

IMPACT OF COVID-19 PANDEMIC IN RELATION TO SOCIAL MEDIA USAGE AMONG ADOLESCENTS

Y. Sharma and P. Devdutt

Centre for Psychology and Human Behaviour, Shobhit Institute of Engineering and Technology
Deemed -to-be University, Meerut, UP, India

ABSTRACT

The COVID-19 epidemic has had an impact on everyone's health, safety, and daily lives. Because of the biological and psychological changes that occur during this developmental period, adolescents may be particularly sensitive to this rapid disturbance in their life. The ways in which adolescents connect and interact with one another have been drastically revolutionized by social media, contributing to an ongoing debate regarding whether social media is benefiting or harming teens today. The study incorporated the narrative review analysis based on the existing literature related to impact of Covid-19 on adolescents who use social media. We performed a search of the electronic databases available at JMIR, Heliyon, Journal of Psychiatric Research, Elsevier, JSCP, PubMed etc. We retrieved 110 total article citations in the search process. On reviewing the sources, we included 37 articles because others dealt with different aspects of the COVID-19 pandemic, such as therapy, drugs, animal models, and organization of the healthcare systems. In this study only peer-reviewed, full-text research papers were included. All types' studies were included in the review which observed the effect of COVID-19 and its related causes such as lockdown on adolescents' mental health impact in relation to social media usage. Research findings indicate that there is both positive and negative impact of social media in adolescents. Fake news, misinformation, depression, anxiety, panic and miscarriages show the negative impact. Academic usage, entertainment, sharing awareness, social interaction shows the positive impact of pandemic in adolescents in relation to media usage. Also Facebook, instagram and twitter were seen as most widely used social media platforms by adolescents in many countries.

Keywords: Social Media, Pandemic, Covid-19, youth, virus, lockdown

Introduction

The COVID-19 pandemic has drastically impacted the lives of all individuals in Indian society and worldwide. Physical (or social) distancing— keeping space between oneself and other people outside of one's home has become the primary method for slowing the spread of coronavirus in almost all of the India . While these physical distancing practices are mandatory practices that ensure and guarantee safety and maintain good health of general public. But they additionally have incurred significant damage and have taken a toll. Human beings are inherently a social species but the practice of social isolation has created both physical and mental health consequences. In spite of the fact, that people of all ages are encountering the social and emotional difficulties. But youths might be especially influenced by the unexpected and delayed interruption in their social activities. This article uses psychological theory and research to debate the implications of social media for adolescent development within the context of COVID-19. It highlights the ways during which social media is also especially helpful for our youth within the midst of

physical distancing practices and accessing COVID-19 resources. It also addresses the ways within which social media use and behaviors may negatively impact teens' safety, self-esteem, anxiety, mood, and sleep. Finally, this text will provide practical guidance and considerations for each parent, educators, and healthcare providers on some way to mitigate the negative effects of social media and promote teens' helpful use of social media during these challenging times. As more people than ever before hope on social media to require care of social connection and ward off social isolation, this text is additionally of practical use for people of all ages who have an interest within the advantages and drawbacks of social media use during the COVID-19 pandemic.

What is unique about Adolescence?

The term adolescence has been derived from the Latin word called "adolescere" which means to grow up. The Adolescence is a developing time of individuals; the period which reaches out from youth to masculinity or womanhood; conventionally considered as stretching out from 13 to 26 years. Therefore it

is said to be “the process or condition of growing up”. As a concept, the age of adolescence has advanced in its biological, social, moral, mental, physical, spritual, sex and social outlook. However its most noteworthy development has happened in grown-up impression of the standards and conduct of youngsters.

The developmental period of adolescence is characterized by identity exploration, increasing autonomy from parents and reliance on peers, heightened sensation-seeking and risk-taking, and also the initiation of romantic and sexual relationships. Underlying each of those changes could be a complex set of bio psychosocial changes. It is a period to learn new things. It is the period of anxieties and worries. It is the period of ambitions. It is the period of conflicts and complexity. (Aggarwal. J.C 1994). Adolescent thus appears excessively affectionate and then quite suddenly detached and cool. These are all problems of the stresses and strains of transition (Aggarwal.J.C 1994).

G.Standley Hall made an intensive study on the nature of adolescence and described its characteristics in detail. “Adolescence could be a new birth, for the higher and more completely human traits are new born. development is a smaller amount gradual and more saltatory, suggestive some ancient period of storm and stress when old moorings were broken and next level is attained. Important functions previously non-existent arise. Every step of the upward way is strewn with wreckage of body, mind and morals, sex asserts its mastery within the field after field, and works its havoc within the style of secret vice, debauch, disease and enfeebled heredity.

What is Social Media?

The word “Social Media” means collection of applications (Facebook, Twitter, WhatsApp, LinkedIn, or YouTube etc.) that connects individual to share information and make them aware of any occasion or event through social media platforms. From the start of the 21st century, social media is current. Individuals of all age groups are on different social media platform. Social media assumes an important part throughout lifestyle.

Today, youths are the defining users of social media. Social media made available a platform for youth to make social networks or social relations among people. Nowadays, lucrative electronic gadgets are attracting the eye of the young generation; they're the most important customer of electronic gadgets and services, which makes them addicted during a short span of your time. It is not surprising that social media usage is of the foremost common activities among youngsters, adolescents, and young adults today. It offers today's youth a portal for amusement and communication and it is a popular platform for accessing data and news. Therefore it's hard to imagine life without social media. It's become essential to connecting with our friends, getting updates about what's occurring within the world and being entertained. We will barely remember (if we're the right age to remember!) how we stayed in grips without it. But teens and young adults are increasingly reporting that social media also can be a source of stress.

It should come as no surprise that the pressure to be available 24/7 on social media is a very real challenge for today's teenagers. Aside from the fact that their grasp of and dependence on social media far exceeds that of many adults, they also are using social media at much greater rates too.

Literature Review

1. **Araz Ramazan Ahmad, Murad R.H** (2020) The aim of this study is to work out how social media affects self-reported mental state and therefore the spread of panic about COVID-19 within the Kurdistan Region of Iraq. A web questionnaire was prepared and conducted in geographical area, and a complete of 516 social media users were sampled. Participants reported that social media encompasses a significant impact on spreading fear and panic associated with the COVID-19 outbreak in geographic region, with a possible negative influence on people's psychological state and psychological well-being. For spreading panic Facebook was the foremost used social media network about the COVID-19 outbreak in Iraq.

2. **Alnasser AHA, Al-Tawfiq JA, Al-Kalif MSH, Shahadah RFB, Almuqati KSA, Al-Sulaiman BSA, Alharbi KKS, Alabbad FYM, Alabbad JYM, Alquwaiz IAI, Almashama IKI (2020).** In this study, the usage of social media as a source of COVID-19 awareness in Saudi Arabia was evaluated. For the study, 3,204 people aged 18 and up took part in an online survey. Except for those from the northern region, all participants from all regions of Saudi Arabia demonstrated a high level of awareness. The official government social media was the most prevalent source of information, with 44.1 percent saying they used Twitter. Our findings suggest that social media has a positive impact on the dissemination of COVID-19 pandemic information in Saudi Arabia.
3. **Al-Dmour H, Masa'deh R, Salman A, Abuhashesh M, Al-Dmour R(2020)-** The goal of this study was to see how social media platforms influenced public health protection against the COVID-19 pandemic in Jordan, using public health knowledge and behavioural changes as mediating factors. In Jordan, data was collected using web questionnaires using a quantitative approach and multiple social media platforms, with a total of 2555 social media users sampled. The study variables were analysed and verified using structural equation modelling. The major findings demonstrated that using social media platforms improved public health protection against COVID-19 as pandemic. Public health authorities may find that using social media platforms to disseminate brief messages to targeted populations is an effective way to raise public health awareness.
4. **Ali KF, Whitebridge S, Jamal MH, Alsafy M, Atkin SL(2020)-** The aim of this study was to rapidly obtain information on public perceptions, knowledge, and behaviors related to COVID-19 to reveal deficits in key areas of public education. In a cross-sectional study design, a web link to the survey on social media and messaging platforms Instagram, Twitter, and WhatsApp was posted. Participants 18 years of age or older completed the survey voluntarily. The main outcomes measured were knowledge of COVID19 symptoms, protective measures against COVID19, and sources of information about COVID19. Our results indicate a relatively well-informed cohort that is implementing adequate protective measures. However, regarding vaccination against COVID19, there are significant gaps in knowledge that need to be addressed in future efforts.
5. **Apuke.D.Oberiri ,Omar.Bahiyah (2021)-** The results of a Nigerian sample (n = 385) on the growth of fake news on COVID-19 are described in this research. The Uses and Gratification framework was used to investigate the fake news phenomena, which was extended by an "altruism" motivation. To investigate the influence of six variables on the outcome of fake news sharing, the data was analysed using Partial Least Squares (PLS). Our findings revealed that altruism was the most significant factor that predicted fake news sharing of COVID-19 .We also discovered that social media motivations sharing information, socializing, seeking knowledge, and passing time on social media predicted the spread of incorrect information on COVID-19.
6. **Balhara YP, Kattula D, Singh S, Chukkali S, Bhargava R (2020)** The goal of this study was to evaluate college students' gaming behaviour during the COVID-19 lockdown. Data was gathered from a cohort of students who served as the sample frame for a larger project. There were 393 college students in attendance. Following that, all eligible students were contacted through email and WhatsApp messaging and invited to share the information. The findings suggest that during the COVID-19 pandemic lockdown period, there was a surge in gaming behaviour, which was linked to exam-related stress and the assumption that gaming helps people cope with stress. These insights underscore the need of determining the pupils' coping styles.

7. **Biernesser.C, Montano.Gerald, Miller.Elizabeth, Radovic.Ana (2020)** This study aims to examine the perspectives of parents and children on the use and role of SM in the daily lives of adolescents with depression, as well as the perceptions and experience of parents in monitoring SM use. by their children. Qualitative interviews with adolescents with depression (n = 23) and one of the parents of each adolescent from Pittsburgh, Pennsylvania. Dyadic analyzes showed that parents and their children disagreed about the use and role of SM in the daily lives of adolescents with depression, and adolescents viewed SM as a forum for the honest expression of their emotions, while parents considered that their children's contributions were insignificant and intervened in the lives of young people. Additionally, parents reported using a wide range of strategies to gain insight into their children's Social Media use to monitor their Social Media safety, including direct and indirect solicitation. For example, keeping the child's passwords, asking friends or siblings about their child's SM use, and restricting SM behavior and device access.
8. **Brailovskaia.J, Margraf.J (2021)** -.In the present study, the relationship of burden caused by Covid-19 and addictive social media usage was examined. Data was collected from a sample of 550 social media users from Germany through online surveys. In a moderate mediation analysis, the positive relationship between stress and addictive social media usage was significantly conveyed by the perceived sense of control. Anxiety symptoms significantly moderated the relationship between control and addiction. The present results reveal the mechanisms that may contribute to the development of addictive tendencies during the outbreak of the pandemic.
9. **Cauberghe.V, Wesenbeeck.V, Jans De.S, Hudders.L and Ponnet.K(2021)** A survey of 2,165 adolescents (Belgians) (13-19 years) examined how feelings of anxiety and loneliness contribute to their level of happiness and whether various social media coping strategies (active relationships, social and humor) mediate these relationships. The results showed that feelings of loneliness had a greater negative impact on adolescents' happiness than feelings of anxiety. Lonely participants were more likely to use social media to cope with a lack of social contact. However, this coping strategy was not significantly related to their feelings of happiness. Humorous coping was positively associated with feelings of happiness, but was not influenced by loneliness or anxiety.
10. **Cato.Susumn, Iida.Takashi, Ishida.Kenji, Ito.Asei, Katsumata.Hiroto, Kenneth Mori McElwain, Shoji.Mashiro(2021)-** This study evaluates the impact of social media usage on individuals' responses to the COVID-19 pandemic, such as demand for necessities and social distancing analysis focuses on the use of Twitter, Facebook, and Instagram. The research was done on 1804 Japanese respondents. The entropy balancing method was used to be used to control the heterogeneity of the characteristics observed between users and non-users of social networks. The results show that while users are more likely to engage in social distancing practices, they are also more likely to take actions that have not been scientifically proven to be reliable, such as consuming fermented soybeans. Although previous studies emphasize the negative effects of social media, our results suggest that it has both light and dark sides.
11. **Chebrolu Hiram.R, Janagama Jyashree, Muraleedharan.K.C, R Resmy (2021)** -The objective is to know the use of SM / OTTM and the applications frequently used during the lockdown its connection with health, the use of information and education. An online survey questionnaire was conducted covering aspects of SM / OTTM use, health issues due to SM / OTTM use, education and information during the Covid19 lockdown. The results of this study showed that SM / OTTM were accessed much more

frequently during the lockdown as compared to the pre-lockdown. This study shows both positive and negative effects on aspects of physical and mental health. SM was also shown to play a key role in sharing information about Covid19, but significant exposure of false information was also observed.

- 12. Chia-chen Yang, Jiun-Yi Tsai, and Shuya Pan(2020)-** This study examined whether experiences of discrimination were related to increased social media use among Asians and how social media use was tailored to their well-being during COVID19. A sample of 242 Asian / Asian Americans residing in the United States completed an online survey. The results showed that more experiences of discrimination during COVID19 were associated with greater participation in private social media messages, posts / comments, and browsing, but the activities revealed different effects on subjective well-being. Both private messages on social media and posts / comments were associated with a higher perception of social support, which contributed to better subjective well-being. Posting / commenting on social media has also been linked to better subjective well-being, as there is less fear of discrimination. In contrast, social media browsing has been linked to poorer subjective well-being due to increased concern about discrimination.
- 13. Drouin. Michelle, McDaniel.T. Brandon, Pater Jessica, Toscos. Tammy(2020)-.** The study examined the perceptions of parents (n = 260) about their own use of social media and other types of communication technologies in the early stages of coronavirus disease 2019 (COVID19) and their children in relation to sanctions (for example, social distancing) in the United States. . He also examined the relationships between social media and technology use and anxiety. On average, parents reported that both they and their children (especially teens ages 13-18) had increased their use of technology and social media since the onset of social distancing. Based on the results, the study advocates

the use of social media by public health officials to collect, compile, and distribute accurate information related to the crisis. Because the use of social media is widespread and false rumors can potentially lead to incorrect behavior and / or excessive stress and anxiety.

- 14. Dutta.Ankuran(2020)-** This study aims to examine the kind of social media that is used to distribute learning resources to students and the impact it has on their educational loss. It also sheds light on the effectiveness of online courses, e-learning pedagogy and its results through structured qualitative analysis. In this study, telephone interviews between researchers and participants were used to avoid human bias as much as possible. Therefore, the researchers in this study were able to obtain detailed information on how students use and benefit from social media in extensive interviews. A total of 15 interviews were conducted along with three focus group discussions from the selected three universities. It was found that the students used different social media applications to acquire scientific knowledge. However, the most popular social media sites are Facebook, Twitter, and Instagram. Digital social media was also found to break the monotony of face-to-face teaching, as students can now access relevant multimedia materials such as videos, lecture notes, presentations, and generally broader access to online sources and experts. Technical failures are hampering the spirit of online learning in a country like India. However, university authorities are obliged to close the gap; Educators and teachers are accountable to their students during this crisis, and students are forced to maintain their education to complete their academic programs.
- 15. Fernandes Blossom, Biswas.N.Urmi, Mansukhani.T.Roseann, Vallejo Alma, & Essau.A.cecilia (2020) -**The aim of the present study was to examine the impact of lockdown on internet use in adolescents, comparing their habits from before the pandemic. Additionally, this research aimed to examine the relationship between

gambling addiction, internet use, and COVID19 concerns. 188 young people from different countries (eg India, Malaysia, Mexico and the UK) completed online questionnaires which were shared via social media and a youth network. These measures included questions about the Internet, social media, gaming, depression, loneliness, escapism, and COVID19. The results show that teens in general use social networking sites and streaming services more. Additionally, those who scored well on gambling addiction, compulsive Internet use, and social media use also reported high scores on depression, loneliness, escapism, poor sleep quality, and pandemic-related anxiety. Our results show that regardless of the country of residence, the COVID19 outbreak had a significant impact on the Internet use and psychosocial well-being of adolescents. It is emphasized that pandemic stress must be addressed to reduce the effects of maladaptive coping strategies.

16. **G. Morgan, M. Tagliamento, M. Lambertini, B. Devnani, B. Westphalen, R. Dienstmann, I. Bozovic-Spasojevic, A. Calles, C. Criscitiello, A. Curioni, A.M. Garcia, A. Lamarca, S. Pilotto, M. Scheffler, M. Strijbos, R. Wong, E. de Azambuja, S. Peters (2020)-** Examining the impact of COVID19 on social media as perceived by the oncology community: results of a survey was carried out with the European Society for Medical Oncology (ESMO) and the OncoAlert Network. From July 8-22, 2020, a 40-item survey was distributed to stakeholders and promoted by the European Society for Medical Oncology (ESMO) and the OncoAlert Network. 1,067 physicians and stakeholders participated in the survey. More than 90% of the respondents considered that social networks were a useful tool for disseminating scientific information and for education. Most used social media to keep up with the constant flow of information about cancer treatment in general (62.5%) and cancer treatment during COVID19 (61%). Respondents also used social media to interact with other oncologists (78.8%) and with patients (34.4%). Overall, 61.1% of respondents were satisfied with the role social media played during the COVID19 pandemic. On the other hand, 41.1% of those surveyed said they had difficulty distinguishing between credible and less credible information, and 30% said that social media was a source of stress.
17. **Gao J, Zheng P, Jia Y, Chen H, Mao Y, et al. (2020)-** The study assessed the prevalence of mental health problems and examined its association with exposure on social media. A cross-sectional study of Chinese citizens aged 18 and over was conducted online. A total of 4872 participants participated in the current study. The results show that there is a high prevalence of mental health problems that are often positively associated with SMEs during the COVID19 outbreak. These results implied that the government should pay more attention to mental health problems, particularly depression and anxiety in the general population, and to controlling the "infodemic" while facing a public health emergency.
18. **Hong.Wei,Liu-De , Ding.Yi, Fu.Xinchen, Zhen.Rui,Sheng.X(2021)-** This study aimed to investigate the mediating role of rumination and the moderating role of mindfulness in the relationship between social media exposure (SME) to COVID19 information and psychological distress. Results of online questionnaire responses from 439 college students from two universities in Wuhan, Hubei province, showed that rumination mediates the link between SMEs and mental distress. Furthermore, mindfulness was revealed as a protective factor that mitigates the negative effects of EMS on psychological distress caused by rumination. These results contribute to a better understanding of the mental symptom development process during the COVID19 pandemic and provide information on effective interventions for negative mental outcomes among college students.
19. **Huixi.Dong, Yang.Fangru, Lu.Xiaozi, Hao.Wei (2020) -**An anonymous and self-reported cross-sectional survey was

conducted among Chinese children and adolescents aged 6 to 18 years. Participants completed questionnaires of Young's Internet Addiction Test (IAT) and the Depression, Anxiety, and Stress Scale (DASS21), as well as questions about demographic information and Internet use characteristics. A total of 2050 participants. The results showed that Chinese children and adolescents used the internet excessively during the COVID19 outbreak. Age, gender, depression, and stress were the potential key factors for internet addiction. In these unprecedented times, extended family and professional support for vulnerable people should be considered.

20. **Islam MS, Sujan MSH, Tasnim R, Mohona RA, Ferdous MZ, Kamruzzaman S, Toma TY, Sakib MN, Pinky KN, Islam MR, Siddique MAB, Anter FS, Hossain A, Hossen I, Sikder MT, Pontes HM(2021)**- The present study aimed to examine problematic smartphone use (PSPU) and problematic social media use (PSMU) among college and university students in Bangladesh during the COVID19 pandemic. A cross-sectional study was carried out with 5,511 universities in Bangladesh. According to hierarchical regression analysis, PSPU and PSMU were positively associated with lower age, lack of sleep, use of social media, television, anxiety, and depression. In addition, PSMUs have been linked to being a woman, living in a nuclear family, having an urban residence, infrequent physical activity, little participation in academic studies, and avoiding paid employment while a man, married, in a low-income family who lives and consumes alcohol. use were too PSMU.
21. **Jennifer M. First, Haejung Shin, Yerina S. Ranjit & J. Brian Houston (2021)**- In the current study, we examined the direct and indirect effects of COVID19 risk factors (i.e., exposure, media use, interpersonal communication) on SEM mental health outcomes in stress and depression using a US sample. 1,545 adults. The results showed that exposure to COVID19 had a direct impact on stress and

an indirect impact on stress and depression through the use of media (traditional and social) and interpersonal communication.

22. **Jiang. Yan (2021)**- This study aimed to examine the possible mediating role of psychological capital and the moderating role of academic burnout in the context of problematic social media use and anxiety in college students during COVID19. A total of 3,123 students from Shanghai universities participated in an online survey. The results showed that problematic social media use among college students predicted their level of anxiety.
23. **Jude P. Mikal, Rebecca Wurtz, Stuart W. Grande (2021)** - The aim of this study is to qualitatively assess longitudinal changes in social media engagement during social distancing recommendations and assignments to Shelter-in-place. For this purpose, qualitative longitudinal data was collected from a group of adults during the eight weeks during which most states had issued the Shelterinplace order. The results provide important information on how computer communication on social media platforms offered opportunities for connection, frustration and information sharing, and misinformation. The positive effects of CMC appeared to lessen over time.
24. **Kaya Tugberk (2020)** - This research aims to discover the influences of the use of social networks in multiple dimensions during the lockdown. The aim of the study is to answer the research question: Do the influences of the use of social networks differ from normal times? The 22-point questionnaire was completed by 668 people during the period of lockdown. The results show that users have more information about COVID19 and are following updated information on social media, showing the shift towards digital media. The results also suggest that users are aware of fake news and are following official sources.

25. **Lee, Y., Yang, B. X., Liu, Q., Luo, D., Kang, L., Yang, F., Ma, S., Lu, W., Chen-Li, D., Rosenblat, J. D., Mansur, R. B., Nasri, F., Subramaniapillai, M., Liu, Z., McIntyre, R. S., & Lin, K. (2020)-** The study analyzed the effects of SM use and psychological and emotional distress on depression in 3,064 adults in mainland China. The mean value (standard error) of PHQ-9 of the study participants was 5.2 (0.1), indicating the presence of clinically significant depressive symptoms. Longer periods of time spent predicted greater severity of depressive symptoms. SM use is also associated with an increased risk of depression: more severe symptoms of depression and loneliness are seen in young adults who use SM extensively. Additionally, SM can increase public fear and panic in public health crises: SM networks, for example, are involved in spreading false information and increase risks and harm.
26. **Luo.Tao,Chen.Wei,Liao.Yanhui(2021)-** A retrospective online survey was conducted on a total sample of 10,963 participants. The patterns of use of social networks before and during COVID19, social media addiction (SMA) and psychological problems (stress, anxiety and depression) were evaluated. This study suggests a significant increase in the use of social media and a relatively high prevalence rate of SMA in China during COVID19. Our results identify factors associated with increased use of social media and SMA that could be used to develop psychological interventions to prevent SMA during the COVID19 epidemic.
27. **Li M, Liu L, Yang Y, Wang Y, Yang X, Wu H (2020)-** The aim of this research was to assess the prevalence of psychological symptoms among college students and to explore their associations with health risk communication and social media. As of March 31, 2020, a web-based survey among Chinese university students was distributed through the Wenjuanxing platform. In addition to demographic data, information on how to communicate with health risks and social media was collected, and the Health Anxiety and Phobia Inventory subscale of Symptom Checklist 90 was used to assess mental symptoms in 1,676 university students in China. To investigate these independent risk factors, a multivariate logistic regression was performed. Regarding social networks, trust in mainstream media has been considered a protective factor against health anxiety.
28. **Lisitsa.Ellie, Katherine S. Benjamin, Sarah K. Chun, Jordan Skalsky, Lauren E. Hammond, and Amy H. Mezulis(2020)-** The current study examined the possible mediating roles of social media use and social support to examine the relationship between age and symptoms of loneliness during the COVID19 pandemic. Participants included 1,674 adults who completed an online survey on depressive symptoms, loneliness, coping strategies, and changes in their daily lives as a result of the pandemic. The results showed that young adults felt more alone than older adults during the pandemic, showed a greater increase in the use of social networks and fewer searches for social support. Higher increases in social media use and lower searches for social support conveyed the association between age group and loneliness.
29. **Ogata Michael, Guest christina, Feldmeier.L Michael (2020)-** The purpose of the study was to examine the use of social media and the impact on young people due to the Covid19 pandemic. Fifty psychiatric hospital patients between the ages of 8 and 20 (48% male) completed the anonymous Google Forms SMIQR using their mobile phones. The SMIQR questionnaire developed by the authors contains questions on social and electronic media use, mood, behavior and school, reflecting use during the COVID19 pandemic in June 2020. The results show that the consequence Most persistent of the pandemic reported by adolescents is that they miss school as well as their friends. Many teens have reported increased anxiety and sadness since the COVID19 pandemic.

Sixty percent of teens said social media currently interferes with homework, nearly 50% reported trouble sleeping, 33% reported school disruptions, and surprisingly, social media rarely disrupted families.

30. **Panno Angelo, Carbone Giuseppe Alessio, Massullo Chiara, Farina Benedetto, Imperatori Claudio(2020)-** The main objective of this study was to examine the association between distress related to COVID19 and: (i) alcohol problems, (ii) social media addiction (iii) food addiction (FA) symptoms. 1,519 participants participated in the survey. Multiple regression analyzes were performed to examine whether COVID19-related variables are significant predictors of various addiction symptoms. The results seem to confirm that one of the most negative effects of the COVID19 emergency could be related to an increase in the prevalence and severity of both substance and behavioral addictions. COVID19-related stress was also linked to higher symptoms of FA.
31. **Radwan.Eqbal,Radwan.Afnan,Radwan. Walaa(2020)-** The current study aims to find out how social media is affecting the spread of COVID19 panic among primary and secondary school students in the Gaza Strip, Palestine. Data were collected using an online questionnaire. Using a convenience sampling, total of 1,067 student's ages 6 to 18 from 56 schools in the Gaza Strip, Palestine were taken as a sample of study .ANOVA and chi-square tests were used to compare the data. The results showed that social media has a significant impact on the spread of panic about COVID19 among school students, with possible negative effects on their mental health and well-being. Facebook was the most common. Students are using social media to continue their learning and learn more about the COVID19 outbreak. Social media is playing a vital role in the rapid spread of panic over the COVID19 pandemic among students in the Gaza Strip.
32. **Sharif.A, Opu Rayhan Rubayet. J. Khalid. Alzahrani, Ahmed.N.S, Islam.S, Shika Sohoda Mim, Khan.B.F, Zaman.F, Dey.K.S (2021) -** This study was conducted to examine the impact of information from social media and television on the development of health awareness among people amid the COVID19 pandemic. The data was collected from 1808 people during. Facebook and television were the most common sources of health information. The strongest correlation was found between social distancing and information on TV.
33. **Tariq N. Al-Dwaikat, Mohammed Aldalaykeh, Wafa'a Ta'an, Mohammad Rababa (2020)-** The purpose of this study was to assess the severity of depression, anxiety, and stress symptoms among undergraduate students and their relationships with the use of social media sites during the COVID19 lockdown. An online survey was used to recruit 456 participants for this descriptive cross-sectional study. The results showed that most of the students presented symptoms of depression (74.1%), anxiety (59.6%) and stress (61.2%). The highest percentage of students (91.9%) used social networks to entertain themselves. Academic use of social networking sites was negatively correlated ($p < .05$) with depression and stress scores, while entertainment use was positively correlated with anxiety. Age was not significantly correlated with psychological stress. These symptoms could be alleviated by continuing with regular academic activities and providing the most accurate up-to-date information on COVID19 through social media.
34. **Werling.M.Anna,Walitzs.S,Grunblatt.E dna,Drechsler.Renate (2021)-** To investigate the consequences of the COVID19 lockdown on the use of on-screen media among children and adolescents with mental health problems, an online survey was conducted on the use of leisure media before, during and after the lockdown. N = 477 patients completed the survey. Patients showed a significant increase in media use time (including

devices such as cell phones, tablets / PCs, video game consoles, television and activities such as games, social media) and a moderate increase in the negative effects of media use. After the lockdown, total media usage time returned to pre-COVID19 levels in most patients, but remained slightly higher in men. A worsening of the main psychopathological problem during confinement was related to an increase in time spent in the media in children (10 to 13 years) but not in adolescents (14 to 18 years).

35. Zhao Nan and Zhou guangyu(2021)- The present study aimed to understand the relationship between COVID19 stress and addictive SMU by examining the mediating role of active use and social media flow (i.e., an intense and enjoyable experience generated by SMU and that a sample of 512 Chinese college students provided self-reported data on COVID19 stress and SMU variables (ie, time, active use, flow, addictive behavior) through an online survey. The results suggest that people who have more COVID19: Experienced stress, have an increased risk of addictive SMU, which can be promoted through active use and flow experience. Special attention should be paid to these high-risk groups, and future measures to reduce addictive SMU could focus in factors that take into account both the active use and the flow of social networks.

36. Zou C, Zhang W, Sznajder K, Yang F, Jia Y, Ma R, Cui C, Yang X(2021)- This study evaluated the prevalence of anxiety and related factors among WeChat users in mainland China in the early stages of the COVID19 pandemic. The survey was distributed to WeChat users through the WeChat smartphone platform. A cross-sectional study was carried out using convenience sampling. Participants' level of anxiety, positive psychological responses, and information-seeking behavior were assessed. This study found that during the COVID19 pandemic in China, positive psychological responses and information-seeking behaviors were closely related to anxiety in WeChat users.

37. Zhang X, Liu J, Han N, Yin J(2021)- This study aims to examine the association between social media use, unhealthy lifestyle, and risk of miscarriage in pregnant women in the early stages of the COVID19 pandemic in China. This prospective cohort study recruited 456 single pregnant women in mainland China. Pregnant women with excessive media consumption were more likely to have no physical activity, inadequate nutritional diversity, and poor quality of sleep. Excessive media consumption and poor sleep quality were associated with an increased risk of miscarriage. Our results underscore the importance of a healthy lifestyle during the COVID19 pandemic.

Methodology

The study incorporated the narrative review analysis based on the existing literature related to the impact of COVID-19 on adolescents in relation to Social Media usage. The study conducted a search of the electronic databases available in PsycINFO, PubMed and LISTA. The survey used search terms, "SARS-CoV-2", "COVID-19", "impact of COVID-19", "impact of COVID-19 on social media", "social media during COVID 19", "adolescents during COVID-19". Similarly, the search included the keywords "global mental health", "psychology", "depression", "anxiety", "stress", "COVID19-related social media messages". This study found a total of 110 article citations in the search process. On reviewing the sources, the investigators excluded 73 articles because they dealt with other aspects of the COVID-19 pandemic, such as therapy, drugs, animal models, and organization of the healthcare systems. In this study only peer-reviewed, full-text research papers were included in the review. All types' studies were included in the review which observed the effect of COVID-19 and its related causes such as lockdown on adolescents' mental health impact in relation to social media usage. All selected articles were in English language and the non-peer-reviewed and duplicate papers were excluded from finally selected articles. In this study the word adolescents, teens and youth is used interchangeably. Google Scholar was searched to identify extra potentially

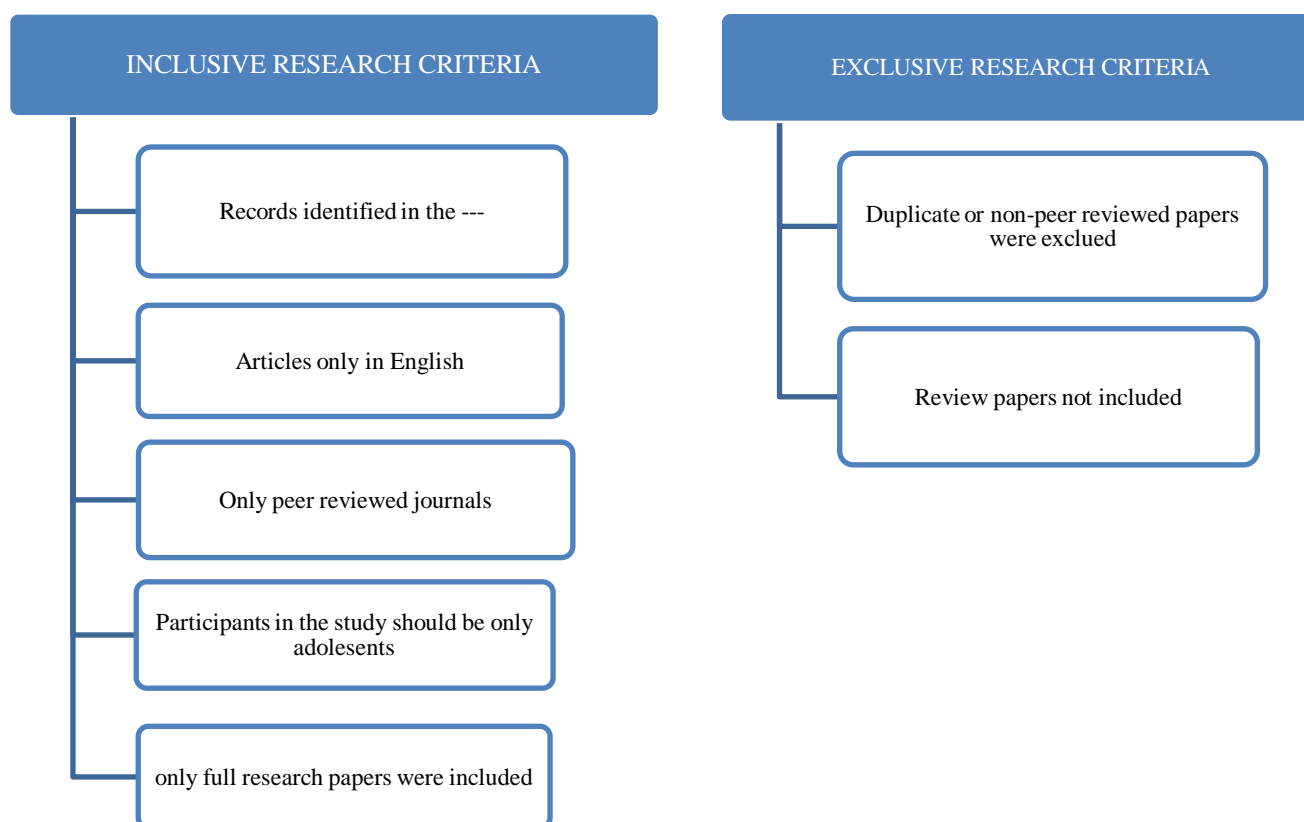
relevant articles. The literature search was conducted on September 9, 2021. The research findings of all the selected researches were concluded all together to find out the impact of COVID-19 on adolescents in relation to social media usage.

Article Coding

To extract the data from the articles, the following coding process was followed:

1. Author/Authors and year of publication,
2. Title of the research,
3. Year of the research
4. Name of the Journal
5. Sampling techniques used in the research
6. Sample size
7. Study design
8. Questionnaire used
9. Research findings

(Figure 1) : Inclusive and Exclusive criteria



Result

In total 110 research papers were identified. After removing duplications because they dealt with other aspects of the COVID-19 pandemic, such as therapy, drugs, animal models, and organization of the healthcare systems. The result interpretation was based on the result findings of all the selected 37 researches in the review. The result findings showed that COVID-19 had a drastic impact on adolescents in relation to social media usage.

Table 1 Shows the main characteristics of the 37 studies included in the review; details of

which presents the main results of different studies following the codification indicated in the previous section: (1) Author/Authors and year of publication, (2) Title of the research, (3) Year of the research, (4) Name of the Journal, (5) Sampling techniques used in the research, (6) Sample size, (7) Study design, (8) Questionnaire used, (9) Research findings.

TABLE 1:- Study selection flowchart

S. No.	Author(s)	Research title	Year	Journal	Sampling technique used	Sample size	Study design	Questionnaire used	Findings
1	Araz Ramazan Ahmad, Murad R.H	The Impact of Social Media on Panic during the COVID-19 Pandemic in Iraqi Kurdistan: Online Questionnaire Study	2020	Journal of medical Internet research,	Random sampling	516	Descriptive survey method	Social media Questionnaire	<ul style="list-style-type: none"> • Social media has a significant impact on spreading fear and panic related to the COVID-19 • Potential negative influence on people's mental health and psychological well-being. • Facebook was the most used social media network for spreading panic about the COVID-19
2	Alnasser AHA, Al-Tawfiq JA	The positive impact of social media on the level of COVID-19 awareness in Saudi Arabia: a web-based cross-sectional survey.	2020	Infez Med.	snowball sampling	3204	cross-sectional survey	-	<ul style="list-style-type: none"> • Social media have a positive impact on the circulation of information about the COVID-19 pandemic in Saudi Arabia. • Twitter has been The most common source of information for speaking news
3	Al-Dmour H, Masa'deh R, Salman A, Abuhashesh M, Al-Dmour R	Influence of Social Media Platforms on Public Health Protection Against the COVID-19 Pandemic via the Mediating Effects of Public Health Awareness and Behavioral Changes: Integrated Model	2020	Journal of Medical Internet Research		2555		The content of the questionnaire (constructs and measures) was mainly selected and adopted from previous relevant studies	<ul style="list-style-type: none"> • The main findings revealed that the use of social media platforms had a significant positive influence on public health protection against COVID-19 as a pandemic. • Public health authorities may use social media platforms as an effective tool to increase public health awareness through dissemination of brief messages to targeted populations.
4	Ali KF, Whitebridge S, Jamal MH, Alsafy M, Atkin SL	Perceptions, Knowledge, and Behaviors Related to COVID-19 Among Social Media Users: Cross-Sectional Study	2020	J Med Internet Res		5677	cross-sectional study design,		<ul style="list-style-type: none"> • Fever or chills" (n=4973, 87.6%) and "shortness of breath" (n=4695, 82.7%) were identified as the main symptoms of COVID-19. Washing and sanitizing hand

5	Apuke.D. Oberiri, Omar.Bahiyah	Social media affordances and information abundance: Enabling fake news sharing during the COVID-19 health crisis	2021	Health informatics journal	Respondent driven sampling	385	A survey research design	<ul style="list-style-type: none"> To measure self-expressing we adapted items from Plume and Slade. Items for online information trust and information overload were derived from the study of Laato et al The items for news-find-me perception were adapted from Gil de Zúñiga et al. We derived the items of fake news sharing from prior studies 	<ul style="list-style-type: none"> Social media users' motivations for information sharing, socialisation, and information seeking and pass time predicted the sharing of false information about COVID-19. Altruism was the most significant factor that predicted fake news sharing of COVID-19.
6	Balhara YP, Kattula D, Singh S, Chukkali S, Bhargava R	Impact of lockdown following COVID-19 on the gaming behavior of college students	2020	Indian Journal of Public Health	Data were collected from a cohort of students that constituted the sampling frame of an ongoing project.	393	Face-to-face interview.	<ul style="list-style-type: none"> Patient Health Questionnaire (PHQ)-9 Generalized Anxiety Disorder (GAD)-7 Internet Gaming Disorder Short Form-9 (IGDSF) scale Visual Analog Scales (VAS) 	<ul style="list-style-type: none"> In the lockdown period following COVID-19 pandemic, the increase in gaming behavior was associated with examination-related stress and the belief that gaming helps combat stress.
7	Biernesser.C, Montano.Gerald, Miller.Elizabeth, Radovic.	Social Media Use and Monitoring for Adolescents With Depression and Implications for the COVID-19 Pandemic: Qualitative Study of Parent and Child Perspectives	2020	JMIR Pediatr Parent	-	23	Qualitative Study	<ul style="list-style-type: none"> Qualitative interviews with adolescents with depression 	<ul style="list-style-type: none"> Dyadic analyses showed that parents and their children disagreed on the use and function of SM in the daily lives of adolescents with depression, with adolescents viewing SM as a forum for honest expression of their emotions, whereas parents felt that their children's posts were inconsequential and interfered with the adolescents' lives.

8	Brailovskaia.J, Margraf.J	The relationship between burden caused by coronavirus (Covid-19), addictive social media use, sense of control and anxiety	2021	Computers in Human Behavior,	550	Online survey	<ul style="list-style-type: none"> Addictive SMU useage Anxiety questionnaire 	<ul style="list-style-type: none"> Burden by Covid-19 is positively linked to addictive Social Media Use (SMU). Sense of control negatively mediates the link between Covid-19 burden and SMU. Anxiety symptoms moderate the link between sense of control and SMU
9	Boursier V, Gioia F, Musetti A, Schimmenti A (2020)	Facing Loneliness and Anxiety During the COVID-19 Isolation: The Role of Excessive Social Media Use in a Sample of Italian Adults	2020	Front Psychiatry	715	A survey design	<ul style="list-style-type: none"> self-report measures to assess perceived sense of loneliness, excessive use of social media, and anxiety 	<ul style="list-style-type: none"> Perceived feelings of loneliness predicted both excessive social media use and anxiety, with excessive social media use also increasing anxiety levels.
10	Cauberghe.V, Wesenbeeck.V, Jans De.S, Hudders.L and Ponnet.K	How Adolescents Use Social Media to Cope with Feelings of Loneliness and Anxiety During COVID-19 Lockdown.	2021	Cyberpsychology, Behavior, and Social Networking	2,165	survey study		<ul style="list-style-type: none"> Participants who were feeling lonely were more inclined to use social media to cope with lacking social contact
11	Cato.Susumn, Iida.Takashi, Ishida.Kenji, Ito.Asei, Katsumata. Hiroto, Kenneth Mori McElwain, Shoji.Mashiro	The bright and dark sides of social media usage during the COVID-19 pandemic: Survey evidence from Japan	2021	International Journal of Disaster Risk Reduction	1804	Online Survey study		<ul style="list-style-type: none"> Results suggest that it has both bright and dark sides.
12	Chebrolu Hiram.R, Janagama Jyashree, Muraleedharan. K.C, R Resmy	Impact of social media and over the top media during COVID-19 lockdown, a cross-sectional study.	2021	International Journal of Community Medicine and Public Health	1945	A cross-sectional study	<ul style="list-style-type: none"> Framed questionnaire which includes the aspects of SM/OTTM usage, health issues due to SM/OTTM usage, education, and information during Covid-19 lockdown 	<ul style="list-style-type: none"> SM/OTTM was frequently used and played a key role during the Covid-19 lockdown. SM has helped people to stay connected, acquire information, and stay updated on the pandemic. SM is also responsible for physical and mental health affections due to prolonged usage and exposure to false information during the lockdown.

13	Chia-chen Yang, Jiun-Yi Tsai, and Shuya Pan	Discrimination and Well-Being Among Asians/Asian Americans During COVID-19: The Role of Social Media	2020	Cyberpsychology, Behavior, and Social Networking		242	online survey	<ul style="list-style-type: none"> • Everyday Discrimination Scale • Self designed a 12-item scale to measure participants' engagement in nonpassive and passive use of social media • Perceived social support scale reported by Utz and Breue. • Satisfaction with Life Scale 	<ul style="list-style-type: none"> • Results showed that more experience of discrimination during COVID-19 was associated with more engagement in social media private messaging, posting/commenting, and browsing, but the activities yielded different implications for subjective well-being. • Social media private messaging and posting/commenting were associated with more perceived social support, which contributed to better subjective well-being. • Social media posting/commenting was also related to better subjective well-being through lower worry about discrimination. • Social media browsing was associated with poorer subjective well-being through more worry about discrimination.
14	Drouin. Michelle, McDaniel.T. Brandon, Pater Jessica, Toscos. Tammy	How Parents and Their Children Used Social Media and Technology at the Beginning of the COVID-19 Pandemic and Associations with Anxiety	2020	Cyberpsychology, Behavior, and Social Networking		260	Survey study	<ul style="list-style-type: none"> • Patient Health Questionnaire-4 (PHQ-4) • PHQ-4 adapted to ask about the child • Negative effect of social distancing on mental health questionnaire • Increase in technology use to connect • Parent technology use to connect or cope • Child technology use to connect 	<ul style="list-style-type: none"> • As social media use is widespread, and there is potential for false rumors to cause erroneous behavioral action and/or undue stress and anxiety • The study suggests that social media campaigns be thoughtfully designed to account for individual differences in developmental stages and psychological vulnerabilities.

15	Dutta.Ankuran	Impact of Digital Social Media on Indian Higher Education: Alternative Approaches of Online Learning during COVID-19 Pandemic Crisis	2020	International Journal of Scientific and Research Publications		15 interview ed and 3 Focus group discussions	Qualitative study	<ul style="list-style-type: none"> • Interview method • Focus group discussion 	<ul style="list-style-type: none"> • 80% of the students, who were interviewed and feedback was taken have been suffering from excessive stress, depression and anxiety • Facebook, Twitter, and Instagram widely used socialmedia sites. • social media applications have been used by the students for acquisition of academic knowledge. • In online classes, the poor network connectivity in the fringe areas creates a huge problem, even in the middle of the classes; the connection gets disconnected due to network problems, system error, software updates, etc
16	Fernandes Blossom, Biswas.N.Urmi, Mansukhani.T.Roseann, Vallejo Alma, & Essau.A.cecilia	The impact of COVID-19 lockdown on internet use and escapism in adolescents	2020	Revista de Psicología Clínica con Niños y Adolescentes		185	Survey study	<ul style="list-style-type: none"> • The Compulsive Internet Use Scale (CIUS) • Kessler Psychological Distress scale • Social Media Use Questionnaire (SMUQ) • Escapism Scale • A short-form UCLA Loneliness scale (ULS-8) • A 7-item Game Addiction Scale (GAS) • A short version of the Rosenberg Self-esteem Scale 	<ul style="list-style-type: none"> • Adolescents generally have increased their use of social media sites and streaming services. • Those who scored highly on gaming addiction, compulsive internet use and social media use also reported high scores of depression, loneliness, escapism, poor sleep quality and anxiety related to the pandemic. • Regardless of country of residence, the COVID-19 outbreak has had a significant effect on adolescent internet use and psychosocial well-being.

17	G. Morgan, M. Tagliamento, M. Lambertini, B. Devnani, B. Westphalen, R. Dienstmann, I. Bozovic-Spasojevic, A. Calles, C. Criscitiello, A. Curioni, A.M. Garcia, A. Lamarca, S. Pilotto, M. Scheffler, M. Strijbos, R. Wong, E. de Azambuja, S. Peters	To study the Impact of COVID-19 on social media as perceived by the oncology community: results from a survey in collaboration with the European Society for Medical Oncology (ESMO) and the OncoAlert Network.	2021	European Society for Medical Oncology		1076	Descriptive Survey study	<ul style="list-style-type: none"> A 40 items survey grouped into different investigational sections: I) demographic, working and personal information, attitudes toward social media usage ,attitudes toward the use of social media specifically linked to the COVID-19 pandemic, perception toward virtual meetings and medical education during the COVID-19 pandemic and beyond, personal and professional interactions during the COVID-19 pandemic and beyond .On 5 likert scale 	<ul style="list-style-type: none"> 41.1% of respondents reported trouble in discriminating between credible and less credible information and 30% stated social networks were a source of stress. Respondents reported using social media to stay up to date with the latest medical and scientific information regarding cancer care, in general, as well as cancer care and COVID-19, respectively. representing a source of updated news and a source of inspiration for 33.8% caused stress and worry in 30% of respondents 77.6% of respondents (n = 697) liked the virtual modality, but 59.1% (n = 531) still preferred the in-person meetings, and 59.7%
18	Gao J, Zheng P, Jia Y, Chen H, Mao Y, et al	Mental health problems and social media exposure during COVID-19 outbreak	2020	PLOS ONE		4872	A cross-sectional study	<ul style="list-style-type: none"> social media exposure (SME), WHO-Five Well-Being Index (WHO-5) Generalized anxiety disorder scale (GAD-7) 	<ul style="list-style-type: none"> Higher prevalence of depression, anxiety during COVID 19.
19	Hong.Wei,Liu-De , Ding.Yi, Fu.Xinchen, Zhen.Rui,Sheng. X	Social Media Exposure and College Students' Mental Health During the Outbreak of COVID-19: The Mediating Role of Rumination and the Moderating Role of Mindfulness,	2021	Cyberpsychology, Behavior, and Social Networking		439	online survey	<ul style="list-style-type: none"> The Social Media Exposure Questionnaire Child and Adolescent Mindfulness Measure. Event-Related Rumination Inventory, Kessler Psychological Distress Scale 	<ul style="list-style-type: none"> During this pandemic, exposure to COVID-19 information serves as a stressor, which may activate cognitive processes and increase ruminative thoughts College students who are frequently exposed to COVID-19 information on social media are likely to report increased levels of anxiety and depression Mindfulness attenuates the impact of SME to COVID-19 information on psychological distress through rumination.

20	Huixi.Dong, Yang.Fangru, Lu.Xiaozi, Hao.Wei	Internet Addiction and Related Psychological Factors Among Children and Adolescents in China During the Coronavirus Disease 2019 (COVID-19) Epidemic	2020	Frontiers in Psychiatry,		2050	A cross-sectional, anonymized, self-reported survey	<ul style="list-style-type: none"> • The Chinese version of Young's Internet Addiction Test (IAT) • DASS-21 	<ul style="list-style-type: none"> • The fear resulting from the COVID-19 disease, and the consequences of lockdown, depression, and stress have been mounting affecting individuals' behaviors • Number of participants experienced significant depression, anxiety, and stress during the outbreak.
21	Islam MS, Sujan MSH, Tasnim R, Mohona RA, Ferdous MZ, Kamruzzaman S, Toma TY, Sakib MN, Pinky KN, Islam MR, Siddique MAB, Anter FS, Hossain A, Hossen I, Sikder MT, Pontes HM.	Problematic Smartphone and Social Media Use Among Bangladeshi College and University Students Amid COVID-19: The Role of Psychological Well-Being and Pandemic Related Factors	2021	Front Psychiatry		5511	A cross-sectional study	<ul style="list-style-type: none"> • Home Quarantine Activities Measures During COVID-19 • Patient Health Questionnaire (PHQ-9) • Generalized Anxiety Disorder (GAD-7) • Bergen Social Media Addiction Scale (BSMAS) • Smartphone Application Based Addiction Scale (SABAS) 	<ul style="list-style-type: none"> • The findings indicate that PSPU and PSMU were linked to poor psychological well-being (i.e., anxiety and depression) and other factors (especially lower age, poor sleep) during the pandemic. • Using smartphone as a source of entertainment (e.g., social media) • participants using social media through their smartphones have been found to spend 0.5–3 h daily using social media with greater time spent using social media posing greater addictive risk, and potentially contributing to greater PSPU risk
22	Jennifer M. First, Haejung Shin, Yerina S. Ranjit & J. Brian Houston	Stress and Depression: Examining Social Media, Traditional Media, and Interpersonal Communication	2021	Journal of Loss and Trauma	Participants were recruited via a Qualtrics Panel aggregator system	1545	A cross-sectional study	<ul style="list-style-type: none"> • Perceived Stress Scale-10 (PSS-10; Cohen et al. • Patient Health Questionnaire-2 (PHQ-2; Kroenke et al. <p>Participants were asked questions related to different factors such as:</p> <ul style="list-style-type: none"> • Traditional media use • Social media use • Interpersonal communication 	<ul style="list-style-type: none"> • COVID-19 exposure had a direct effect on stress and an indirect effect on stress and depression through media use (traditional and social) and interpersonal communication.

23	Jiang Y	Problematic Social Media Usage and Anxiety Among University Students During the COVID-19 Pandemic: The Mediating Role of Psychological Capital and the Moderating Role of Academic Burnout	2021	Front. Psychology		3123	online survey	<ul style="list-style-type: none"> • GAD (Generalized Anxiety Disorder, GAD-7) • Problematic Mobile Social Media Usage Assessment Questionnaire • Maslach Burnout Inventory-Student Survey (MBI-SS) 	<ul style="list-style-type: none"> • Levels of anxiety increased among the university students who believed that their academic performance had been affected by the COVID-19 pandemic. • An increase in internet and social media use time increases the possibility of internet addiction • Academic burnout moderated two pathways among university students: the influence of problematic social media usage on anxiety and that of psychological capital on anxiety.
24	Jude P. Mikal, Rebecca Wurtz, Stuart W. Grande	Social media as a modern Emergency Broadcast System: A longitudinal qualitative study of social media during COVID-19 and its impacts on social connection and social distancing compliance	2021	computers in Human Behavior Reports	Snowball sampling	256	online survey	<ul style="list-style-type: none"> • Questionnaire consisted of 6–8 open-ended questions each week Questions 1–3 were designed to assess changes to circumstances, mood or social media use in the preceding week. • The remaining questions changed weekly, based on the findings of the week before and current events, and were designed to assess participants' attitudes towards social media use, in COVID 	<ul style="list-style-type: none"> • Findings provide key insights into how computer-mediated communication on social media platforms provided opportunities for connection, frustration, and exchange of information—and misinformation. • The positive effects of CMC appeared to lessen over time.
25	Kaya Tugberk	The changes in the effects of social media use of Cypriots due to COVID-19 pandemic.	2020	Technology in society		668	online survey	<ul style="list-style-type: none"> • (Self designed questionnaire by the author) Social media use during the COVID-19 pandemic. 	<ul style="list-style-type: none"> • Users have more information about COVID-19, and they follow recent information via social media, which shows the shift towards digital medium • Social media is powerful to affect decision-makers, and respondents' social media use did not create any panic or anxiety amongst them • Social media use during COVID-19 is different from normal times as a common purpose triggers this, survival.

26	Li M, Liu L, Yang Y, Wang Y, Yang X, Wu H	Psychological Impact of Health Risk Communication and Social Media on College Students During the COVID-19 Pandemic: Cross-Sectional Study	2020	J Med Internet Res		1676	Cross-Sectional Study	<ul style="list-style-type: none"> • Phobia subscale of the self-reported Symptom Checklist 90 (SCL-90) • The Health Anxiety Inventory (HAI) • Social media use was measured by asking which sources the participant used to obtain COVID-19-related information during the last month • Health risk communication of COVID-19 was measured through two aspects: COVID-19-related perceptions and knowledge of preventive behaviors 	<ul style="list-style-type: none"> • Students who trusted mainstream media information had less panic. • Social media was the primary means of distributing information • Mass media exposure to “infomedia” through social media platforms can create anxiety because rumors, “fake news,” and conspiracy theories make it difficult to find trustworthy information • Students spend a lot of time on the internet, and they are more likely to be misguided and experience triggering of anxiety symptoms.
27	Lisitsa.Ellie, Katherine S. Benjamin, Sarah K. Chun, Jordan Skalisky, Lauren E. Hammond, and Amy H. Mezulis	Loneliness among young adults during Covid-19 pandemic: The mediational roles of social media use and social support seeking	2020	Journal of Social and Clinical Psychology	Snowball sampling	1674	online survey	<ul style="list-style-type: none"> • UCLA Loneliness Scale Short Form-8 (ULS-8) • social support scales of the Brief COPE • Center for Epidemiologic Studies Depression Scale-10 • Social Media Use questionnaire 	<ul style="list-style-type: none"> • Young adults (18–34-year-olds) would report significantly more loneliness than older adults during the pandemic. • Young adults reported more increased social media use and less social support seeking compared to older adults during the pandemic. • Young adult loneliness during the pandemic was found to be significantly explained by more increases in social media use and less social support seeking.

28	Lee, Y., Yang, B. X., Liu, Q., Luo, D., Kang, L., Yang, F., Ma, S., Lu, W., Chen-Li, D., Rosenblat, J. D., Mansur, R. B., Nasri, F., Subramaniapillai, M., Liu, Z., McIntyre, R. S., & Lin, K.	Synergistic effect of social media use and psychological distress on depression in China during the COVID-19 epidemic	2020	Psychiatry and clinical neurosciences	convenience sampling	3064	Cross-Sectional Study	<ul style="list-style-type: none"> Impact of Event Scale – Revised [IES-R]) Patient Health Questionnaire [PHQ-9] 	<ul style="list-style-type: none"> SM use is also associated with greater symptoms of depression and loneliness. SM can aggravate public fear and panic: for example, SM networks have been implicated in the spread of false information
29	Ogata Michael, Guest Christina, Feldmeier.L Michael	Social Media use and impact on youth during the covid 19 pandemic: A novel electronic questionnaire to engage youth about social media use	2020	Elsevier Public Health Emergency Collection.		Fifty psychiatry clinic patients		<ul style="list-style-type: none"> Social Media Initial Questionnaire-Revised (SMIQ-R) 	<ul style="list-style-type: none"> That most consistent consequence of the pandemic reported by youths is that they miss school as well as their friends. Many youths reported more anxiety and sadness since the COVID-19 pandemic. Sixty percent of youth reported that social media currently interferes with homework, sleep, school, and family
30	Panno Angelo, Carbone Giuseppe Alessio, Massullo Chiara, Farina Benedetto, Imperatori Claudio	Related Distress Is Associated With Alcohol Problems, Social Media and Food Addiction Symptoms: Insights From the Italian Experience During the Lockdown.	2020	Frontiers in Psychiatry,			1519	<ul style="list-style-type: none"> Body Mass Index was accurately measured Impact of Event Scale-Revised CAGE questionnaire Bergen Social Media Addiction Scale BSMAS Yale Food Addiction Scale Version 2.0 impulsiveness-venturesomeness-empathy scale 	<ul style="list-style-type: none"> Most negative impacts of the COVID-19 emergency could be related to an increase in the prevalence and severity of both substance and behavioral addictions. COVID-19 related distress was also associated with higher FA symptoms.

31	Radwan.Eqbal,Radwan.Afnan,Radwan.Walaa	The role of social media in spreading panic among primary and secondary school students during the COVID-19 pandemic: An online questionnaire study from the Gaza Strip, Palestine	2020	Heliyon	convenience sampling	1067	An online questionnaire study	<ul style="list-style-type: none"> • The social media platforms employed during the COVID-19 pandemic • the effect of social media panic on study participants 	<ul style="list-style-type: none"> • COVID-19 pandemic is influencing the type of news topics most commonly followed on social media platforms. Health news was the most frequently topic seen, read, or heard • sports news were the least • Social media platforms would increase panic of the coronavirus among students due to the rapid spreading of rumours, fake news and misinformation. • more exposure to misinformation about COVID-19 and its consequences on the educational status (e.g. Schools closure) on social media would spread panic and fear among school students • It was reported that Facebook has become the most common and extensively used social media platform among students.
32	Sharif.A, Opu Rayhan Rubayet. J. Khalid. Alzahrani, Ahmed.N.S, Islam.S, Shika Sohoda Mim, Khan.B.F, Zaman.F, Dey.K.S	The positive impact of social media on health behavior towards the COVID-19 pandemic in Bangladesh: A web-based cross-sectional study	2021	Diabetes & Metabolic Syndrome: Clinical Research & Reviews		1808	cross-sectional study	<ul style="list-style-type: none"> • using questionnaire about information source and their impact on COVID-19 related health measures 	<ul style="list-style-type: none"> • Most of the social media users were students • Social media and television were the most popular sources • Facebook was the most common source of getting health information. • Participants who used social media followed the health measures after 0–28 days of getting the information.
33	Tao Luo, Wei Chen, Yanhui Liao	Social media use in China before and during COVID-19: Preliminary results from an online retrospective survey	2021	Journal of Psychiatric Research		10,963	online retrospective survey	<ul style="list-style-type: none"> • Social media addiction (SMA), • mental health problems (stress, anxiety, and depression) 	<ul style="list-style-type: none"> • compared with before COVID-19, weekly social media use was significantly increased during COVID-19

34	Tariq N. Al-Dwaikat, Mohammed Aldalaykeh, Wafa'a Ta'an, Mohammad Rababa	The relationship between social networking sites usage and psychological distress among undergraduate students during COVID-19 lockdown	2020	Heliyon	-	465	A cross-sectional quantitative descriptive design	<ul style="list-style-type: none"> Demographic variables, The social network usage questionnaire, The depression, anxiety, and stress scale 	<ul style="list-style-type: none"> Female students had higher depression and anxiety symptoms than males. The largest percentage of students used social networking sites for entertainment. The academic usage of social networking sites was negatively correlated
35	Zhao Nan and Zhou guangyu	COVID-19 Stress and Addictive Social Media Use (SMU): Mediating Role of Active Use and Social Media Flow	2021	Frontiers in Psychiatry		705		<ul style="list-style-type: none"> A checklist of ten items was used to assess participants' experience of COVID-19 related stressful events Bergen Facebook Addiction Scale Active SMU by Brailovskaia and Margra "Facebook flow" developed by Brailovskaia 	<ul style="list-style-type: none"> Active use and SM flow in sequence mediate the relationship between COVID-19 stress and addictive SMU COVID-19 stress is related to addictive SMU by uncovering the mediating roles of active use and flow experience.
36	Zou C, Zhang W, Sznajder K, Yang F, Jia Y, Ma R, Cui C, Yang X	Factors Influencing Anxiety Among WeChat Users During the Early Stages of the COVID-19 Pandemic in Mainland China: Cross-sectional Survey Study	2021	Journal of Medical Internet Research	Convenience sampling.	2483	cross-sectional survey	<ul style="list-style-type: none"> Generalized Anxiety Disorder 7-item (GAD-7) scale Measurement of Positive Psychological Response Measurement of Information-Seeking Behaviors 	<ul style="list-style-type: none"> Participated in this study reported having experienced anxiety during the early stages of the COVID-19 pandemic. This study also found that excessive consumption of information about COVID-19 might be closely linked with anxiety WeChat users in this study had been exposed to a variety of stressors such as the perception of severe health risks of COVID-19, negative emotions associated with home quarantine, financial hardships caused by delays in work, and uncertainty during the pandemic, which might have resulted in reduced positive psychological responses and higher prevalence of anxiety.

37	Zhang X, Liu J, Han N, Yin J	Social Media Use, Unhealthy Lifestyles, and the Risk of Miscarriage Among Pregnant Women During the COVID-19 Pandemic: Prospective Observational Study	2021	JMIR Public Health Surveill		456	cohort study	<ul style="list-style-type: none"> • Assessment of Media Use About COVID-19 • Follow-up for Pregnancy Outcomes • Covariates were collected at the first prenatal visit, including age, educational level, region, family 	<ul style="list-style-type: none"> • Pregnant women spent about 2 hours a day reading COVID-19 news in the early stage of the COVID-19 pandemic in China. • Pregnant women with excessive media use were more likely to having no physical activity, inadequate dietary diversity, and poor sleep quality • Excessive media use and poor sleep quality were associated with a higher risk of miscarriage
----	------------------------------	--	------	-----------------------------	--	-----	--------------	---	---

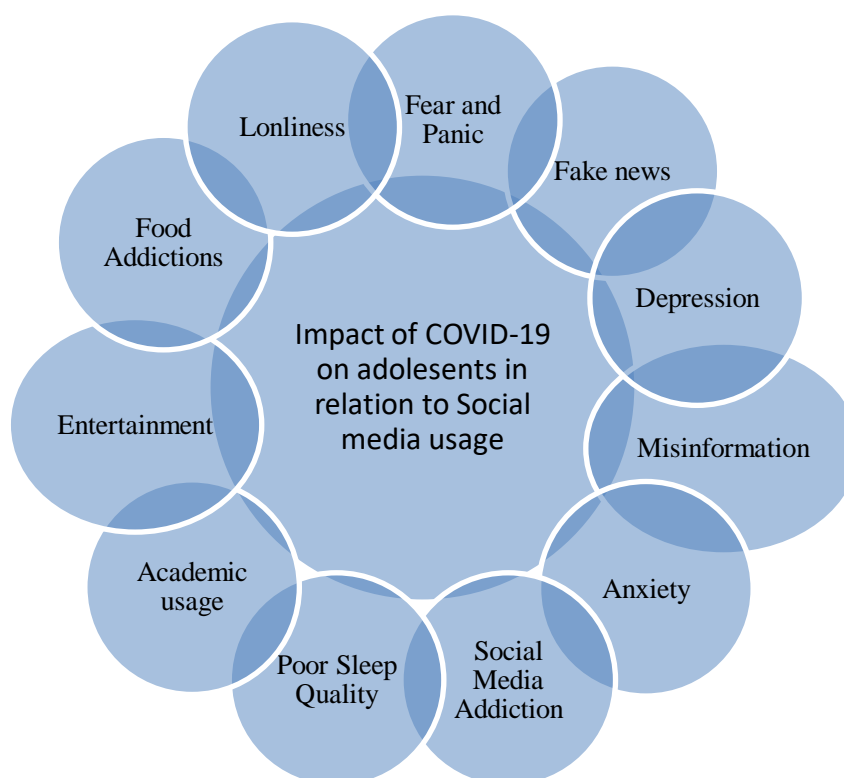


Figure 2:- Key findings of the research

Discussion

The main aim of the present research was to explore the impacts of COVID-19 on adolescents in relation to social media usage. For the current study researches done in the year 2020 and 2021 that fall into the inclusion criteria of research were selected. It can be seen from **TABLE 1** that the selected researches were from all parts of the world; different research design and standardized test and questionnaires were implemented and used in these researches to get to know how COVID-19 has been affecting adolescents who use social media.

Figure 2 shows different findings or the impacts due to COVID-19 in adolescents in relation to social media usage.

a) Circulation of information, Misinformation, Fake news

In the study done by (Araz Ramazan Ahmad, Murad R.H) participants were asked “Which social media platform do you use to get news and information about COVID-19? The majority of participants (426/516, 82.6%) used Facebook to acquire information about COVID-19. Also the participants were asked which category of information has had the

most impact on creating panic on social media.” They answered “fake news about COVID-19. Therefore it was found that there is a significant positive statistical correlation between self-reported social media use and the spread of panic related to COVID-19. Social media have a positive impact on the circulation of information about the COVID-19 pandemic in Saudi Arabia. (Alnasser AHA, Al-Tawfiq JA).

The news-find-me perception was the strongest predictor of fake news sharing related to COVID-19 pandemic among Nigerian social media users (Apuke D. Oberiri, Omar Bahiyah) A negative association between status seeking and fake news sharing was hypothesised in this study. However, our results suggest that status searches lead to behavior in exchanging fake messages related to the COVID 19 pandemic. A possible explanation to this is that social media allows it users to develop popularity, hence encouraging social media users to show that they are knowledgeable on some preventive tips and precautionary measures. They would like to be the first to share information to prove to their peers that they are knowledgeable (Apuke.D.Oberiri, Omar.Bahiyah). As social

media comes to occupy an increasingly important role in the exchange of information (and misinformation) and fake news this study has important implications for the health of. **The role of** users and social media in future disasters, including **the impact of** social media on stress and **health-related** behaviors. This false information can be distressing, and it can contribute to maladaptive decision making that can potentially make the mental health impact of COVID-19 exposure more severe for individuals and families (**Jennifer M. First, Haejung Shin, Yerina S. Ranjit & J. Brian Houston**)

b) Psychological impact

From the selected researches it was concluded that due to social media use during COVID-19 times adolescents suffered from a lot of psychological problems. Results showed that the majority of youths aged 18-35 years are facing psychological anxiety.(**Alnasser AHA, Al-Tawfiq JA**). Concerns over the COVID pandemic and compulsive internet use significantly predicted high scores of depression, loneliness and escapism. The average scores of depression suggest that adolescents are experiencing mild symptoms which maybe directly linked with the lockdown ((**Fernandes Blossom, Biswas.N.Urmi, Mansukhani.T.Roseann, Vallejo Alma, & Essau.A.cecilia**). (**Huixi.Dong, Yang.Fangru, Lu.Xiaozi, Hao.Wei**) showed that a number of participants experienced significant depression, anxiety, and stress during the outbreak. In this particular period, due to the suspension of schools, the closure of living environments, the reduction of outdoor activities, and the increase of epidemic pressure, the mental health of school-age children and adolescents were threatened. **Uncertainty and potential adverse effects of losing academic progress can be detrimental. There are various** explanations for why **increased** media coverage of disasters **can pose greater challenges for** individuals. First, media coverage of disasters is often “pervasive, continuous, and intense” (Houston et al., 2008, p. 14). Thus, for example, media coverage of COVID-19 might include repeated images of overcrowded hospitals or of medical

professionals responding to patients covered in personal protective equipment. (**Jennifer M. First, Haejung Shin, Yerina S. Ranjit & J. Brian Houston**). Interpersonal communication (e.g., talking with family members and friends) about disasters has also been observed to be related to more disaster distress.

According to (**Gao J, Zheng P, Jia Y, Chen H, Mao Y, et al**). It was found that 82.0% of participants frequently expose them to social media, and frequently associated with high odds of anxiety. There may be two reasons **to explain** the **relationship** between **many small businesses** and mental health. During COVID-19 outbreak, disinformation and false reports about the COVID-19 have bombarded social media and stoked unfounded fears among many netizens which may confuse people and harm people’s mental health. **Many** citizens **also** expressed negative **emotions** such as fear, **anxiety, tension and fear** on social media, which are contagious social network. (**Jiang Y**) in his research stated that he levels of anxiety increased among the university students who believed that their academic performance had been affected by the COVID-19 pandemic.

Also there was a high prevalence of psychological symptoms among college students. Health risk communication and social media use were important in predicting psychological symptoms, especially health anxiety. (**Li M, Liu L, Yang Y, Wang Y, Yang X, Wu H**). Therefore (**Zou C, Zhang W, Sznajder K, Yang F, Jia Y, Ma R, Cui C, Yang X**) focuses on excessive use of Wechat during COVID-19 resulting in positive psychological responses and information-seeking behaviors closely associated with anxiety in China.

Students are prone to psychological distress because they may be worried about contracting the disease, was afraid regarding their academic achievement and their future plans. The results of this study also showed that female students had significantly higher levels of anxiety and stress symptoms, which may have resulted from their greater worries.(**Tariq N. Al-Dwaikat, Mohammed Aldalaykeh, Wafa'a Ta'an, Mohammad Rababa**).

c) To stay connected

The results showed a significant increase in social media and streaming services during the **pandemic as the government implemented a lockdown to control the spread of the coronavirus**. Given that adolescents are usually more and more focused on **interacting with their peers** (Blakemore, 2008), **the need to maintain social ties is much higher** despite the lockdown of COVID19. **The study shows that adolescents in different parts of the world are increasingly using social media contacts. Many teens reporting use of social media (Instagram, Snapchat and TikTok) to stay in touch with their peers (Fernandes Blossom, Biswas.N.Urmi, Mansukhani.T.Roseann, Vallejo Alma, & Essau.A.cecilia)**

d) Poor sleep quality

A study by (Zhang X, Liu J, Han N, Yin J) focused on **the fact that excessive media consumption can become an unhealthy habit for pregnant women during COVID19**. They concluded that pregnant women **who are over-consuming media are more likely to have less physical activity, poor dietary diversity, and poor sleep quality**. Excessive media use and poor sleep quality were associated with **an increased risk of miscarriage**. **During the pandemic, young adults were lonelier than older adults, with significantly increased use of social media and lower social support seeking. Increased use of social media and lower social support seeking communicated a link between age group and loneliness**. (Lisitsa.Ellie, Katherine S. Benjamin, Sarah K. Chun, Jordan Skalisky, Lauren E. **Hammond** and Amy H. **Mezris**). **Many young people who reported serious loneliness also said they felt as if no one “genuinely cared” about them. The survey also suggests that lonely people often feel they’re reaching out or listening to other people more than other people are reaching out or listening to them. “These things can become self-defeating.**

e) Food addiction and Substance Abuse

In a research by (Islam MS, Sujun MSH, **Tasnim R, et. al**) participants reported smoking cigarettes while a minority reported

consuming alcohol during Covid times due to excessive social media use. Analyses on substance use showed that during lockdown adolescents smoked significantly increased (see table 5). The number of times that adolescents consumed alcohol and other substances (including marijuana) also showed some increase during compared to before COVID19. (**Fernandes Blossom, Biswas.N.Urmi, Mansukhani.T.Roseann, Vallejo Alma, & Essau.A.cecilia**).

f) Academic usage

In a world where digital social media has taken a significant role in teaching and learning, any modern pedagogy much accounts for students’ findings, analysing, and applying knowledge from a growing number of constantly changing sources. This requires higher-order skills like critical thinking and the ability to learn more independently, as well as in larger groups, both in person and online (Persaud, 2019). (**Dutta.Ankuran**) explains the impact of self-isolation, quarantine and lockdown due to the pandemic on the academic schedule of the students of Indian higher education. The results reveal that social media is widely used by students of higher institution. Opportunities and benefits of digital social media for academic purposes incurred by the students became visible only after the crisis took place.

g) Entertainment purposes

During the pandemic many challenges spread across social media, potentially to link individuals to one another and to bring entertainment of the individual's attempts. On the other hand, the use of SNS for entertainment purposes was associated with increased symptoms of stress, and anxiety (**Tariq N. Al-Dwaikat, Mohammed Aldalaykeh, Wafa'a Ta'an, Mohammad Rababa**). One hard truth of the pandemic was that, in order to someday be together safely, we had to be apart in the meantime. For many, this meant that social media has become one of the only ways to be with friends and family, so people have flocked to platforms like (instagram) and (Facebook). The new normal, where many more of our daily interactions are

mediated by screens, has made us change the way we behave on those platforms, with the messiness and realities of pandemic life crowding out some of social media's posturing and perfection.

h) Gaming addiction

Supporting the findings of (Fernandes Blossom, Biswas N. Urmi, Mansukhani T. Roseann, Vallejo Alma, & Essau A.cecilia) high scores of gaming addiction also contributed towards escapism, loneliness, and symptoms of depression. Increase in gaming has been observed in adolescents using this to cope with the psychological distress of the pandemic.

i) Internet addiction

Another lifestyle change triggered by the pandemic that may increase anxiety levels among university students is the use of mobile social media. Adults who put more effort and time into mobile social media had poorer sleep quality, lower self-esteem, and higher levels of anxiety and depression. Moreover, during public health crises, mobile social media spreads disinformation, thus aggravating public fear and panic. The prevalence of the pandemic has forced university students' social capital to turn toward online connections. During the pandemic, mobile social media has played a pivotal role in the learning, living, and leisure activities of university students. Due to the long hours at home, e-learning has become the primary mode of learning for university students, whereas face-to-face social relationships have been kept to a minimum, both of which have created conditions and opportunities for social media usage and resulted in a significant increase in the amount of time university students spend on social media (Jiang Y)

j) Lonliness

In the sample of Italian adults, the tested mediation model suggested that perceived loneliness during COVID-19 pandemic was positively associated, both directly and indirectly, with anxiety. Furthermore, increased feelings of loneliness and isolation predicted high levels of both anxiety and excessive social media use, in addition, when we controlled for excessive social media use, the predictive

effect of loneliness on anxiety further increased (Boursier V, Gioia F, Musetti A, Schimmenti A). Furthermore, high scores of gaming addiction also contributed towards escapism, loneliness, and symptoms of depression. Supporting the findings of) Fernandes Blossom, Biswas N. Urmi, Mansukhani T. Roseann, Vallejo Alma, & Essau A.cecilia)

Conclusion

To conclude, the main objective of this study was to examine the impact of COVID-19 on adolescents in relation to social media usage. This study was carried to examine whether the pandemic would have a detrimental effect on adolescents behaviour in relation to social media usage during the times of pandemic where the whole world was under lockdown. Further we wanted to explore the relationship between these online behaviours and psychological well-being. Given the ongoing pandemic, these findings revealed a greater increase in social media use and streaming services. Moreover, these results showed that compulsive internet use and increased social media use was strongly associated with worries of COVID-19 and symptoms of depression.. Those scoring high on gaming addiction also reported increased symptoms of depression, loneliness and escapism. Taken together these results highlight that adolescents who rely on maladaptive coping strategies, such as gaming and compulsive use internet, to manage distress and anxiety are likely to have a negative effect on their mental health and even quality of sleep. Twitter has an emerging role in the dissemination of health information. Therefore it also acknowledges us with both positive and negative impacts of social media during COVID times.

1. Positive impact

The COVID19 pandemic is complex as it has a disproportionate impact on multiple groups of people. The virus moves at different speeds, which requires the best of us and our management skills. Today, users use social media tools to enhance their organization's capabilities and demonstrate its resilience in response to crises. Social media users are creating new ways to collaborate that are likely

to lead to more resilient communication over time.

Social media and the Internet also allow students to feel more involved in a community while having access to resources and guides. Social media is often the fastest way to get in touch with people or answer questions and thus make information accessible regardless of location. For example, current event news can travel fast on social media before broadcasters have had a chance to cover it.

As the face of education continues to change, institutions must find ways to evolve their curricula to attract the new generation of students. Although some are reluctant to deviate from traditional educational practices, it is important to prioritize the needs of students and therefore ensure that they are taught in a way that maximizes their own potential and learning. As more and more social media platforms are introduced, the internet is flourishing and therefore should be used as a tool to support the educational process. It has already proven to be an invaluable medium and source of information

2. Negative impact

It's no secret that social media platforms are deliberately designed to hold users' attention for as long as possible, exploiting psychological biases and weaknesses regarding our desire for confirmation and fear of rejection. Too much passive use of social media - just browsing posts - can be unhealthy and has been linked to loneliness, inadequacy, and lower life satisfaction. Studies have even shown that it can lead to symptoms of ADHD, depression, anxiety, and poor sleep.

The feelings elicited by a "like" can temporarily alleviate feelings of loneliness, but they cannot completely replace sociability. When lonely offline teens use social media to compensate for less developed social skills, they can feel even more lonely in the long run. The meaningful relationships that we build face-to-face through verbal and non-verbal cues are a deep and lasting source of personal satisfaction and happiness. An emoji or "LOL" may evoke superficial feelings of connection,

but face-to-face communication creates more meaningful bonds through body language, touch, and facial expressions, along with interpreting feelings through tonality and colors. nuances, all the things often found in Inspiration. gets lost in the digital world.

Teens often talk online with people they already have relationships with offline. In moderation, using social media in this way allows teens to stay in touch with friends, classmates, and family and potentially improve their offline relationships. However, it can become problematic when online conversation dominates all social interaction or, in the case of excessive passive browsing, when teens consume more information than they care about.

More important than the actual time they spend online, however, are the influences of the content teens encounter and the activities they engage in online. Rather than using social media for the kind of public broadcasting and passive browsing that can lead to comparing likes, it may be more beneficial to use it to strengthen relationships by allowing more personal interactions with close friends through comments and messages.

TABLE 2 shows the positive and negative impacts of social media usage among adolescents during Covid times

Positive impact	Negative impact
Sharing information rapidly	Fake news
Allows social interaction	A lot of low-quality information
Raise awareness	Mental health issues
Keep up with health information	Loneliness
Instagram, Facebook and Twitter most widely used platforms	Miscarriages
Online classes and e-learning	Internet addiction
Entertainment purposes	Gaming addiction
	Poor sleep quality
	Food addiction
	Substance abuse

References

1. Araz Ramazan Ahmad, Murad R.H (2020). The Impact of Social Media on Panic during the COVID-19 Pandemic in Iraqi Kurdistan: Online Questionnaire Study. *Journal of medical Internet research*, 22(5). Doi:10.2196/19556
2. Alnasser AHA, Al-Tawfiq JA, Al-Kalif MSH, Shahadah RFB, Almuqati KSA, Al-Sulaiman BSA, Alharbi KKS, Alabbad FYM, Alabbad JYM, Alquwaiz IAI, Almashama IKI (2020). The positive impact of social media on the level of COVID-19 awareness in Saudi Arabia: a web-based cross-sectional survey. *Le Infezioni in Medicina* 28(4), 545-550. <https://pubmed.ncbi.nlm.nih.gov/33257629>
3. Aggarwal.J.C. (1994). *Essentials of educational psychology*. Vikas publishing house pvt ltd
4. Apuke.D.Oberiri ,Omar.Bahiyah (2021). Social media affordances and information abundance: Enabling fake news sharing during the COVID-19 health crisis. *Health informatics journal*, 27 (3). <https://doi.org/10.1177/14604582211021470>
5. Al-Dmour H, Masa'deh R, Salman A, Abuhashesh M, Al-Dmour R(2020). Influence of Social Media Platforms on Public Health Protection Against the COVID-19 Pandemic via the Mediating Effects of Public Health Awareness and Behavioral Changes: Integrated Model. *J Med Internet Res*, 22(8). doi: 10.2196/19996
6. Biernesser.C, Montano. Gerald, Miller. Elizabeth ,Radovic. Ana (2020). Social Media Use and Monitoring for Adolescents With Depression and Implications for the COVID-19 Pandemic: Qualitative Study of Parent and Child Perspectives. *JMIR Pediatr Parent* ,3(2). doi: 10.2196/21644
7. Balhara YP, Kattula D, Singh S, Chukkali S, Bhargava R(2020). Impact of lockdown following COVID-19 on the gaming behavior of college students. *Indian Journal of Public Health*, 64(6), 172-176. <https://www.ijph.in/text.asp?2020/64/6/172/285596>
8. Boursier V, Gioia F, Musetti A, Schimmenti A (2020) Facing Loneliness and Anxiety During the COVID-19 Isolation: The Role of Excessive Social Media Use in a Sample of Italian Adults. *Front Psychiatry*, 8(11). Doi: 10.3389/fpsy.2020.586222.
9. Brailovskaia.J, Margraf.J (2021). The relationship between burden caused by coronavirus (Covid-19), addictive social media use, sense of control and anxiety .*Computers in Human Behavior*, 119, 106720. <https://doi.org/10.1016/j.chb.2021.106720>
10. Chebrolu Hiram.R, Janagama Jyashree, Muraleedharan.K.C, R Resmy (2021). Impact of social media and over the top media during COVID-19 lockdown, a cross-sectional study. *International Journal of Community Medicine and Public Health*, 8(3), 1156-1163. DOI: <https://dx.doi.org/10.18203/2394-6040.ijcmph20210796>
11. Cauberghe.V, Wesenbeeck.V, Jans De.S,Hudders.L and Ponnet.K(2021).How Adolescents Use Social Media to Cope with Feelings of Loneliness and Anxiety During COVID-19 Lockdown. *Cyberpsychology, Behavior, and Social Networking*, 24(4) 250-257. <http://doi.org/10.1089/cyber.2020.0478>
12. Cato.Susumn, Iida.Takashi, Ishida.Kenji, Ito.Asei, Katsumata. Hiroto, Kenneth Mori McElwain, Shoji.Mashiro(2021).The bright and dark sides of social media usage during the COVID-19 pandemic: Survey evidence from Japan. *International Journal of Disaster Risk Reduction*,5. <https://doi.org/10.1016/j.ijdrr.2020.102034>.
13. Chia-chen Yang, Jiun-Yi Tsai, and Shuya Pan (2020). Discrimination and Well-Being among Asians/Asian Americans during COVID-19: The Role of Social Media. *Cyberpsychology, Behavior, and Social Networking*, 23(12), 865-870. <https://doi.org/10.1089/cyber.2020.0394>
14. Drouin. Michelle, McDaniel.T. Brandon, Pater Jessica, Toscos. Tammy(2020).How Parents and Their Children Used Social Media and Technology at the Beginning of the COVID-19 Pandemic and Associations with Anxiety. *Cyberpsychology, Behavior,*

- and Social Networking, 23, 11. <https://doi.org/10.1089/cyber.2020.0284>
15. Dutta.Ankuran (2020) Impact of Digital Social Media on Indian Higher Education: Alternative Approaches of Online Learning during COVID-19 Pandemic Crisis. International Journal of Scientific and Research Publications, 10(5). DOI: 10.29322/IJSRP.10.05.2020.p10169
 16. Fernandes Blossom, Biswas.N.Urmi, Mansukhani.T.Roseann, Vallejo Alma, & Essau.A.cecilia (2020).The impact of COVID-19 lockdown on internet use and escapism in adolescents. Revista de Psicología Clínica con Niños y Adolescentes 7(3), 59-63. Doi: 10.21134/rpcna.2020.mon.2056
 17. G. Morgan, M. Tagliamento, M. Lambertini, B. Devnani, B. Westphalen, R. Dienstmann, I. Bozovic-Spasojevic, A. Calles, C. Criscitiello, A. Curioni, A.M. Garcia, A. Lamarca, S. Pilotto, M. Scheffler, M. Strijbos, R. Wong, E. de Azambuja, S. Peters (2021). To study the Impact of COVID-19 on social media as perceived by the oncology community: results from a survey in collaboration with the European Society for Medical Oncology (ESMO) and the OncoAlert Network. European Society for Medical Oncology, 6(2), 100104. <https://doi.org/10.1016/j.esmoop.2021.100104>
 18. Gao J, Zheng P, Jia Y, Chen H, Mao Y, et al. (2020).Mental health problems and social media exposure during COVID-19 outbreak. PLOS ONE, 15(4), 0231924. <https://doi.org/10.1371/journal.pone.0231924>
 19. Huixi.Dong, Yang.Fangru, Lu.Xiaozi, Hao.Wei (2020).Internet Addiction and Related Psychological Factors Among Children and Adolescents in China During the Coronavirus Disease 2019 (COVID-19) Epidemic, Frontiers in Psychiatry,11,751. DOI: 10.3389/fpsy.2020.00751
 20. Hong.Wei,Liu-De , Ding.Yi, Fu.Xinchen, Zhen.Rui,Sheng.X(2021). Social Media Exposure and College Students' Mental Health During the Outbreak of COVID-19: The Mediating Role of Rumination and the Moderating Role of Mindfulness. C yberpsychology, Behavior, and Social Networking, 24(4). <https://doi.org/10.1089/cyber.2020.0387>
 21. Islam MS, Sujan MSH, Tasnim R, Mohona RA, Ferdous MZ, Kamruzzaman S, Toma TY, Sakib MN, Pinky KN, Islam MR, Siddique MAB, Anter FS, Hossain A, Hossen I, Sikder MT, Pontes HM (2021).Problematic Smartphone and Social Media Use Among Bangladeshi College and University Students Amid COVID-19: The Role of Psychological Well-Being and Pandemic Related Factors.Front Psychiatry 12, 10.3389/fpsy.2021.647386
 22. Jiang Y (2021).Problematic Social Media Usage and Anxiety Among University Students During the COVID-19 Pandemic: The Mediating Role of Psychological Capital and the Moderating Role of Academic Burnout. Front. Psychol, 12,612007. <https://doi.org/10.3389/fpsyg.2021.612007>
 23. Jude P. Mikal, Rebecca Wurtz, Stuart W. Grande (2021) .Social media as a modern Emergency Broadcast System: A longitudinal qualitative study of social media during COVID-19 and its impacts on social connection and social distancing compliance.computers in Human Behavior Reports, 4, 100137, <https://doi.org/10.1016/j.chbr.2021.100137>
 24. Jennifer M. First, Haejung Shin, Yerina S. Ranjit & J. Brian Houston (2021) .Stress and Depression: Examining Social Media, Traditional Media, and Interpersonal Communication. Journal of Loss and Trauma, 26(2), <https://doi.org/10.1080/15325024.2020.1835386>
 25. Kaya Tugberk (2020). The changes in the effects of social media use of Cypriots due to COVID-19 pandemic.Technology in society 63, 101380. <https://doi.org/10.1016/j.techsoc.2020.101380>
 26. Lisitsa.Ellie, Katherine S. Benjamin, Sarah K. Chun, Jordan Skalisky, Lauren E. Hammond, and Amy H. Mezulis(2020). Loneliness among young adults during Covid-19 pandemic: The mediational roles of social media use and social support seeking. Journal of Social and Clinical Psychology, 39 (8), 708–726. <https://doi.org/10.1521/jscp.2020.39.8.708>

27. Lee, Y., Yang, B. X., Liu, Q., Luo, D., Kang, L., Yang, F., Ma, S., Lu, W., Chen-Li, D., Rosenblat, J. D., Mansur, R. B., Nasri, F., Subramaniapillai, M., Liu, Z., McIntyre, R. S., & Lin, K. (2020). Synergistic effect of social media use and psychological distress on depression in China during the COVID-19 epidemic. *Psychiatry and clinical neurosciences*, 74(10), 552–554. <https://doi.org/10.1111/pcn.13101>
28. Li M, Liu L, Yang Y, Wang Y, Yang X, Wu H(2020).Psychological Impact of Health Risk Communication and Social Media on College Students During the COVID-19 Pandemic: Cross-Sectional Study. *J Med Internet* 22(11). DOI: 10.2196/20656
29. Luo.T, Chen.W, Liao.Y(2021). Social media use in China before and during COVID-19: Preliminary results from an online retrospective survey.*Journal of Psychiatric Research*,140, 35-38. DOI: 10.1016/j.jpsychires.2021.05.057
30. Ngien.Annabel and Jiang.Shaohai(2021).The Effect of Social Media on Stress among Young Adults during COVID-19 Pandemic: Taking into Account Fatalism and Social Media Exhaustion. *Health Communication*. DOI: 10.1080/10410236.2021.1888438
31. Ogata Michael, Guest Christina, Feldmeier.L Michael (2020).Social Media use and impact on youth during the covid 19 pandemic: A novel electronic questionnaire to engage youth about social media use. *Elsevier Public Health Emergency Collection*.59 (10), 255-256. DOI: <https://doi.org/10.1016/j.jaac.2020.08.426>
32. Oosterhoff Benjamin, Palmer. A. Cara, Wilson Jenna, Shook Natalie (2020).Adolescents' Motivations to Engage in Social Distancing During the COVID-19 Pandemic: Associations With Mental and Social Health. *Journal of Adolescent health* 67(2), 179-185. DOI:<https://doi.org/10.1016/j.jadohealth.2020.05.004>
33. Panno Angelo, Carbone Giuseppe Alessio, Massullo Chiara, Farina Benedetto, Imperatori Claudio(2020). COVID-19 Related Distress Is Associated With Alcohol Problems, Social Media and Food Addiction Symptoms: Insights From the Italian Experience During the Lockdown. *Frontiers in Psychiatry*, 11, 1314. <https://doi.org/10.3389/fpsy.2020.577135>
34. Radwan.Eqbal,Radwan.Afnan,Radwan.Walaa(2020). The role of social media in spreading panic among primary and secondary school students during the COVID-19 pandemic: An online questionnaire study from the Gaza Strip, Palestine.*Heliyon* 6(12), 10.1016/j.heliyon.2020.e05807
35. Sharif.A, Opu Rayhan Rubayet. J. Khalid. Alzahrani, Ahmed.N.S, Islam.S, Shika Sohoda Mim, Khan.B.F, Zaman.F, Dey.K.S (2021). The positive impact of social media on health behavior towards the COVID-19 pandemic in Bangladesh: A web-based cross-sectional study.*Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 5(15), 102206, <https://doi.org/10.1016/j.dsx.2021.102206>
36. Tariq N. Al-Dwaikat, Mohammed Aldalaykeh, Wafa'a Ta'an, Mohammad Rababa (2020).The relationship between social networking sites usage and psychological distress among undergraduate students during COVID-19 lockdown. *Heliyon* 6(12),e05695. DOI: 10.1016/j.heliyon.2020.e05695.
37. Werling.M.Anna,Walitz.S,Grünblatt.Edna ,Drechsler.Renate (2021).Media use before, during and after COVID-19 lockdown according to parents in a clinically referred sample in child and adolescent psychiatry: Results of an online survey in Switzerland. *Comprehensive Psychiatry*, 109, 152260. <https://doi.org/10.1016/j.comppsy.2021.152260>
38. Werling.M.Anna, Walitz.S, Grünblatt.Edna, Drechsler.Renate (2021).Impact of the COVID-19 lockdown on screen media use in patients referred for ADHD to child and adolescent psychiatry: an introduction to problematic use of the internet in ADHD and results of a survey.*Journal of Neural Transmission*, 128, 1033-1043. <https://doi.org/10.1007/s00702-021-02332-0>
39. Zhao Nan and Zhou guangyu (2021).COVID-19 Stress and Addictive

- Social Media Use (SMU): Mediating Role of Active Use and Social Media Flow. *Frontiers in Psychiatry* 12, (85). <https://doi.org/10.3389/fpsyt.2021.635546>
40. Zhang X, Liu J, Han N, Yin J(2021)Social Media Use, Unhealthy Lifestyles, and the Risk of Miscarriage Among Pregnant Women During the COVID-19 Pandemic: Prospective Observational Study, *JMIR Public Health Surveill*,7(1). doi: 10.2196/25241