

EFFECTS OF SOCIAL MEDIA ADDICTION ON PSYCHOSOCIAL HEALTH OF UNIVERSITY STUDENTS

Ambati Jagadeeswara Reddy^{1*}, Rohit Ranjan²

Abstract:

Background:

Social media use has rapidly increased, raising worries about how it may affect mental health, particularly among young people. Basuroy (2023). The purpose of this review of the research is to investigate the connection between university students' use of social media, anxiety, depression, stress, and resilience. The review also emphasised the possible effects of social media addiction on outcomes related to mental health, interpersonal relationships, and academic achievement

Material and Methods: To find pertinent articles published between 2015 and 2023, literature searches were conducted in databases such as Google Scholar, the National Centre for Biotechnology Information (NCBI), and PubMed. This was done utilising the PRISMA exclusion and inclusion criteria (recommended reporting items for systematic reviews and the meta-analyses technique). The present study comprises 39 empirical research studies.

Results: The results indicate that social media addiction is adversely connected with resilience in college students and favourably associated with anxiety, despair, and stress. The research also suggested that the link between psychological distress and resilience may be mediated by social media addiction.

Conclusion: The research found a number of elements, including boredom, loneliness, and low self-esteem, that support university students' addiction to social media. This study emphasises the need for more research in this field and the significance of tackling social media addiction among university students.

Keywords: Social Media Addiction, Resilience, Anxiety, Depression, Stress and University Students.

DOI: 10.48047/ecb/2023.12.si5a.0203

^{1*,2}Department of psychological Sciences, School of Human Sciences, Lovely professional University, Phagawara, 144402, Punjab, India.

^{*}Corresponding Author:- Ambati Jagadeeswara Reddy

^{*}Department of psychological Sciences, School of Human Sciences, Lovely professional University, Phagawara, 144402, Punjab, India.

INTRODUCTION:

In India, where use of social media has increased dramatically in recent years, social media addiction and stress are significant issues. According to a Statista analysis, the number of active social media users in India reached 467 million in Q3 2022, making it one of the countries with the highest social media user bases worldwide. Many more Indians are now actively using the internet thanks to the expansion of digitalization initiatives and low data pricing. Social media use has rapidly increased, raising worries about how it may affect mental health, particularly among young people Basuroy (2023).

Young adults and students may experience the COVID-19 pandemic-related stresses in a more severe way than the general population because they are forced to adapt to online schooling while going through a crucial developmental period and are deprived of social interactions. According to research published in the Indian Journal of Psychological Medicine, social media addiction has grown as a result of the epidemic, with students using the platforms for longer periods of time than previously (2021). Due to the isolation brought on by the pandemic, adult students in particular have discovered themselves becoming more and more dependent on social media platforms. According to research by Kaur et al. (2021), college students in India have become more addicted to social media as a result of the epidemic.

Numerous university students are being forced to live online and on social media because of the dominance of online learning during lockdown. The coronavirus epidemic may make social media addiction among students worse since there are less opportunities for physical and social interaction outside of the house and more time spent on mobile devices and the Internet. Therefore, in addition to the pandemic situation itself, their increased use of the Internet and social media poses a risk to their mental health. Recent data reveals that excessive social media use has a negative impact on users' mental health during the COVID-19 pandemic in Wuhan (Gao et al., 2020).

Andreassen and Pallesen (2014), Kuss and Griffiths (2017), Sun and Zhang 2021) and other researchers, problematic social media use is defined as an excessive and uncontrollable use of social media that worsens personal, social, and professional functioning and exhibits symptoms resembling behavioural addiction. Koç, Gökalp, and Seki (2023) investigated the connections between self-control and distress in emerging

adults, using social media addiction and FOMO as serial mediators. The findings imply that social media addiction and FOMO may mediate the connection between self-control and discomfort in emerging adults. Haand and Shuwang (2020), reported a substantial positive link between social media addiction and depression, indicating that university students who use social media excessively may be more likely to develop depression. some social media habits, such as making social comparisons and being addicted to the platform, are linked to severe depressive illness (Robinson et al., 2019).

Primack et al., 2017 disclosed that young adults who use social media may have higher levels of anxiety and despair. This demonstrates the importance of conducting further studies on the effects of social media use on mental health, especially among younger people. In a recent study of Vietnamese undergraduate students, it was discovered that social media addiction, sadness, and anxiety are significantly positively correlated (Nguyen et al., 2020).

This shows that young adults' mental health may be significantly impacted by social media addiction. Retrospective correlational research by Ciacchini et al. (2023) revealed a substantial link between young adults' social media addiction and unfavourable outcomes. Similar to this, Taş (2023) investigated the link between social media addiction and social media ignore and discovered that family life satisfaction served as a mediator in this relationship. According to Tkácová et al. (2023) in their case study on Slovak efforts, the COVID-19 epidemic has also underlined the value of resilience in the face of digital media manipulation, particularly among university students.

METHODS AND MATERIALS

For this particular study (process showing the selection of publications), the recommended reporting items for systematic reviews and meta-analysis (PRISMA) criteria and checklist were adhered to. The authors use PRISMA procedures to guarantee the accuracy and thoroughness of their systematic reviews and meta-analyses. The PRISMA statement and its explanations were created by the authors to assist researchers in reporting on a wide range of systematic reviews that evaluated the advantages and disadvantages of various medical conditions. This article is a systematic review of the empirical research on social media addiction and aims to compile the key

findings, particularly with regard to prevalence, causes, comorbidities, and health effects.

Using the keywords "social media addiction" "precipitating factors of SMA," "addictive behaviour," "SMA intervention," "problematic social media addiction," "stress, anxiety and depression in SMA," "etiological factors of SMA," "SMA in college and university students," "distribution and determinants of SMA," "comorbidities of SMA," and "comorbidities of SMA," a search was conducted on Google Scholar, Web of Science, and "the consequences of SMA on mental health and well-being."

Boolean operators, such as and, or, and not, were employed during the search procedure to find accurate and pertinent materials relating to SMA. Searches were conducted independently for each keyword and phrase, such as social media addiction, risk factors of SMA, mental health effects of SMA, etc. The following inclusion and exclusion criteria were used in this study to select articles of importance for the review purpose. Empirical studies reporting SMA in relation to its understanding, screening and psychometric tools, psychological risk factors, consequences, and intervention, as well as studies specifically in the context of social media addiction that had been published in the English language. Additionally, the inclusion criteria for this study only took articles released between 2015 and 2023 into account.

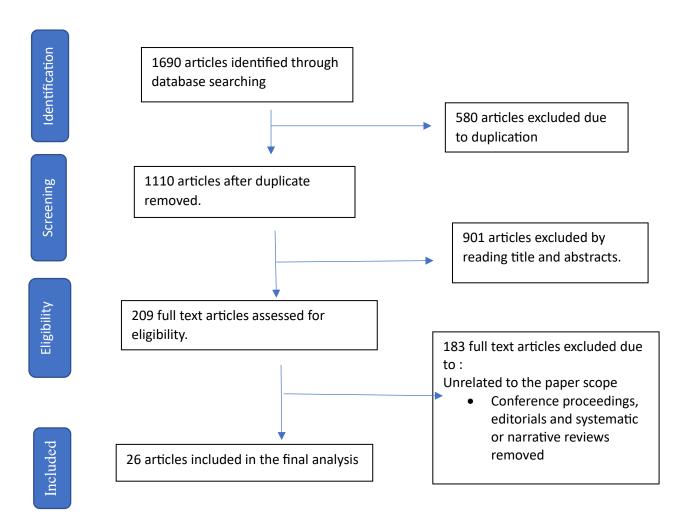


Figure 1: Flow chart of study selection for the systematic review and meta-analysis

Guided by the objective of the review and the inclusion-exclusion criteria, A literature search using several databases turned up 1234 items. Following the removal of duplicates 813 due to duplication, and 421 articles were kept for preliminary evaluation.200 articles were eliminated based on the exclusion criteria by looking at the titles and abstracts of the 421

publications. Then 221 full-text articles were assessed for eligibility. then 186 research articles were excluded due to unrelated paper scope. The study did not include reviews, or case studies, that were not available in full text. The present review included 35 empirical publications. The sample sizes of the empirical research included in this analysis varied from 10 to 3570, and most of them

used cross-sectional survey methodologies and online or web surveys. Overall, the method used for this review article involved a systematic search and synthesis of the literature, and a critical analysis of the findings to provide insights into the relationship between social media addiction and mental health and well-being, as well as strategies for promoting positive mental health outcomes.

Table no: 1 Literature Review

	1		: 1 Literature		
S.NO.	AUTHOR	YEAR	STUDY DESIGN	VARIABLES	MAJOR FINDINGS
1	Bilgin, Okan Taş, İbrahim	2018	Descriptive	Perceived Social Support Scale, Resilience	Psychological resilience was revealed to be a strong predictor of social media addiction, and perceived social support was found to significantly predict the subscale of perceived social support from peers.
2	Elena Stanculescu Mark D. Griffith	2022	Descriptive	Social Media Addiction, Social Media Intensity	It was discovered that females had a greater frequency of addiction than males: 10.4% females (n = 45) and 6.9% males (n = 19 men), according to gender in the third profile (i.e., "high risk of addiction").
3	Sonia Khodabakhsh & Somaye Ahmadi	2022	Descriptive	Subjective happiness resilience.	Our findings revealed that when resilience is average or high, the association between social media use and subjective happiness is considerable. This is in relation to the various ways that resilience may operate as a moderator.
4	Sheshadri Chatterjee	2021	Descriptive	Social media addiction	Age and gender have been revealed to have significant moderating effects on the influence of predictors on the addiction to online platforms.
5	Indri Utami Sumaryanti*, Salma Azizah, Fanni Putri Diantina, Endah Nawangsih	2019	Quantitativ e approach	Social media addiction	The findings indicated a strong relationship between three personality types and the propensity for social media addiction. There were pleasant, extraverted, and neurotic personality types.
6	Musarrat Azher	2018	cluster sampling method	Internet Addiction Anxiety	The male students were more likely than female students to be addicted to the internet, and that there was a strong and substantial correlation between internet addiction and anxiety levels among college students.
7	Behzad Foroughi1 & Mark D. Griffiths2 & Mohammad Iranmanesh3 & Yashar Salamzadeh	2021	a paper- based survey	Social media addiction, anxiety.	The study also revealed that Instagram addiction improved social anxiety and despair while having a detrimental influence on academic achievement.
8	Gökmen Arslan & Murat Yıldırım & Masood Zangeneh	2021	descriptive	Social media addiction	The study found that social media addiction impacted the role of college belongingness in mediating the relationship between undergraduates'.
9	julia Brailovskaia , Holger Schillack , Jürgen Margraf	2020	exploratory	Social media addiction , depression	SM flow and depressive symptoms were found to be important predictors, Negative Emotions" served as a significant predictor of addictive SMU.

10	Skyler I. Meguiro	2022	correlation	Social media	More social media use and TikTok
	Skylar L. Maguire Hollie Pellosmaa			addiction , stress, anxiety	addiction were positively connected with higher rates of sadness, anxiety, and stress. On the social media scales, younger people had a larger likelihood of scoring higher.
11	Önder Baltaci	2019	Pearson correlation and Hierarchica I regression analysis	Social media addiction , anxiety.	The results revealed a link between students' degrees of social media addiction and their levels of loneliness and anxiety in social situations.
12	 Dmitri Rozgonjuka,b, Cornelia Sindermanna Jon D. Elhaic Christian Montaga 	2020	Descriptive	Social media addiction	The study discovered a link between social media usage disorders, fear of missing out (FoMO), and detrimental effects on everyday life and job productivity.
13	 Juan Hou Yamikani Ndasauka2, Xuefei Pan1, Shuangyi Chen1, Fei Xu2 and Xiaochu Zhang 	2018	Descriptive	Social media addiction	According to the study, excessive WeChat and Weibo use was adversely connected with agreeableness, social support, and social interaction and favourably correlated with neuroticism and external locus of control.
14	 ZhonghuaHe* Mingde Li Chanjun Liu and Xiaoyue Ma	2022	descriptive	Social media addiction.	The findings show a strong correlation between SMA and EDS.
15	Lu Yu1 Tingyu Luo2	2021	descriptive	Social media addiction	The results point to the severity of SNA and its unfavourable effects among student.
16	 Serdar Aydin Orhan Koçak Thomas A. Shaw Betul Buber Esra Zeynep Akpinar and Mustafa Z. Younis 	2021	descriptive	Social media addiction	. The study revealed that there was no gender difference in social media addiction when sociodemographic factors were addressed.
17	 : Žmavc, M.; Šorgo, A.; Gabrovec, B.; Crnkovi c, N.; Cesar, K.; Selak, Š. 	2022	descriptive	Social media addiction,resil ience, stress	resilience significantly reduced social media addiction by lowering the symptoms of depression and stress
18	 Güler Beril Kumpasoglu Selen Eltan Ezgi Didem Merdan-Yıldız Ays egül Durak Batıgü 	2021	descriptive	Social media addiction	Death fear mediates the association between psychopathy and social media addiction, and life .
19	Sujarwoto1 & Rindi Ardika Melsalasa Saputri Tri Yumarni3	2021	descriptive	Social media addiction	. During pandemics, addressing social media addiction and fostering family bonds and religion may help lower the dangers to university students' mental health.
20	Brenda K. Wiederhold,	2018	descriptive	Self-Esteem, Social Media Addiction	gender, posting updates, friend count, and independent self-construal only predict social media addiction, self and extraversion only predict internet addiction.
21	Nazir Hawi & Maya Samaha	2019	descriptive	Social Media Addiction .	Male students had a addiction that was greater than female students' and this difference was statistically significant ($P < 0.01$).
22	Zeynep Isil Demircioglu Asli Goncu Kose	2019	descriptive	Self-Esteem. SMA	the association between SMA and self-esteem was modulated by gender.

23	 Raquel Lozano Blasco Cecilia Latorre Cosculluela Alberto Quílez Robres 	2020	descriptive	Social Network Addiction (SNA) Anxiety	The study comes to the conclusion that using social networks improperly might result in behavioural addiction.
24	Rahmatullah HaandZhao Shuwang	2020	descriptive	Depression, Social Media Addiction, Internet Addiction	The findings indicated that social media addiction has a positive correlation with depression and depression significantly predicts social media addiction.
25	Mehmet Enes Sağar	2021	descriptive	Media Addiction Cognitive Flexibility, Self-Control	cognitive flexibility and self- control substantially predicted social media addiction.
26	 Xiang-Ling Hou a , Hai-Zhen Wang b , Cheng Guo c , James Gaskin d , Detlef H. Rost a,e , Jin-Liang Wang 	2017	descriptive	Stress Scale, Resilience,	The study discovered a strong link between psychological toughness, and problematic social media usage
27	Bányai, F., Zsila, Á., Király, O., Maraz, A., Elekes, Z., Griffiths, MD. Demetrovics, Z.	2019	survey	Social Media Addiction	According to the study, anxiety and a lack of psychological resiliency are risk factors for problematic social media usage.
28	Korkmazer, B., Yurdakul, F., Şükriye, Ö. Z. E. R., Yeşil, Ö., Coşkuntuncel, C., Sualp, B. Ü. Ş. R. A.Şahin, E. M.	2022	Cross sectional design	Depression Anxiety	The study found that there was a significant positive relationship between smartphone addiction and depression, anxiety, young adults.
29	Chang LiuJian-Ling Ma	2019	cross- sectional design	Social, Media Addiction.	The findings imply that attachment style and emotion control are crucial elements in the development of SNS addiction.
30	 Elhai JD, Rozgonjuk D, Yildirim C, Alghraibeh AM, Alafnan AA. 	2019	cross- sectional design	Smartphone Addiction Worry	The findings also revealed that those in the high-risk class, or those having problematic smartphone usage was the most severe, had considerably greater levels of anxiety and rage than those in the low-risk class.
31	 Chentsova, V. O., Bravo, A. J., Mezquita, L., Pilatti, A., Hogarth, L., Cross-Cultural Addictions Study Team. 	2023	cross- sectional design	Social Media Disorder .	The results indicate that therapies intended to lessen problematic usage of social networking sites .
32	Brailovskaia, J.,Margraf, J.	2023	longitudinal design	Anxiety Disorder Social Media Addiction .	The results imply that declines in sense of control and rises in anxiety may play a role in the emergence of addictive social media usage,
33	 Mark Žmavc, Andrej Šorgo, Branko Gabrovec, Nuša Crnkovič, Katarina Cesar, Špela Selak 	2022	Cross sectional study	Social Media Addiction	Social media addiction symptoms were present in 4.6% of people overall, with more women than men. Compared to male users, female users of social media reported social media addiction symptoms.

34	•	Zitong Zhao,	2022	Cross sectional	Anxiety,	Exercise did not significantly
	•	Shuai Zhao,		design	depression	reduce the addiction to mobile
	•	Qi Wang,			resilience	phones.
	•	Yiran Zhang,				
	•	Chunchun Chen				

3	35	•	Şeyma Güldal,	2022	Survey	social media	, social media addiction rose with
		•	Nur Akbulut			addiction	coronavirus anxiety, but coping
			Kılıçoğlu,				humour dropped and
		•	Figen Kasapoğlu				psychological flexibility was
			2 1 2				indirectly affected by social media
							addiction.

RESULT

In order to identify and map the empirical data that is currently accessible on SMA, a scoping review was conducted to highlight the important ideas and conclusions from the selected papers. In order to show SMA from a variety of angles, including the prevalence of SMA, determinants of SMA, comorbidities, and health effects of SMA, the existing literature was divided into several categories.

Prevalence of SMA

The prevalence of SM addiction in Asia countries like Singapore and China is greater than that of the US The high percentage of college students addicted to social networking sites in Asia countries once again confirmed the validity of previous studies. The results were consistent with previous studies that the prevalence of social media addiction among Asian students than other continents (Tang & Koh, 2017; Tang et al., 2018; Önder Baltaci et al., 2019; Elena Stanculescu & Mark D. Griffith 2022;). By two studies conducted by china, one identified 78 of the 463 students surveyed were reported as social media addicts or 16.8% (Liu & Ma, 2019); while other study tells tha, 21 out of 61 students addicted to WeChat social networking (or 41%) were announced (Montag et al., 2018). Singapore has conducted a study that declared 328 out of 1110 (29.5%) of the students surveyed identified Facebook addiction (Tang & Koh, 2017). Here in two studies one of the study is found that 23 out of 253 surveyed students (9.7%) addict to social networking sites (Hormes et al., 2014); Another study did not specify the frequency of social media Facebook (Xie & Karan, 2019).

Comorbidities and health consequences of SMA:

One relevant aspect is that found in several studies, where certain personality traits, such as neuroticism (Sumaryanti et .al., 2019) or low self-esteem, great shyness, and depression (D Mark et. Al.,2022) are pointed out as factors promoting possible addiction to the Internet, especially to social networks. This psychological dependence affects different spheres of daily life such as work, social and interpersonal relationships, school performance, emotional and family relationships, etc. Nazir Hawi & Maya Samaha (2019), and

therefore has become a public health problem and requires preventive actions Lu Yu & Tingyu Luo (2021) especially among the student population People with technological addictions (Sağar et al., 2021) often present loss of self-control, intense desire to connect to social networks, withdrawal symptoms such as anxiety, agitation, depression, irritability when it is not possible to access the network, tolerance (need to progressively extend the time of Internet connection to achieve the same results and feel satisfied), severe interference in daily life with reduced physical activity, and gradual abandonment of other previous pleasures (Cheng, J.; Burke, M.; Davis, E.G. 2019)criteria that are common to substance abuse and dependence (Rhemtulla, M. 2016)Therefore, different authors have established an equivalence between addiction to substances such as alcohol and drugs and dependence on the Internet, showing the same symptoms. As presented by (Torrens et.al.; 2019), "dual pathology" refers to the concurrence in the same individual of at least one substance use disorder and other psychiatric disorder. These "dual" patients, or those with psychiatric comorbidity, are relatively frequent, and it is certainly of great interest to study their presence among university students, due to their implications for training and prevention measures.

DISCUSSION:

In terms of prevalence, causes, comorbidities, and health effects, this study evaluates and attempts to summarise empirical data on social media addiction. Nowadays, social media is highly widespread around the world. An example of a behavioural addiction in social networking site, which is thought to have neurological abnormalities in common with other addictive illnesses Shannon, H. N. (2022). There is very limited room for outside activity, and usage of mobile phones tends to lead to a sedentary lifestyle. This has been more prevalent recently since the internet has become a common pastime for most teenagers Abolfathi, Mitra, et al.(2022). SMA causes injury to both the body and the mind Precht, Lena-Marie, et al. (2022). It has several symptoms that call for therapy. The social media addiction scale (SMA) and resilience scale should be administered concurrently to assess for comorbid problems. Eliminating social media usages behaviour that is impeding self-care, relationships,

and other life obligations is the main goal of therapy, cognitions aid in the development of a therapeutic formulation and guide treatment plans He, Zhonghua, et al. (2022). The issue in this field is the dearth of useful information, such as full explanations of the methods and techniques used in SMA treatment trials or standardised, step-by-step treatment manuals. In order to treat a social media addiction, psychological treatment, including both individual and group therapy, is the most often employed method Rusfa, U. S et al., Mulawarman, M, et al., Sugiyo, S, et al., (2022). Furthermore, the age at which SMA first manifests itself may be a helpful indicator of the prognosis for SMA. Because the causes of social media addiction are complex and involve several biopsychosocial factors, treatment is difficult, making prevention all the more important Rouleau, R. D, at el., Beauregard, C, at el., & Beaudry, V, at el., (2023). Further research in varied usages of social networking site is needed to understand the aetiology, prevalence, and related risk factors, as well as youth-specific prevention and treatment approaches. Numerous research recommended restricting the usage of social media and investigating the following actions to be taken: Parents should restrict the amount of time on social media for their kids may spend on the computer White-Gosselin, C. É, at el., Poulin, F, at el., (2022). The review also emphasised the possible effects of social media addiction on outcomes related to mental health, interpersonal relationships, and academic achievement. The results of various research indicate that social media addiction has a detrimental impact on both interpersonal relationships and academic achievement. Additionally, there is evidence connecting social media addiction to a number of mental health issues, such as stress, anxiety, and depression (Shannon, Holly, et al., 2022). It is advised that treatments be created to foster resilience and lessen social media addiction among college students in light of the findings of this review. CBT, mindfulness-based practises, and educational initiatives supporting healthy social media usage are a few examples of such therapies, Gainza Perez, M. (2022). We can lessen social media's detrimental effects on mental health by tackling social media addiction among university students.

Future research direction on social media addiction

It would be interesting to carry out future research that would go deeper into this, including analysing the possibility of dual pathology in some students and young adults, considering as one of them addicted to social networking sites or, in general, Facebook, WhatsApp, Instagram and TikTok etc (Sagar et. al.,2021). In addition to appropriate treatments for comorbidity and multimorbidity in their different dimensions, including addictions to social networking site (Internet, social networks, messengers, etc (JD Elhai et al., 2019) social media addiction has been widely explored, but shockingly by young people has garnered very less attention in India and internationally (Sharma Mk et. al.,2022) However, research on SMA from across the world also discusses a wide range of other difficulties and worries in addition to its related components. As a result, a portion of the population is more vulnerable to the dangers of the excessive, social site by students and children and young adults (Hau Juan et. al, 2018). These results overwhelmingly show that young people are more susceptible to Researchers and clinicians SMA. investigate the ultimate effects and all-inclusive approaches to treating SMA in greater detail in light of these persisting conditions, which warrant and frighten them both. Further research is needed to determine whether the nine SMA symptom parameters and the cut-off points currently proposed are ideal or should be re-evaluated. The dynamic nature of social media and its monetization over time has made it similar to gambling Kopf, S. (2020). The transition in nature of social communication systems and their interface with other tasks should be taken into account for future study. Many aspects of social media usage are still being disputed. For example, the extent to which online social media addiction is considered a mental illness; the negative effects of social media addiction; the relationship between SMA and other comorbid psychological disorders; the clinical manifestation of social media addiction; and the aetiology and progression of SMA. Future research on SMA should focus on: its epidemiological investigation, the expansion and standardisation of diagnostic tools for better diagnosis and treatment, neurological factors, and treatment and prevention in light of the extensive drawn and included empirical findings. At the same time, while SMA is undeniably a rising problem for all developing nations, the scarcity of research on it necessitates an urgent need to analyse and study it as a multidimensional concept, with many causes and risk factors from a global viewpoint.

CONCLUSION

In conclusion, our review of the research has shown that social media addiction is significantly correlated with traits like depression, stress, anxiety, and resilience in a variety of groups, including college students. According to this review's findings, social media addiction has a negative relationship with resilience but a positive connection with depression, stress, and anxiety. In addition, the research found that a number of conditions, such as boredom, low self-esteem, and loneliness, might lead to social media addiction in people. It is further highlighted by the detrimental effects of social media addiction on results for mental health, interpersonal relationships, and Finally, academic achievement. the significant research, therapeutic effort, and advancement in this area are limited to a few age groups, which must be broadened to include all age groups. There is an urgent need not only for an adequate health care policy but also for awarenessraising and the introduction of specialised clinics throughout the world to give options for getting out of virtual reality.

REFERENCE

- 1. Abolfathi, M., Dehdari, T., Zamani-Alavijeh, F., Taghdisi, M. H., Ashtarian, H., Rezaei, M., & Irandoost, S. F. (2022). Identification of the opportunities and threats of using social media among Iranian adolescent girls. Heliyon, 8(4), e09224.
- Arslan, G., Yıldırım, M., & Zangeneh, M. (2021). Coronavirus anxiety and psychological adjustment in college students: Exploring the role of college belongingness and social media addiction. International Journal of Mental Health and Addiction, 1-14.
- Aydin, S., Koçak, O., Shaw, T. A., Buber, B., Akpinar, E. Z., & Younis, M. Z. (2021, April). Investigation of the effect of social media addiction on adults with depression. In Healthcare (Vol. 9, No. 4, p. 450). MDPI.
- 4. Azher, M., Khan, R. B., Salim, M., Bilal, M., Hussain, A., & Haseeb, M. (2014). The relationship between internet addiction and anxiety among students of University of Sargodha. International Journal of Humanities and Social Science, 4(1), 288-293.
- 5. Azizi, S. M., Soroush, A., & Khatony, A. (2019). The relationship between social networking addiction and academic performance in Iranian students of medical sciences: a cross-sectional study. BMC psychology, 7(1), 1-8.
- 6. Baltaci, Ö. (2019). The Predictive Relationships between the Social Media Addiction and Social Anxiety, Loneliness, and Happiness. International Journal of Progressive Education, 15(4), 73-82.

- 7. 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), e0169839.
- 8. Bilgin, O., & Taş, İ. (2018). Effects of perceived social support and psychological resilience on social media addiction among university students. Universal journal of educational research.
- 9. Brailovskaia, J., & Margraf, J. (2022). Positive mental health and mindfulness as protective factors against addictive social media use during the COVID-19 outbreak. Plos one, 17(11), e027763
- Brailovskaia, J., & Margraf, J. (2023). Less sense of control, more anxiety, and addictive social media use: Cohort trends in German university freshmen between 2019 and 2021. Current Research in Behavioral Sciences, 4, 100088.
- 11. Brailovskaia, J., Schillack, H., & Margraf, J. (2020). Tell me why are you using social media (SM)! Relationship between reasons for use of SM, SM flow, daily stress, depression, anxiety, and addictive SM use—An exploratory investigation of young adults in Germany. Computers in Human Behavior, 113, 106511.
- 12. Chatterjee, S. (2021). Impact on addiction of online platforms on quality of life. Australasian Journal of Information Systems, 25.
- 13. Chentsova, V. O., Bravo, A. J., Mezquita, L., Pilatti, A., Hogarth, L., & Cross-Cultural Addictions Study Team. (2023). Internalizing symptoms, rumination, and problematic social networking site use: A cross national examination among young adults in seven countries. Addictive Behaviors, 136, 107464.
- 14. Ciacchini, R., Orrù, G., Cucurnia, E., Sabbatini, S., Scafuto, F., Lazzarelli, A., ... & Conversano, C. (2023). Social Media in Adolescents: A Retrospective Correlational Study on Addiction. Children, 10(2), 278.
- 15. Demircioğlu, Z. I., & Köse, A. G. (2020). Mediating effects of self-esteem in the relationship between attachment styles and social media addiction among university students.
- Elhai, J. D., Rozgonjuk, D., Yildirim, C., Alghraibeh, A. M., & Alafnan, A. A. (2019).
 Worry and anger are associated with latent classes of problematic smartphone use severity among college students. Journal of affective disorders, 246, 209-216.

- 17. Foroughi, B., Griffiths, M. D., Iranmanesh, M., & Salamzadeh, Y. (2021). Associations between Instagram addiction, academic performance, social anxiety, depression, and life satisfaction among university students. International Journal of Mental Health and Addiction, 1-22.
- 18. Gainza Perez, M. (2022). The Protective Influence of Mindfulness Facets on the Relationship Between Negative Core Beliefs and Social Media Addiction Among Latinx College Students.
- 19. Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., ... & Dai, J. (2020). Mental health problems and social media exposure during COVID-19 outbreak. Plos one, 15(4), e0231924.
- Güldal, Ş., Kılıçoğlu, N. A., & Kasapoğlu, F. (2022). Psychological flexibility, coronavirus anxiety, humor and social media addiction during COVID-19 pandemic in Turkey. International Journal for the Advancement of Counselling, 44(2), 220-242.
- 21. Haand, R., & Shuwang, Z. (2020). The relationship between social media addiction and depression: A quantitative study among university students in Khost, Afghanistan. International Journal of Adolescence and Youth, 25(1), 780-786.
- 22. Hawi, N. S., & Samaha, M. (2017). The relations among social media addiction, self-esteem, and life satisfaction in university students. Social Science Computer Review, 35(5), 576-586.
- 23. Hawi, N., & Samaha, M. (2019). Identifying commonalities and differences in personality characteristics of Internet and social media addiction profiles: traits, self-esteem, and self-construal. Behaviour & Information Technology, 38(2), 110-119.
- 24. He, Z., Li, M., Liu, C., & Ma, X. (2022). Common Predictive Factors of Social Media Addiction and Eating Disorder Symptoms in Female College Students: State Anxiety and the Mediating Role of Cognitive Flexibility/Sustained Attention. Frontiers in Psychology, 12, 6182.
- 25. Hormes, J. M., Kearns, B., & Timko, C. A. (2014). Craving F acebook? Behavioral addiction to online social networking and its association with emotion regulation deficits. Addiction, 109(12), 2079-2088.
- 26. Hou, J., Ndasauka, Y., Pan, X., Chen, S., Xu, F., & Zhang, X. (2018). Weibo or WeChat? Assessing preference for social networking sites and role of personality traits and

- psychological factors. Frontiers in psychology, 9, 545.
- 27. Hou, X. L., Wang, H. Z., Guo, C., Gaskin, J., Rost, D. H., & Wang, J. L. (2017). Psychological resilience can help combat the effect of stress on problematic social networking site usage. Personality and Individual Differences, 109, 61-66.
- 28. Khodabakhsh, S., & Ahmadi, S. (2020). The relationship between subjective happiness and social media usage during the COVID-19 pandemic: the moderating role of resilience. Aloma: revista de psicologia, ciències de l'educació i de l'esport Blanquerna, 38(2), 105-112.
- 29. Kopf, S. (2020). "Rewarding good creators": Corporate social media discourse on monetization schemes for content creators. Social Media+ Society, 6(4), 2056305120969877.1.
- 30. KORKMAZER, B., Yurdakul, F., Şükriye, Ö. Z. E. R., YEŞİL, Ö., COŞKUNTUNCEL, C., Sualp, B. Ü. Ş. R. A., ... & ŞAHİN, E. M. (2022). A Cross-sectional study on the relationship between smartphone addiction and depression, anxiety and social appearance anxiety in young adults. Journal of Istanbul Faculty of Medicine, 85(1), 91-97.
- 31. Kumpasoğlu, G. B., Eltan, S., Merdan-Yıldız, E. D., & Batıgün, A. D. (2021). Mediating role of life satisfaction and death anxiety in the relationship between dark triad and social media addiction. Personality and individual differences, 172, 110606.
- 32. Liu, C., & Ma, J. L. (2019). Adult attachment style, emotion regulation, and social networking sites addiction. Frontiers in psychology, 10, 2352.
- 33. Lozano Bascom, R., Latorre Cosculluela, C., & Quílez Robres, A. (2020). Social network addiction and its impact on anxiety level among university students. Sustainability, 12(13), 5397.
- 34. Maguire, S. L., & Pellosmaa, H. (2022). Depression, Anxiety, and Stress Severity Impact Social Media Use and TikTok Addiction.
- 35. Montag, C., Zhao, Z., Sindermann, C., Xu, L., Fu, M., Li, J., ... & Becker, B. (2018). Internet communication disorder and the structure of the human brain: Initial insights on WeChat addiction. Scientific reports, 8(1), 2155.
- 36. Nguyen, T. H., Lin, K. H., Rahman, F. F., Ou, J. P., & Wong, W. K. (2020). Study of depression, anxiety, and social media addiction among undergraduate students.

- 37. Precht, L. M., Stirnberg, J., Margraf, J., & Brailovskaia, J. (2022). Can physical activity foster mental health by preventing addictive social media use?—A longitudinal investigation during the COVID-19 pandemic in Germany. Journal of affective disorders reports, 8, 100316.
- 38. Primack, B. A., Shensa, A., Escobar-Viera, C. G., Barrett, E. L., Sidani, J. E., Colditz, J. B., & James, A. E. (2017). Use of multiple social media platforms and symptoms of depression and anxiety: A nationally-representative study among US young adults. Computers in human behavior, 69, 1-9.
- 39. Rouleau, R. D., Beauregard, C., & Beaudry, V. (2023). A rise in social media use in adolescents during the COVID-19 pandemic: the French validation of the Bergen Social Media Addiction Scale in a Canadian cohort. BMC psychology, 11(1), 1-8.
- 40. Rozgonjuk, D., Sindermann, C., Elhai, J. D., & Montag, C. (2020). Fear of Missing Out (FoMO) and social media's impact on daily-life and productivity at work: Do WhatsApp, Facebook, Instagram, and Snapchat Use Disorders mediate that association?. Addictive Behaviors, 110, 106487.
- 41. Rusfa, U. S., Mulawarman, M., & Sugiyo, S. (2022). The Effectiveness of Cognitive Behavior Therapy Group Counseling with a Self-talk Technique to Improve the Body Image Satisfaction of Students with Social Media Addiction Tendencies. Jurnal Bimbingan Konseling, 11(4), 257-264.
- 42. Sagar, M. E. (2021). Predictive Role of Cognitive Flexibility and Self-Control on Social Media Addiction in University Students. International Education Studies, 14(4), 1-10.
- 43. Sahin, C. (2017). The Predictive Level of Social Media Addiction for Life Satisfaction: A Study on University Students. Turkish Online Journal of Educational Technology-TOJET, 16(4), 120-125.
- 44. Saputri, R. A. M., & Yumarni, T. (2023). Social media addiction and mental health among university students during the COVID-19 pandemic in Indonesia. International Journal of Mental Health and Addiction, 21(1), 96-110.
- 45. Shannon, H. N. (2022). Towards a Better Understanding of the Neurobiological Basis of Problematic Social Media use in Young Adults (Doctoral dissertation, Carleton University).

- 46. Shannon, H., Bush, K., Villeneuve, P. J., Hellemans, K. G., & Guimond, S. (2022). Problematic social media use in adolescents and young adults: systematic review and meta-analysis. JMIR Mental Health, 9(4), e33450.
- 47. Stănculescu, E., & Griffiths, M. D. (2022). Social media addiction profiles and their antecedents using latent profile analysis: The contribution of social anxiety, gender, and age. Telematics and Informatics, 74, 101879.
- 48. Sumaryanti, I. U., Azizah, S., Diantina, F. P., & Nawangsih, E. (2020, March). Personality and social media addiction among college students. In 2nd Social and Humaniora Research Symposium (SoRes 2019) (pp. 376-379). Atlantis Press.
- 49. Taş, İ. (2023). The relationship between social Ignore and social media addiction among adolescents: Mediator effect of satisfaction with family life. Youth & Society, 55(4), 708-729.
- 50. Tkácová, H., Pavlíková, M., Stranovská, E., & Králik, R. (2023). Individual (Non) Resilience of University Students to Digital Media Manipulation after COVID-19 (Case Study of Slovak Initiatives). International Journal of Environmental Research and Public Health, 20(2), 1605.
- 51. White-Gosselin, C. É., & Poulin, F. (2022). Associations between young adults' social media addiction, relationship quality with parents, and internalizing problems: A path analysis model. Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement.
- 52. Xie, W., & Karan, K. (2019). Predicting Facebook addiction and state anxiety without Facebook by gender, trait anxiety, Facebook intensity, and different Facebook activities. Journal of Behavioral Addictions, 8(1), 79-87.
- 53. Yu, L., & Luo, T. (2021). Social networking addiction among Hong Kong university students: Its health consequences and relationships with parenting behaviors. Frontiers in Public Health, 8, 555990.
- 54. Zaffar, M., Mahmood, S., Saleem, M., & Zakaria, E. (2015). Facebook addiction: Relation with depression, anxiety, loneliness and academic performance of Pakistani students. Science International (Lahore), 27(3), 2469-2475.
- 55. Zhao, Z., Zhao, S., Wang, Q., Zhang, Y., & Chen, C. (2022). Effects of Physical Exercise on Mobile Phone Addiction in College

- Students: The Chain Mediation Effect of Psychological Resilience and Perceived Stress. International Journal of Environmental Research and Public Health, 19(23), 15679.
- 56. Žmavc, M., Šorgo, A., Gabrovec, B., Crnkovič, N., Cesar, K., & Selak, Š. (2022). The Protective Role of Resilience in the Development of Social Media Addiction in Tertiary Students and Psychometric Properties of the Slovenian Bergen Social Media Addiction Scale (BSMAS). International Journal of Research and Public Environmental Health, 19(20), 13178.