Pakistan Journal of Social Research ISSN 2710-3129 (P) 2710-3137 (O) Vol. 4, No. 3, September 2022, pp. 1020- 1031. https://doi.org/10.52567/pjsr.v4i03.1283 www.pjsr.com.pk

ASSESSMENT OF PSYCHOSOCIAL ISSUES DUE TO SOCIAL MEDIA ADDICTION AMONG UNIVERSITY STUDENTS AND THEIR RELATIONSHIP WITH ACADEMIC GRADES

Bisma Akhlaq⁻

PhD Scholar, Deparment of Applied Psychology, Islamia University Bahawalpur bismakhlaq@gmail.com

Aamir Iqbal

PhD Scholar, Department of Applied Psychology, Islamia University Bahawalpur amirshaah.14@gmail.com

Ahmed Ikram

Lecturer, Department of Applied Psychology, Islamia University Bahawalpur Ahmed.ikram@iub.edu.pk

ABSTRACT

The sole purpose of this research was to assess the psychosocial issues arising due to social media addiction among the university students. In this regard, psychological distress, loneliness, cyber bullying and academic grades of the students was the core variables to be explored in this study. This was a quantitative research therefore; the data was collected by applying the valid and reliable scales in appropriateness with the study variables. The data was collected by using online survey. The responses from the sample were analyzed by using SPSS. The results revealed that the level of psychological distress was higher among the overall university students. The findings reported that 46% students were suffering from severe level of distress. Similarly, the level of cyber bullying, loneliness and internet addiction were also sever among the students i. e. 37%, 42% & 13% respectively. The gender wise comparison showed that the level of loneliness, cyber bullying and internet addiction was higher among male university students. Lastly, the academic grades of the students were correlated with the loneliness, cyber bullying and social media addiction. On the basis of the findings it concluded that the social media addiction is a silent killer and should be address in order to reduce the psychosocial issues among students.

Keywords: Psychological distress, Loneliness, Cyber Bullying, Social media addiction.

INTRODUCTION

The term social media addiction is linked to the huge field of "internet addiction" which has numerous meanings by definition. It has been described as "excessive use of the Internet" by several authors (Weinstein, 2010), "Problematic Internet use" (Thatcher, 2005), and "Internet addiction" or "Pathological Internet use" (Durkee, 2012). Internet addiction is defined by Young (2007) as a pattern of improper Internet usage that causes clinically substantial impairment or suffering. The DSM-V characterizes social media addiction (also known as internet addiction) as a suggested type of psychological or behavioral addiction to social networking sites (Casale & Banchi, 2020).

Although social media addiction makes our life more convenient, some people suffer the adverse consequences of being social media users because they are unable to limit the amount of time they spend online. Social media addiction may result from prolonged use of the internet in the form of different

[–] Corresponding Author

aspects (Nakaya, 2015). Internet addiction is a mental illness that manifests as excessive or unchecked preoccupations, urges, or behaviors connected to computer and social media use that results in issues for the user with other people, their jobs, and society as a whole. (Gorse & Lejoyeux, 2011).

Additionally, Internet addiction means that people prefer communicating online over in-person interactions and that their ability to regulate their impulses when using the Internet is inadequate (Beard & Wolf, 2001). Internet addiction was initially known as an "Internet disorder," according to the DSM-5, even though other researchers have produced diagnostic criteria since the idea of Internet addiction was originally introduced (Goldberg, 2011).

Moreover, multiple problems are produced by social media addiction that harms emotions, actions, and thoughts (MedlinePlus, 2020). In earlier research on social media addiction, different kind of questionnaires or surveys were frequently employed to evaluate this behavioral addiction without the necessity for a professional diagnosis. The people groups most at risk from problematic internet use include young people and students. One of the most significant inventions that have brought comfort in many facets of life is the Internet, which serves as the world's primary source of information, communication, and entertainment. With time, many people's lifestyles have integrated this novel technological advancement (Ioannidis et al., 2018).

Social Media Addiction and Mental Health Issues

Numerous emotional regulation issues, including increased avoidance of experiences, inability to accept emotional responses, restricted access to emotional regulation techniques, control of emotions, etc., have been brought on by the use of online networking media (Hawai & Samaha, 2016). More frequent Facebook users report higher degrees of dependency and anxiety when they are not on the site (Xie& Karan, 2011). Also contributing to the emotional disturbance is the connection between stress and excessive use of social media (Liu & Ma, 2019).

Furthermore, there is a direct and negative association between social media addiction and mental health. As the person will consume much of the time on social media, the more negative impact will be on mental health. In addition, systematic research conducted by Lin et al (2016) exposed that increasing the usage time on social media leads to the mental health issues such as depression, stress, and anxiety among people. A blue light emitting from the screen causes negative consequences for sleep issues which leads to insomnia later due to disturbance in the melatonin hormone secretion associated with sleep regulation (Kuss & Driffiths, 2017).

Social Media Addiction and its Social Issues

University students are increasingly struggling with social media addiction, which has several negative societal consequences. Overuse of social media sites like Facebook, Instagram, and Twitter has been linked to higher levels of isolation, hopelessness, and anxiety as well as worse academic and professional performance. A study by Kuss and Griffiths (2017) found that social media addiction had a detrimental effect on students' mental health and social relationships with participants stating an intense need to continually check their accounts on the internet and dealing with symptoms of withdrawal when not able to use them. These findings emphasize the urgent need for awareness campaigns and intervention programs to address the negative impacts of social media addiction on college students' well-being. David and Griffiths (2017). There following social issues loneliness, social comparison, and cyber bullying are as given below.

Social Media Addiction and Loneliness

According to studies, social media addiction has negative psychological effects such as increased anxiety, despair, and loneliness (Lin et al., 2016). For instance, Wang, Lee, and Chang (2003) discovered that extensive social media use among university students is linked to decreased life satisfaction and self-esteem and increased loneliness. Similarly, to this, Tandoc and Duffy (2015) found that envy brought on by online social comparison can result in sadness in university students.

Additionally, research suggests that social media addiction might result in fewer in-person connections with others, which are crucial for life grooming. According to Kelly et al. (2012), increased Facebook use was linked to worse subjective well-being scores in young individuals. According to the research, using social media might take the role of in-person relationships, which lowers life happiness. In

addition, those who are addicted to social media may fall into the "comparison trap," continually comparing their lives to those of others on social networking sites, which can result in poor confidence and a sense of inadequacy (Vogel et al., 2015).

Social Media Addiction and Social Comparison

University students are becoming increasingly concerned about social media addiction as sites like Facebook, Instagram, and Twitter continue to gain popular and availability. Social media addiction has been linked to negative outcomes for kids' academic achievement, mental health, and general well-being, according to research. According to research by Kuss and Griffiths (2017), using social media platforms excessively might cause addiction-related symptoms, such as an obsession with it, experiences of withdrawal when one can't access it, and an inability to manage one's usage. Social media platforms' addictive qualities are a result of users' ongoing desire for social approval, their persistent FOMO, and the instant satisfaction they offer.

Another significant feature of social media addiction among college students is social comparison. Students who use social media often have access to carefully planned posts and profiles of their classmates that highlight their accomplishments, adventures, and social life. The continual exposure to idealized portrayals of other people's life can cause social comparison processes to get activated, which can result in poor self-esteem, feelings of inadequacy, and jealousy. Among college students, social media use was adversely correlated with self-esteem and favorably correlated with upward social comparisons. Vogel et al.(2015). Because of this, college students could continually contrast themselves with their classmates, focusing on their own perceived flaws and failings, which can have a serious negative effect on their psychological health and lead to the emergence of social media addiction.

Social Media Addiction and Cyberbullying

To address social media addiction and cyberbullying among their student body, universities are crucial. For students to realize the possible hazards linked with excessive social media usage and cyberbullying, universities must offer education and awareness programs. Universities can also create tactics to stop and handle instances of cyberbullying as well as clear rules and instructions on appropriate social media use. Through these initiatives, university students' well-being and academic success can be promoted while also fostering a safer and healthier online environment (Bowen, 2019).

Cyberbullying has emerged as a major issue for university students in addition to social media addiction. When someone harasses, threatens, or degrades another person online using a digital communication technology like social media, instant messaging, or a forum on the internet, it is known as cyberbullying. According to research by Hinduja and Patchin (2018), students in university who were bullied online showed greater levels of psychological distress, such as despair, anxiety, and loneliness. The study also made clear that cyberbullying may have serious negative effects on victims, such as academic setbacks, social exclusion, and even suicidal thoughts.

REVIEW OF LITERATURE

The popularity of using social media for leisure is growing. From the oldest to the youngest members of society, everyone utilizes technology excessively and focuses on it longer than is required, which - unknowingly - leads to lethargy and various spine and health issues. Too much social media use and addiction to social media without realizing it might be a problem. One may argue that the majority of social media consumers engage in apparently compulsive activity, such as monitoring social media for reactions to an individual's presence and presence on different sites regularly (Kula et al., 2020).

According to studies, internet addiction is growing daily, while people's propensity to socialize is waning. A study in Germany determined that 2.1% of the overall population had an internet addiction, a study in the US discovered that 26.3% of university students had the same problem, a study in Egypt discovered that 40% of university students had the same problem, and research in Turkey in 2017 found that 1.6% of the students were engaged in internet addiction and 16.2% of them were likely to have one (Kara, 2021).

Assessment of Psychosocial Issues Due to Social Media Addiction

Another research on teenagers from six Asian nations found that social media addiction was prevalent in between 1.2% and 4.9% of them (Mak et al., 2014). Additionally, a survey of American high school students revealed that 4% of them had Internet addiction. (Liu et al., 2011). According to studies from Turkey, there are between 1 and 10 percent of high school kids are addicted to the Internet (Sigrili, 2017). Research studying the correlation between Internet addiction and numerous characteristics has resulted from all of these researches demonstrating that teens are a significant risk group for Internet addiction (Kara, 2021).

According to research conducted in India, among 1389 pre-university students who used social media, social media addiction was prevalent at 36.9% (Ramesh et al., 2018). Also, issues with social media usage in kids and teens are frequently linked to signs of mental illnesses including stress, anxiety, and despair (Hoge et al., 2017). Around 25% of university students polled in the US displayed symptoms of sadness when they use social media such as Facebook (Moreno et al., 2011).

According to another study, Facebook use was associated with six outcomes, involving depressive disorders, addictive behaviors, stress, poor body image, alcohol use, and other problems(Frost & Rickwood, 2017). The association between internet use and depressive symptoms is mostly explained by American youths' problematic use of social media (Shensa et al., 2017). Inappropriate Facebook use and psychological distress are positively correlated, according to a systematic review of random effects (Marino et al., 2018). Although on a smaller scale, a different meta-analysis likewise supported the association between the Facebook app and depression symptoms (Yoon et al., 2019). And finally, there is a direct link between utilizing social media and having psychological problems (Keles et al., 2020).

According to research, those who use social networking sites more often engage in less physical exercise. The study surveyed 350 adults and found that those who spent more than two hours per day on social media had lower levels of physical activity compared to those who spent less time on social media (Hampton, et al., 2014). Another study discovered that university students' usage of social media was linked to a decline in physical activity. According to the study polling 166 university students, those who used social media more often engaged in less physical exercise. (Shensa, et al., 2016).

According to a study, teenage social media addiction was shown to have a bad relationship with physical exercise. The study surveyed 634 adolescents and discovered that those who stated higher levels of social media addiction had lower levels of physical activity (Chen, et al., 2018). Furthermore, a review article published in the Journal of Medical Internet Research discovered that social media use was related to sedentary behavior and decreased physical activity. The review analyzed 27 studies and found that social media use was consistently connected with sedentary behavior and a decrease in physical activity (Clemente et al., 2020).

Young Adults and Social Media Addiction

In today's world, young adults are a significant Internet addiction risk population. In a research study conducted by Kaess et al. (2014) with involvement from 11 European nations, it was discovered that 13.4% of young adults in the risk category and 4.2% of adolescents had Internet addiction. The frequency of internet addiction among young adults was found to range from 1.2% to 4.9%, according to another research on young people from six Asian nations (Mak et al., 2014). Additionally, a survey of American high school students revealed that 4% of them had Internet addiction (Liu et al., 2011). An estimated 1 to 10% of high school pupils in Türkiye, according to studies, are addicted to the Internet (Sığrılı, 2017). According to all these studies, teenagers are a significant risk group for developing a social media addiction, which has prompted researchers to look into the correlation between social media and numerous factors (Esen and Siyez, 2011).

Negative Consequences of Social Media Addiction

A variety of symptoms are due to social media addiction such as physical, social, emotional, and psychological difficulties. Physical issues including sleeping issues, eating problems, little exercise, pain in the back, blurred vision, and others are linked to it. social media addiction has been linked to poor health, chronic daytime insomnia, nightmares, trouble falling asleep and getting up at night, loss of energy, confusion with bodily functions, weakened defenses, overweight and obesity, and visual impairment, according to research literature (Bener, 2011). Social media addiction causes a wide range of

social issues, including the breakdown of interpersonal bonds in the family, community, and workplace, as well as the alienation of users from friends and family. It obstructs relationships with family, friends, coworkers, and other members of the community (Chen, 2009).

Furthermore, social media addiction has diverse effects not only socially, but also shows negative consequences psychologically. Many of the psychological issues such as depression, anxiety, stress, and different kinds of phobias such as social phobia. Additionally, due to social media addiction, several issues are linked with social issues mainly focusing on family and social circles of university students. When students spend plenty of time on social media, it changes their lifestyles, social involvement, and psychological aspects (Hoge et al., 2017).

It's critical to realize that social media addiction can have detrimental impacts on a person's ability to develop psychologically. The worst side effects were internet-related anxiety, sadness, suicidal thoughts, social phobia, photographic phobias, schizophrenia, obsessive-compulsive disorder, violent or antisocial conduct, self-harming behavior, and sleep difficulties. According to the findings of Chinese research on university students, those who were Internet addicts scored higher on comorbidities and impulsivity (Kim et.al, 2006).

THEORETICAL FRAMEWORK

Various theories have been put out by different theorists to explain the origins of social media addiction. Theorists who use a cognitive-behavioral approach to explaining the origins of social media addiction emphasize the significance of cognitive dysfunction and claim that social media addiction may also be avoided or cured by changing these perspectives (Liu, 2016). According to Davis's (2001) cognitive-behavioral model of pathological Internet use, cognitive impairment is the key component of Internet addiction. This idea holds that individuals who depend heavily on the Internet have cognitive abnormalities such as over generalizing and either all-or-nothing perspectives on the world or their place in it.

On the other side, the problematic internet usage theory put out by de Caplan claims that individuals with psychological issues or poor social abilities choose social media engagement over face-to-face interaction with others because it seems less frightening. Moreover, this option may result in a difficult or overloaded Internet connection. The importance of loneliness and psychosocial well-being is emphasized in Caplan's theory. Internet addiction among teens. In today's world, teenagers are a significant Internet addiction risk population. In research conducted by Kaess et al. (2014) with 11 European nations as participants, it was shown that 13.4% of teenagers in the risk category and 4.2% of adolescents had Internet addiction.

Objectives of the Study

- 1. To screen out the students with social media addiction.
- 2. To check the level of mental health issues among the students due to social media addiction.
- 3. To check the level of loneliness due to social media addiction among the students.
- 4. To check the prevalence of cyber bullying due to social media addiction among the students.
- 5. To check the relationship of academic grades of students (CGPA) with study variables.

Hypothesis of the study

- 1. The students will likely to be more addict of social media addiction.
- 2. Level of psychological distress will significantly high among female students due to social media addiction.
- 3. There will be a higher level of loneliness among male students due to social media addiction.
- 4. Level of cyber bullying would be higher among male students with social media addiction.
- 5. Academic grades of the students (CGPA) will be significantly correlated with psychological distress, loneliness and cyber bullying.

Method of the Study

Participants

The sample size of this research study was (N=80) who were screened out as social media addict. From the overall sample of (N=80) respondents 40 (50%) are male and other 40 (50%) are female respondents. On discussing the education of target population 13 (16.2%) people are intermediate and BA, 31 (38.3%) of the overall population having BS honor level of education, 22 (27.5%) respondents having MPHIL and the other 14 (17.5%) individuals having PHD level. The researcher also discussed that18 (22.5%) people from lower economic class, 40 (50%) people are middle class people and the other 22 (27.5%) individuals having higher level of economic conditions. From the overall sample 32 (40%) people having joint family system and other 48 (60%) people having nuclear family system.

Research Design

This was a prevalence study with diversified sample of students along with social media addiction. Therefore, the cross-cultural research design was used in this research.

Demographic variables

The following demographic variables such as age, qualification, family history, and socioeconomic status etc.

Sampling Technique

Online survey was conducted to collect the data. Therefore, consecutive sampling technique was used.

Measures and Covariates

Four types of measures were administered to collect the responses from the participants. The detail is as under.

Internet Addiction Test

Internet Addiction Test (IAT) was uses to measure the prevalence and intensity of Internet addiction. The Internet Addiction Test (IAT) analyses self-reported excessive Internet usage and evaluate signs of Internet addiction in various situations. The test comprises 20 courses, each of which is based on prior research and clinical analysis of compulsive web users and their traits. These 20 questions assess traits and actions such as compulsivity, prevention, and addiction that are connected to obsessive Internet usage. *Depression, Anxiety, Stress Scale (Dass-21)*

The DASS is a set of three self-report measures that are used to measure stress, anxiety, and depression. Scores are shown as a total score (from 0 to 63) and scores for the three sub-ranges (from 0 to 21). A 4-point severity/frequency scale is used to ask subjects to assess the frequency and severity of each state over the course of the preceding week. The results of summing the results for each item yield the scores for depression, anxiety, and stress.

UCLA Loneliness Scale

Daniel Russell, Letitia Peplau, and Mary Ferguson created the UCLA Loneliness Scale in 1978, and it is now a commonly used indicator for both adults and adolescents. There is a 20-item, shortened UCLA Loneliness Scale that is used to measure loneliness. The measurement demonstrated a test-retest correlation of 73 with 102 university students over 2 months and strong internal consistency (coefficient alpha,0.96) in 239 university students.

Cyberbullying Scale (CBS)

This scale was developed by Haynes, Richard, &Kubany (1995). Looking at the factor construction and reliability of the Cyberbullying scale (CBS) for 736 students. The structure of the CBS was best modeled by a one-factor model, according to the results of Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The discovery of a single-factor structure shows that cyberbullying is a unidimensional entity, which is consistent with prior studies. The CBS showed healthy psychometric features in the present population, including great internal consistency (Cronbach's alpha =.94) and appreciable positive correlations with related variables of anxiety, depression, and loneliness.

Ethical Consideration

It is essential to consider ethical principles to ensure the health and protection of participants. Here are some ethical considerations that should be addressed in research:

Agreement: Participants should be provided with detailed information about the study, including the purpose, process, potential risks, and benefits of participation. They must have the opportunity to decline or withdraw from the study at any time.

Privacy: Participants' personal information and data must be kept confidential and protected against unauthorized access. They should be informed of the measures taken to ensure security, such as anonymity, secure storage, and restricted access.

Voluntary participation: Participants should not be forced or coerced to participate in the study. They should have the freedom to choose whether or not to participate without fear of negative consequences.

Risk management: Research should minimize potential risks to participants, including emotional distress and invasion of privacy. The study must have a protocol to manage and address any adverse effects participants may experience during the intervention.

Respect participants: Participants should be treated with respect and dignity throughout the study. Research should avoid any behavior or language that may stigmatize or discriminate against participants based on gender, race, ethnicity, or any other personal characteristic.

Demographic variables		Frequency	Percentage
Gender			
	Male	40	50.0
	Female	40	50.0
Qualification of respondents			
	FA and BA	13	16.2
	BS Honor	31	38.8
	MPHIL	22	27.5
	PHD	14	17.5
Socio Economic Status			
	Lower class	18	22.5
	Middle class	40	50.0
	Higher class	22	27.5
Family System			
	Joint Family	32	40.0
	Nuclear Family	48	60.0

RESULTS

.. __

Note: This table shows the statistical information (frequencies, percentages) values derived from the sample (N=80).

Table 2 Prevalence of psychosocial issues among the overall sample of (n=80)

Demographic variables		Frequency	Percentage
Psychological Distress			
	Mild	17	21.2
	Moderate	26	32.5
	Severe	37	46.2
Loneliness level			
	Mild	17	21.2

	Moderate	29	36.2	
	Severe	34	42.5	
Cyber Bullying				
	Mild	18	22.5	
	Moderate	32	40.0	
	Severe	30	37.5	
Internet Addiction				
	High	37	46.2	
	Very High	32	40.0	
	Severe	11	13.8	

Note: This table shows the statistical information (frequencies, percentages) values derived from the sample (N=80).

Table 3 Showing the Descriptive Statistics of study variables (n=80)

Variables	Mean	Std. Deviation	Range	
Age	23.24	3.24	16-30	
CGPA	2.73	.57	2.0-3.80	
Psychological Distress	28.76	8.74	12-46	
Loneliness	55.59	17.76	22-88	
cyber bullying	24.88	7.49	9-36	
Internet Addiction	69.38	13.35	50-90	

Note: The above table shows the descriptive statistics of overall studyvariables.

Clinical variables	Age	CGPA	Psychological Distress	Loneliness	cyber bullying	Internet Addiction
Age	1					
CGPA	003	1				
Psychological Distress	008	794**	1			
Loneliness	.134	050	.000	1		
cyber bullying	175	230*	.171	.216	1	
Internet Addiction	.156	035	.115	069	.202	1

Table no 4Bivariate correlation among overall study variables (n=80)

Note: The above table shows bivariate correlation among all the clinical variables under study in this research.

Table 5 Showing the comparison of all variables in case of gender using T-test

Variables	Gender	Mean	Std. Deviation	T-Test Comparison	
v allables	Uelluel	Wiedli	Stu. Deviation	T-Score	P-value
Psychological	Male	28.02	8.20	75	.454
Distress	Female	29.50	9.30		

Variables	Gender	Mean	Std. Deviation	T-Test Comparison	
			Std. Deviation	T-Score	P-value
Psychological	Male	28.02	8.20	75	.454
Loneliness	Male	57.08	18.99	1.73	.045*
	Female	54.10	16.55		
Cyber bullying	Male	25.05	7.47	.21	.836
	Female	24.70	7.59		
Internet Addiction	Male	72.50	12.96	2.14	.035*
	Female	66.25	13.14		

*. p< 0.05 and **. p< 0.01

Note: The table is showing comparison of all variables according to Gender and between males and females respondents.

FINDINGS AND DISCUSSION

This study was aimed to assess the psychosocial issues arise due to the excessive use of social media addiction among the university students. For this purpose the first hypothesis was developed to check the level of social media addiction among the students. It was hypothesized that "The students will likely to be more addict of social media addiction". The results of this hypothesis showed level of social media addiction at different level among the students. It revealed from the analysis that 46%,40% and 13% mild, moderate and sever cases of social media addiction respectively. The results of this hypothesis are consistence with the past researches such as Beard and Wolf (2001) reported a higher level of social media addiction among the adults. The second hypothesis was developed for the sake of measuring level of psychological distress among the gender. It was hypothesized that "Level of psychological distress will significantly high among female students due to social media addiction." This hypothesis accepted and the results are in line with previous researches. Such as Bakken et al. (2009) concluded a higher level of psychological distress among female students due to social media addiction. The third hypothesis was developed to check the level of loneliness among the students. It was hypothesized that "There will be a higher level of loneliness among male students due to social media addiction." This hypothesis accepted and the results are in accordance with the past researches i.e Canbaz et al. (2009). The fourth hypothesis was developed to compare the level of cyber bullying among male and female students. It was hypothesized that "Level of cyber bullying would be higher among male students with social media addiction." This hypothesis accepted and the results authenticated by the studies conducted in the past. Such as, Cao et al. (2007) reported the same findings. The last hypothesis was to check the relationship of academic grades of the students with the psychological distress, loneliness and cyber bullying. It was hypothesized that "Academic grades of the students (CGPA) will be significantly correlated with psychological distress, loneliness and cyber bullying. The results of this hypothesis also accepted and are in line with the past researches such as, Fabris et al (2020) reported the same findings.

CONCLUSION

On the basis of the study findings it revealed that the overuse of social media addiction is linked with psychosocial issues such as psychological distress, loneliness and cyber bulling among the students. It is obvious that there are porn and cons of social media addiction. But this research explores that the addiction of social media leads to many psychosocial issues. Hence, there is a need to address the arising issues due to social media addiction among adults.

REFERENCES

Bakken, I. J. Wenzel, H. G. Gotestam, K. G. (2009). Internet addiction among Norwegian adults: A stratified probability sample study. Scandinavian Journal of Psychology, 50(2): 121-127

- Beard, K. W., & Wolf, E. M. (2001). Modification in the proposed diagnostic criteria for internet addiction. Cyberpsychology and Behavior, 4(3), 377–383
- Bener A, Al-Mahdi HS, Ali AI, et al. Obesity and low vision as a result of excessive Internet use and television viewing. International Journal of Food Sciences and Nutrition. 2011;62(1):60-62.
- Canbaz, S., Sunter, T., Peksen, Y., &Canbaz, M. A. (2009). Prevalence of the pathological internet use in a sample of Turkish school adolescents. Iranian Journal of Public Health, 38(4), 64–71.
- Casale, S., & Banchi, V. (2020). Narcissism and problematic social media use: A systematic literature review. Addictive Behaviors Reports, 11, 100252.
- Chen, L., Zhang, G., & Hou, Y. (2018). Social media usage and physical activity behavior among Chinese adolescents. Journal of Behavioral Addictions, 7(3), 686-694.
- Chen, S.H. Development of Chinese Internet addiction scale and its psychometric study. Chinese Journal of Psychology. 2009; 45:279-2
- Clemente, F. M., Nikolaidis, P. T., Rosemann, T., Knechtle, B., & Mendes, R. (2020). Social media and physical activity: A systematic review and meta-analysis of observational studies. Journal of Medical Internet Research, 22(11), e22527.
- David, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. International Journal of Environmental Research and Public Health, 14(3), 311. doi:10.3390/ijerph14030311.
- Davis, R. A. (2001). A cognitive-behavioral model of pathological internet use. Computers in Human Behavior, 17, 187–195.
- Durkee, T. Kaess, M. Carli, V. et al. (2012). Prevalence of pathological Internet use among adolescents in Europe: Demographic and social factors. Addiction,107(12):2210-2222
- Esen, E., &Siyez, D. (2011). An investigation of psycho-social variables in predicting internet addiction among adolescents. Turkish Psychological Counseling and Guidance Journal, 4(36), 127–138.
- Fabris, M. A., Marengo, D., Longobardi, C., &Settanni, M. (2020). Investigating the links between fear of missing out, social media addiction, and emotional symptoms in adolescence: The role of stress associated with neglect and negative reactions on social media. Addictive Behaviors, 106, 106364.
- Frost, R. L., & Rickwood, D. J. (2017). A systematic review of the mental health outcomes associated with Facebook use. Computers in Human Behavior, 76, 576-600.
- Goldberg, K. (2011). Effects of a group counseling integration program on self-determination and internet addiction in high school students with a tendency to internet addiction. Journal of Korean Academy of Nursing, 41(5), 694–703.
- Gorse, P., &Lejoyeux, M. (2011). Online pathological gambling: A new clinical expression of internet addiction. In H. O. Price (Ed.), Internet addiction (pp. 95–111). Nova Science Publishers Inc.
- Hampton, K. N., Rainie, L., Lu, W., Shin, I., & Purcell, K. (2014). Social media and the cost of caring. Pew Research Center.
- Hawi, N. S., & Samaha, M. (2016). The relations among social media addiction, self-esteem, and life satisfaction in university students. Social Science Computer Review, 34(5), 576-586.
- Hinduja, S., &Patchin, J. W. (2018). Do college students make better predictions of their future income than young adults in the labor force? Education Economics, 23(2), 162-179.
- Hoge, E., Bickham, D., & Cantor, J. (2017). Digital Media, Anxiety, and Depression in Children. Pediatrics, 140(Supplement 2), 76-80.
- Ioannidis, K., Treder, M. S., Chamberlain, S. R., Kiraly, F., Redden, S. A., Stein, D. J., Lochner, C., Grant, J. E. (2018). Problematic internet use as an age-related multifaceted problem: Evidence from a two-site survey. Addictive Behaviors, 81, 157-166.
- Kaess, M., Durkee, T., Brunner, R., Carli, V., Parzer, P., Wasserman, C., et al. (2014). Pathologycal Internet use among European adolescents: Psychopathology and self-destructive behavioryours. European Child and Adolescent Psychiatry, 23(11), 1093–1102. https://doi.org/10.1007/ s00787-014-0562-7

- Kara, F. (2021). The effectiveness of a cognitive-behavioral intervention for social media addiction among university students. Addicta: The Turkish Journal on Addictions, 8(1), 78-91.
- Keles, B., McCrae, N., &Grealish, A. (2020). A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents. International Journal of Adolescence and Youth, 25(1), 79-93.
- Kelly, T. M., Daley, D. C., & Douaihy, A. B. (2012). Treatment of substance abusing patients with comorbid psychiatric disorders. Addictive Behaviors, 37(1), 11-24.
- Kim, K., Ryu, E. Chon, M.Y., et al. Internet addiction in Korean adolescents and its relation to depression and suicidal ideation: A questionnaire survey. International Journal of Nursing Studies. 2006;43(2):185-192
- Kula, J. (2020). Do college students make better predictions of their future income than young adults in the labor force? Education Economics, 23(2), 162-179.
- Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. International Journal of Environmental Research and Public Health, 14(3), 311. doi:10.3390/ijerph14030311.
- Lin, L. Y., Sidani, J. E., Shensa, A., Radovic, A., Miller, E., Colditz, J. B., Hoffman, B. L., Giles, L. M., & Primack, B. A. (2016). Association between social media use and depression among U.S. young adults. Depression and anxiety, 33(4), 323-331.
- Liu, C. Y., & Ma, F. (2019). A study of internet addiction through the lens of interpersonal theory. Cyberpsychology and Behavior, 10(6), 799–804.
- Malak, M. (2017). A meta-analysis of psychological interventions for Internet/ smartphone addiction among adolescents. Journal of Behavioral Addictions., 8(4), 613–624.
- MedlinePlus. (2020). Mental Disorders. Retrieved from https://medlineplus.gov/mentaldisorders.html
- Moreno, M. A., Jelenchick, L. A., Egan, K. G., Cox, E., Young, H., Gannon, K. E., & Becker, T. (2011). Feeling bad on Facebook: depression disclosures by college students on a social networking site. Depression and anxiety, 28(6), 447-455.
- Nakaya, A. C. (2015). Internet and social media addiction. Reference Point Press, Inc.
- Ramesh, M., N. R., Pruthvi, S., &Phaneendra, M. S. (2018). A Comparative Study on Social Media Usage and Health Status among Students Studying in Pre-University Colleges of Urban Bengaluru. Indian Journal of community medicine: official publication of Indian Association of Preventive & Social Medicine, 43(3), 180-184.
- Ramesh, M., N. R., Pruthvi, S., &Phaneendra, M. S. (2018). A Comparative Study on Social Media Usage and Health Status among Students Studying in Pre-University Colleges of Urban Bengaluru. Indian Journal of community medicine: official publication of Indian Association of Preventive & Social Medicine, 43(3), 180-184.
- Shensa, A., Escobar-Viera, C. G., Sidani, J. E., Bowman, N. D., Marshal, M. P., & Primack, B. A. (2017). Problematic social media use and depressive symptoms among U.S. young adults: A nationallyrepresentative study. Social Science & Medicine, 182, 150-157.
- Sığrılı, H. (2017). Evaluation of the relationship between Internet addiction in high school students and attachment styles [Unpublished master's thesis]. Marmara University. [in Turkish]. https://tez.yok. gov.tr/UlusalTezMerkezi/giris.jsp.
- Tandoc, E. C., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is Facebooking depressing? Computers in Human Behavior, 43, 139-146.
- Thatcher, A. Goolam, S. (2005). Development and psychometric properties of the problematic Internet use questionnaire. South Africa Journal of Psychology, 35:793-809
- Vogel, E. A., Rose, J. P., Okdie, B. M., Eckles, K., & Franz, B. (2015). Who compares and despairs? The effect of social comparison orientation on social media use and its outcomes. Personality and Individual Differences, 86, 249-256.
- Weinstein, A. Lejoyeux, M. (2010). Internet addiction or excessive Internet use. The American Journal of Drug and Alcohol Abuse, 36:277-283.

- Whang, L., Lee S, Chang G. Internet over- users' psychological profiles: A behavior sampling analysis on Internet addiction. CyberPsychology& Behavior. 2003;6(2):143-150
- Xie, P. & Karran Y. (2011). The effects of social media on college students. Journal of Educational Technology Development and Exchange, 4(1), 1-14.

Yoon, S., Kleinman, M., Mertz, J., &Brannick, M. (2019). Is social network site usage related to depression? A meta-analysis of Facebook–depression relations. Journal of Affective Disorders, 248, 65-72.