized for real life emotional cues (Bányai et al., 2017 & Montag et al., 2012). This desensitization may impair the ability of individual to show empathy, regulate their emotions and difficulty in fostering interpersonal relationship effectively in real life social interaction (Whang et al., 2003). Addictive nature of internet addiction create a cycle of addiction by affecting the brain reward system and reinforcing compulsive behaviour which makes it even more difficult to control internet use behaviour. Like in online gaming and social media it become really difficult to control impulse as internet addiction affects the brain reward system (Brand et al., 2016 & Weinstein et al., 2010). This cycle of compulsive behaviour further leads towards the emotional dysregulation and impairs the ability of individual to cope with stress in healthy way (Kardefelt-Winther, 2017).

Internet addiction adversely affects the communication skills thus has a detrimental effect on the individual's social relationships. Research consistently shows that spending more time on internet particularly on social media, gaming platforms and browsing, reduce opportunities for face- to face interaction, will ultimately deteriorate the interpersonal interaction in real social setting (Kraut et al., 1998). This decline in face-to face interaction can reduce the individuals' proficiency of understanding and interpreting non-verbal communication cues like body language, facial expression, tone and pitch which ultimately hinder their ability of communicating in social situations effectively (Valkenburg & Peter, 2007). Internet addiction may lead towards the emotionless interaction and development of the shallow or superficial relationship means individual will not have meaningful connection, social interaction would be superficial rather than deep. Communication plays a crucial role in any relationship if the quality of communication is hindered it will ultimately affect the quality of the relationship (McKenna & Bargh, 2000, Orr et al., 2009). Due to internet addiction individual may prefer the online interactions over face-to-face interaction, which will further lead to the difficulty in initiating any conversation, keeping eye contact, interpreting non-verbal cues in real life social interaction (Kraut et al., 1998, Valkenburg & Peter, 2007). Furthermore, internet addiction can create dependency on digital communication tools like texting or messaging apps for social interaction which will reduce their ability to engage in spontaneous and unscripted conversations as on digital platforms people have chances of editing or removing messages which is not the case in verbal communication in real life. In offline setting conversations are spontaneous and unplanned which require more cognitive effort and expertise in emotional and communication cues. (Valkenburg & Peter, 2007, Kraut et al., 1998). This dependency on digital platform for social interaction may limits the adaptability of the individual to various communications cues and hinder their ability in understanding complex social dynamics (Valkenburg & Peter, 2007).

Internet addiction causes impairment in emotional regulation leading to the heightened level of stress, anxiety levels, depressive, emotional avoidance, escapism, isolation and interpersonal relationship problems. For addressing the internet addiction requires multifaceted interventions which focus on enabling the individual to seek healthier ways of dealing with stress, being able to manage their emotional issues and enable them to use internet in a healthy way. The studies also show that Internet addiction negatively affect the communicative competencies by decreasing face-to-face interaction, encouraging the development of superficial connections, and encouraging the reliance on digital means of

communication. Thus, for reducing the Internet addiction one needs to treat the signs that are associated with the promotion of healthy and sufficient use of the Internet, the formation of interpersonal relationships, and fostering communication skills both online and offline.

REFERENCES

Albikawi, Z. F. (2023). Anxiety, depression, self-esteem, internet addiction and predictors of cyberbullying and cybervictimization among female nursing students: Across-sectional study. *International Journal of Environmental Research and Public Health*, 20(5), 4293. https://doi.org/10.3390/ijerph20054293

Andreassen, C.S., Pallensen, S., & Griffiths, M.D. (2017). The relationship between addictive use of social media, narcissism and self- esteem: Findings from a large national survey. *Addictive Behaviours*, 64, 287-293.

Bayzan, S., & Aksakalli, G. (2024). An investigation of the relationship between university students' internet addiction levels, social anxiety and communication skills. *Addicta: The Turkish Journal on Addictions,* 11(1), 85-98.

Bányai, F., Zsila, Á., Király, O., Maraz, A., Elekes, Z., Griffiths, M. D., & Demetrovics, Z. (2017). Problematic Social Media Use: Results from a Large-Scale Nationally Representative Adolescent Sample. *PLoS ONE,* 12(1).

Brand, M., Young, K. S., Laier, C., Wölfling, K., & Potenza, M. N. (2016). Integrating psychological and neurobiological considerations regarding the development and maintenance of specific Internet-use disorders: An Interaction of Person-Affect-Cognition-Execution (I-PACE) model. *Neuroscience Biobehavioral Reviews*, 71, 252-266.

Cash, H., Rae, C. D., Steel, A. H., & Winkler, A. (2012). Internet Addiction: A Brief Summary of Research and Practice. *Current Psychiatry Reviews,* 8, 292-298. doi:10.2174/157340012803520513

Chou, W.J., Huang, M.F., Chang, Y.P., Chen, Y.M., Hu, H.F., & Yen, C.F. (2017). Social skills deficits and their association with Internet addiction and activities in adolescents with attention-deficit/hyperactivity disorder. *Journal of Behavioural Addictions,* 6(1), 42-50.

Collins, F. M. (2014). The Relationship between Social Media and Empathy. *Georgia Southern University.* 1-64. doi: https://digitalcommons.georgiasouthern.edu/etd

Cai, J., Wang, Y., Wang, F., Lu, J., Li, L., & Zhou, X. (2021). The association of parent-child communication with Internet addiction in left-behind children in China: A cross-sectional study. *International Journal of Public Health*, 66, 630700.

Chen, Z., Poon, K.T., & Cheng, C. (2017). Deficits in recognizing disgust facial expressions and Internet addiction: Perceived stress as a mediator. *Psychiatry Research*. 254.

Darnai, G., Perlaki, G., Orsi, G., Arató, Á., Szente, A., Horváth, R., Áfra, E., Nagy, S. A., Kovács, N., Dóczi, T., & Janszky, J.(2022). Language processing in Internet use disorder: Task-based fMRI study. *PLOS ONE,* 17(6), e0269979. doi:10.1371/journal. pone.0269979

Davis, R.A. (2001). A cognitive-behavioural model of pathological Internet use. *Computers in Human Behavior*, 17(2), 187-195.

DeVito, J. A. (2019). The International Communication Book (15). *Pearson*.

Dong, G., Shen, Y., Huang, J., & Du, X., (2013). Impaired error-monitoring function in people with Internet addiction disorder: an event-related fMRI study. *European Addiction Research.* 19(5), 269-75. doi: 10.1159/000346783.

Evren, C., Evren, B., Dalbudak, E., Topcu, M., Kutlu, N., & Elhai, J.D. (2019). Severity of dissociative experiences and emotion dysregulation mediate the relationship between

childhood trauma and Internet addiction symptom severity among young adults. *Neurological Sciences*, 32, 334-344. doi: 10.14744/DAJPNS.2019.00048

Effatpanah, M., Moharrami, M., Damavandi, G., Aminikhah, M., Nezhad, M., Khatami, F., Arjmand, T., Tarighatnia, H., & Yekaninejad, S. (2020). Association of Internet Addiction with Emotional and Behavioural Characteristics of Adolescents. *Iranian Journal of Psychiatry,* 15. doi: 10.18502/ijps.v15i1.2440

Engelberg, E., & Sjöberg, L. (2004). Internet use, social skills and adjustment. *Cyber psychology & Behavior*, 7, 41-47. doi: 10.1089/109493104322820101

Faghani, N., Akbari, M., Hasani, J., & Marino, C. (2020). An emotional and cognitive model of problematic Internet use among college students: The full mediating role of cognitive factors. *Addictive Behaviors*, 105, 106252. doi: 10.1016/j.addbeh.2019.106252

Griffiths, M. D., Kuss, D. J., & King, D.L. (2012). Video game addiction: Past, present and future. *Current Psychiatry Reviews*, 8(4), 308-318.

Garcia, M., & Rodriguez, S. (2020). Internet Addiction and Emotional Regulation in Adolescents. *Journal of Adolescent Health*, 67(2), 245-251.

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure and initial validation of the difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment*, 26(1), 41-54.

Gioia, F., Rega, V., & Boursier, V. (2021). Problematic Internet Use and Emotional Dysregulation among young people. A Literature Review. *Clinical Neuropsychiatry*, 18(1), 41-54, doi: 10.36131/cnfioritieditore20210104.

Hormes, J.M., Kearns, B., & Timko, C.A. (2014). Craving Facebook? Behavioral addiction to online social networking and its association with emotion regulation deficits. *Addiction*, 109(12), 2079-2088, doi: 10.1111/add.12713

Hao, Q. H., Peng, W., Wang, J., Tu, Y., Li, H., & Zhu, T. M. (2022). The correlation between internet addiction and interpersonal relationship among teenagers and college students based on Pearson's correlation coefficient: A systematic review and meta- analysis. *Frontiers in Psychiatry*, 13, 818494, doi: 10.3389/fpsyt.2022.818494

Ha, Y. M., & Hwang, W. (2014). Gender Differences in Internet Addiction Associated with Psychological Health Indicators among Adolescents Using a National Web-Based Survey. *International Journal of Mental Health and Addiction*, 12, 660-669, doi: 10.1007/s11469-014-9500-7

Jiao, C., Wang, T., Peng, X., & Cui, F. (2017). Impaired empathy processing in individuals with Internet addiction disorder: An event – related potential study. *Frontiers in Human Neuroscience*, 11, 498, doi: 10.3389/fnhum.2017.00498

Jaiswal, A., Manchanda, S., Gautam, V., Goel, A., Aneja, J., & Raghav, P. (2020). Burden of internet addiction, social anxiety and social phobia among university students, India. *Journal of Family Medicine and Primary Care*, 9, 3607, doi: 10.4103/jfmpc.jfmpc_360_20

Karaer, Y., & Akdemir, D. (2019). Parenting styles perceived social support and emotion regulation in adolescents with internet addiction. *Comprehensive Psychiatry*, 92, 22-27. doi: 10.1016/j.comppsych.2019.03.00

Kardefelt- Winther, D. (2017). Conceptualizing Internet use disorders: Addiction or coping process? *Psychiatry and Clinical Neuroscience*, 71(7), 459-466.

Kuss, D., & Griffiths, M. (2012). Online gaming addiction in children and adolescents: A review of empirical research. *Journal of Behavioural Addictions*, 1, doi: 10.1556/JBA.1.2012.1.1

Ko, D., & Yao, M. (2015). Internet addiction: Across- cultural perspective. *The Psychology of Social Networking: Identity and Relationships in Online Communities*. 141-158.

Ko, C. H., Yen, J. Y., Chen, C. S., Yeh, Y.C., & Yen, C. F. (2012). Predictive values of psychiatric symptoms for internet addiction in adolescents: A 2-year prospective study. *Archives of Pediatrics & Adolescent Medicine*, 166(10), 901-906.

Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: Asocial technology that reduces social involvement and psychological well-being? *American Psychologist,* 53(9), 1017-1031.

Kuss, D.J., & Griffiths, M. D. (2012). Internet gaming addiction: A systematic review of empirical research. *International Journal of Mental Health and Addiction,* 10(2), 278-296.

Kraus, S. W., Voon, V., & Potenza, M. N. (2016). Should compulsive sexual behaviour be considered an addiction? *Addiction*, 111, 2097-2106.

Lee, H., Kim, J.W., & Choi, T. Y. (2017). Risk factors for smartphone addiction in Koran adolescents: smartphone use patterns. *Journals of Korean Medicine Science.* 33, e323, doi: 10.3346/jkms.2017.32.10.1674

Lin, Y. H., Lin, Y. C., Lee, Y. H., Lin, P. H., Lin, S.H. & Chang, L.R. (2015). Time distortion associated with smartphone addiction: Identifying smartphone addition via a mobile application. *Applied Journal of Psychiatry Research.* 65, 139-145. doi: 10. 1016/j.jpsychires.2015.04.003.

Melodia, F., Canale, N., & Griffiths, M. D. (2020). The role of avoidance coping and escape motives in problematic online gaming: A systematic literature review. *International Journal of Mental Health and Addiction.* Advance online publication.

McKenna, K. Y., & Bargh, J.A. (2000). Plan 9 from Cyberspace: The Implications of the Internet for Personality and Social Psychology. *Personality and Social Psychology Review*, 4, 57-75.

Mei, S., Yau, Y.H., Chai, J., Guo, J., & Potenza, M. N. (2016). Problematic Internet use, well-being, self-esteem and self-control: Data from a high – school survey in China. *Addictive Behaviors*, 61, 74-79.

Montag, C., Kirsch, P., Sauer, C., Markett, S., & Reuter, M. (2012). The role of the CHRNA4 gene in Internet addiction: A case- control study. *Journal of Addiction Medicine*, 9(3), 191-195.

Müller, A., Mitchell, J.E., & de Zwaan, M. (2015). Compulsive buying. *American Journal of Addictions,* 24(2), 132-137.

Marciano, L., Camerini, A. L., & Schulz, P.J. (2022). Neuroticism and Internet addiction: What is next? A systematic conceptual review. *Personality and Individual Differences.* 185.

Nabila, S., Ambad, S., Kalimin, K., Mohd, K., Aizat, A., & Ku Yusuf, K. M. A.A. (2017). The effect of internet addiction on students' emotional and academic performance. *e-Academia Journal,* 6, 86-89.

Özer, D., Altun, Ö. Ş., & Avsar. G. (2023). Investigation of the relationship between internet addiction, communication skills and difficulties in emotion regulation in nursing students. *Archives of Psychiatric Nursing*, 42, 18-24.

Orr, E. S., Sisic, M., Ross, C., Simmering, M. G., Arseneault, J. M., & Orr, R. R. (2009). The influence of shyness on the use of Facebook in an undergraduate sample. *CyberPsychology & Behavior*, 12(3), 337-340.

Öztekin, G. G. (2024). Associations between internet addiction and school engagement among Turkish college students: Mediating role of psychological distress. *Frontiers of Psychology,* 15, 1367462. doi: 10.3389/fpsyg.2024.1367462

Reddy, N. Y. (2022). Impact of Internet Addiction on the social skills and Emotional Skills of Young Adults. *Journal of Psychiatry and Psychology Research*, 5 (1), 295-296.

Samantray, S. (2015). Internet Addiction and Relationships: The Psychology behind it. *MOJ Addiction Medicine & Therapy*, 3, doi: 10.15406/mojamt.2017.03.00024

Sinha, N. K., Kumar, P., Kumar, S., & Priyadarshi, P. (2021). Problematic Internet Use and Psychosocial Well-being: Role of Mindfulness Mediated by Self Control and Negative affect. *Society & Management Review*, 10 (1), 99-112.

Sundqvist, A., Koch, F. S., Birberg Thornbery, U., Barr, R., & Heimann, M. (2021). Growing up in a digital world- Digital media and the association with the child's language development at two years of age. *Frontiers in Psychology*, 12. 569920. doi: 10.3389/fpsyg.2021.569920

Trumello, C., Babore, A., Candelori, C., Morelli, M., & Bianchi, D. (2018). Relationship with Parents, Emotion Regulation and Callous- Unemotional Traits in Adolescents' Internet Addiction. *BioMed Research International*, 10, doi: 10.1155/2018/7914261

Valkenburg, P. M., & Peter, J. (2007). Online communication and adolescent well-being: Testing the stimulation versus the displacement hypothesis. *Journal of Computer-Mediated Communication,* 12(4), 1169-1182.

Weinstein, A., & Lejoyeux, M. (2010). Internet addiction or excessive internet use. *The American Journal of Drug and Alcohol Abuse,* 36(5), 277-283. doi: 10.1155/2018/7 914261

Whang, L. S., Lee, S., & Chang, G. (2003). Internet over-users' psychology profiles: A behaviour sampling analysis on Internet addiction. *CyberPsychology & Behavior*, 6(2), 143-150.

Wu, C., Dongping, L. I., Bao, Z., Yan, Y., & Zhou, Z. (2015). The Impact of Parent-Child Attachment on Adolescent Problematic Internet Use: A Moderated Mediation Model. *Acta Psychologica Sinica*, 47,611-623. https://doi.org/10.3724/SP.J.1041.2015.00611

Young, K. S., & de Abreu, C. N. (2011). Internet Addiction: A Handbook and Guide to Evaluation and Treatment. Hoboken, *NJ: John Wiley & Sons Inc.*

Young, K. S. (1996). Psychology of computer Use: XL Addictive use of Internet: A case that breaks the stereotype. *Psychology Reports,* 79(3), 899-902.

Yildirim, Demirdöğen. E., Akinci, M.A., Bozkurt. A., Bayraktutan, B., Turan, B, Aydoğdu S, Ucuz İ, Abanoz E, Yitik Tonkaz G, Çakir A, Ferahkaya H. (2024) Social media addiction, escapism and coping strategies are associated with the problematic internet use of adolescents in Türkiye: a multi-center study. *Front Psychiatry*. 8(15), 1355759