

The Effect of Digital Media on the Younger Minds during the Pandemic: A Report of Pakistan, Jordan and Syria

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ABSTRACT

Objective: To evaluate the psychosocial impact of the use of digital media on young minds.

Material and Methods: A survey based cross sectional study was conducted by using questionnaires through google forms from diverse general, young population. A total number of 110 respondents from Pakistan, Jordan, and Syria, were included.

Results: 18 – 35 years age group showed Depression 53.4%, Anxiety 71.8%, Lack of Interest in Daily Activities 70.5%, Decreased Decisive Ability 10.5% and Insomnia 66.3%. While, the 36 – 54 years group showed Depression 46.4%, Anxiety 56.8%, Lack of interest in Daily Activities 61.8%, Decreased Decisive Ability 8.3% and Insomnia 47.5%. It was noticeable, that the younger age group of 18 – 35 years suffered more psychological effects.

Conclusion: We concluded that while digital media is affecting all age groups, but the younger age group was affected the most.

Keywords: COVID-19, Pandemic, Digital Media, International Study, Lockdown, Social Isolation.

INTRODUCTION

We live in the era of digital media, and especially after lockdown and self-isolation, digital media has boomed tremendously. The easy availability, no time limitation and restriction, utility of having every news right in the palm of your hand, and the ease of communication has made it an essential part of life. Digital media, defined precisely as the use of social media and electronic press are considered both a source of entertainment and a portal of "reach out" to raise awareness, propagate news and precautions, and, of course, the viewing and reporting critical current scenarios.

While, writing this report, in Pakistan, there are 296,149 confirmed cases of COVID-19 and 6298 fatalities caused by COVID-19.¹ However, although the incidence might not be as high as in the United States and Europe, especially Italy and Spain, a rise may still be expected because of the continually mutating nature of the causative agent. COVID-19 has affected 210 countries² and territories, and there are more than 2,355,853 cases of COVID-19 all around the world.³ In this time of social distancing and isolation, people suffer from a lot of psychological impact. While there is a fear of the disease itself, there is also an apprehension of what might happen in the

future regarding economic bearings, finances, business, and education. Will things ever be back to normal again?

A human mind is a smart machine looking for all the answers from every corner. Lip service and gossip have always played a part. It has now been upgraded in the form of digital media that has surpassed the era of the press.

While the importance of digital media cannot be denied, it is not less than a knife, which can be both a weapon and a healing scalpel depending upon the wisdom and intent of its use. We want to enlighten further that no matter how sharp a knife is, it can never cut its handle!

Pandemics have always weighed heavily, considering the impact of their biological consequences of illness and fatalities. It expands to the psychological and mental health of the population, where many studies have pointed out an increased incidence of REM sleep with COVID-19 related dreams/nightmares concerning anxiety and stated the occurrence of night terrors.⁴ Pandemic is still a time of uncertainty, dismay, apprehension, and fear. Since people isolate themselves in their homes, and many even have their loved ones locked away in different places, the negative impact is easy to predict.

Hence, we conducted this study to address the role played by the digital media on the psychological state of the Pakistani population consisting of people from all walks of life.

MATERIALS AND METHODS

Study Design

We conducted a cross-sectional study to address the role of digital media on the psychological state of the Pakistani population consisting of people from all walks of life.

Questionnaire

An electronic questionnaire was implemented using google forms. We shared the online survey and made a team of students and juniors who reached out to the diverse people to reduce the bias and gain access to the young, general population, especially the non-medical one. The link was shared on Facebook and WhatsApp groups.

Responses

A total number of 110 subjects responded to the

questionnaire. This questionnaire addressed people's psychological aspects belonging to various age groups and associated with different professions. People from nationalities of Pakistan, Jordan, and Syria took part. Digital media was defined as social, digital media such as: Facebook, Twitter, Instagram, Snapchat, TikTok, WhatsApp, Viber, and other online news channels and newspapers.

RESULTS

In our survey, people replied about the impact of the news and updates from the social, digital media. The results in the 18-35 years age group showed Depression 53.4%, Anxiety 71.8%, Lack of Interest in Daily Activities 70.5%, Decreased Decisive Ability 10.5% and Insomnia 66.3%. While, the 36 – 54years group, showed Depression 46.4%, Anxiety 56.8%, Lack of interest in Daily Activities 61.8%, Decreased Decisive Ability 8.3% and Insomnia 47.5% (Figure 1).

Table 1: Age Data of the Respondents.

Age (Years)	Total No	Mean Age (Years)
18 – 35	55	28
36 – 54	55	42
Total	110	Age Range: 18 – 54 Years

Table 2: Time Spent on Digital Media with Reference to the Age Group.

Total Time Spent	18 – 3 (Years)	36 – 5 (Years)
1 – 2 Hrs	3.4%	8.4%
2 – 4 Hrs	54.6%	67.8%
> 4 Hrs	42%	23.8%

Table 3: Psychological Effects Age with Reference to the Age Group.

Psychological Effects	In 18 – 3 (Years)	In 36 – 54 (Years)
Depression	53.4%	46.4%
Anxiety	71.8%	56.8%
Lack of Interest in Daily Activities	70.5%	61.8%
Decreased Decisive Ability	10.5%	8.3%
Insomnia	66.3%	47.5%

Graph: Psychological Effects Comparison between Two Groups of Age Range

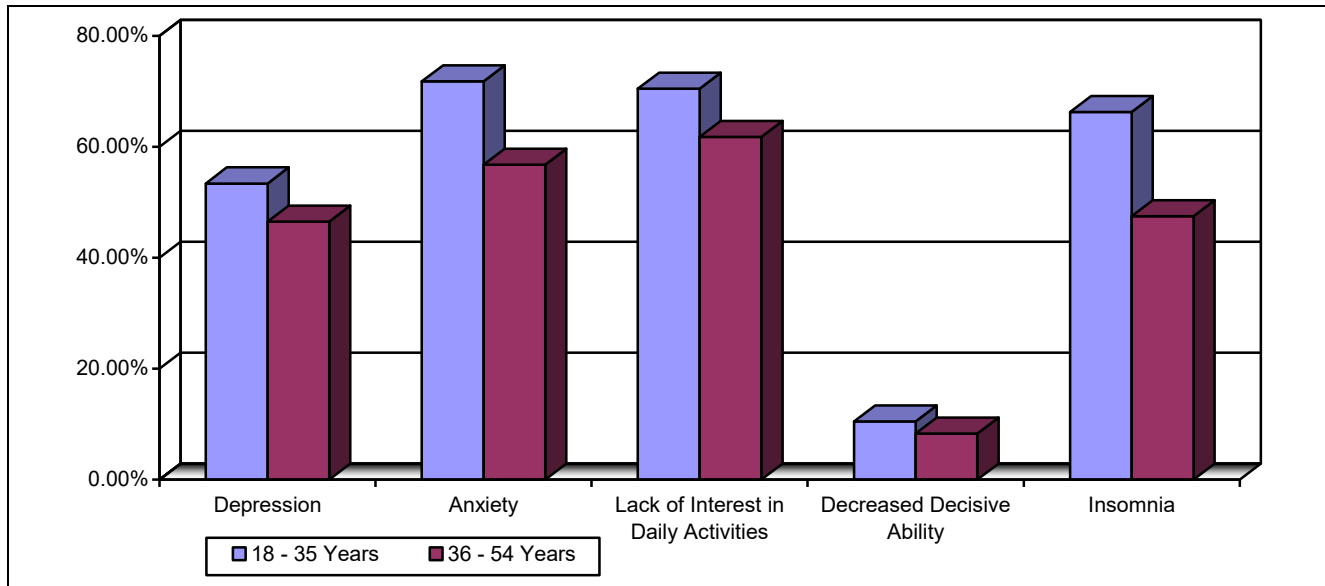


Fig. 1: Distribution of Two Groups of Subjects According to Percentage of Psychological Effects.

It was noticeable, that the younger age group of 18 – 35 years suffered more psychological effects. Furthermore, the younger age group spent more hours on the social, digital media. However, through all ages, there were no visible differences in the mean between males and females using the social media, so it seems in our study that both genders use digital media during the outbreak.

DISCUSSION

While we may conclude that digital media is creating some unnecessary hype, we still cannot deny the positive impact of digital media's proper usage, as we can share and reach out people in various positive ways in terms of increasing level of awareness, keeping up with the recent medical views based on experience regarding patient management, getting information, and attempting to find ways to intervene in the chain of transmission, finding a probable cure, sharing ideas with people, sending hope to people who are ill or anxious about COVID-19, cheering up people left alone, helping out by raising funds and collecting food and equipment for people in need, doctors can perform their telemedical consultations, and you may also share your ideas in policy making. Furthermore, this was a way of teaching residents and students while they were at their homes through webinars, which gave them the access to high quality education

materials, which were difficult to access before as it was difficult to meet those panelists in person due to their tight schedules or the expenses of travelling.

The younger age group was affected the most for various reasons. This age group has a natural emotional tendency to respond to environmental stress. This age group is also the one where most people are at the crossroads of their career and education so they have apprehensions for their future as well. Unfortunately the same age group uses digital media the most. There is also role of peer groups that discuss the happenings and how it would impact their future. It is important to address this age group regarding these problems. There should be a plan to keep them busy in some productive work so they may divide their attention away the digital media and towards other happenings.

Thus, we want to share our view that digital media needs to be used wisely, and its excess should be avoided. Only reputable news portals should be used, and the negative hype is avoided. The WHO has repeatedly warned that COVID-19 related newstead to make one feel anxious and distressed. It is advised to minimize the updates to once or twice a day at specific times and only from trusted sources. We want you all to kindly refer to these guidelines by the WHO on psychosocial considerations during the pandemic of COVID-19.⁵ While many people are relieved knowing the fact that COVID-19 does not pose a high risk of

fatality in the healthy population compared to the medically compromised one.⁶ According to the WHO, this novel coronavirus strain SARS-CoV-2 is a public health emergency of international concern that has an impact not only being an infection but also psychologically among the young and sensitive individuals.^{7,8} With the advent of digital media, the information delivery has been drastically altered.⁹ In China, where the outbreak was originally generated, even bolder headlines were shared. Such pieces of information misled the public and also caused racial discrimination outside mainland.^{10,11}

If we want to convey our concerns regarding the appropriate use of digital media in the given uncertain circumstances, then being at the viewer end, we need to modulate media use according to its impact on our mind. We need to educate people on how to use digital media and how to react. Instead of feeling disappointed, one should learn to respond by trying to find a solution how to mitigate the feared consequences. We should devise our way of using digital media most constructively. For example, several of us from all around the world gathered and designed to broadcast educational videos for the resident doctors who are now deprived of daily rounds, made Facebook groups to convey information regarding COVID-19, unique dedicated blogs to keep the people entertained, mostly the elderly ones who were isolated alone, and there are also several other ways to introduce more positivity.

CONCLUSION

We cannot deny the useful impact of social, digital media as well as it is the only portal of communication and an effective educational tool especially during these challenging times. But, the social, digital media are also affecting the younger age group psychologically.

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REFERENCES

1. Covid.gov.pk. 2020 [cited 5 September 2020]. Available from: <http://covid.gov.pk/>[Internet].
2. COVID-19 situation update worldwide, as of 4 September 2020 [Internet]. European Centre for Disease Prevention and Control. 2020 [cited 5 September 2020]. Available from: https://www.ecdc.europa.eu/en/geographical-distribution-2019-ncov-cases?fbclid=IwAR3pAe_683nZWcATN2wgBLiClnjwQxMxIjHh1RlsGXBMTcwObPMq7HiL8os
3. Coronavirus Update (Live): 26,795,847 Cases and 878,963 Deaths from COVID-19 Virus Pandemic - Worldometer [Internet]. Worldometers.info. 2020 [cited 5 September 2020]. Available from: https://www.worldometers.info/coronavirus/?fbclid=IwAR0ZILkSSONB9Ub7BKmEEE6KxMpGYZDZKlzC7C3WfvCjs_v0J6pTKDJulyE
4. The Science Behind Your Weird Coronavirus Dreams (And Nightmares) [Internet]. Time. 2020 [cited 5 September 2020]. Available from: <https://time.com/5821896/coronavirus-nightmares-dreams/>.
5. Giacalone A, Rocco G, Ruberti E. Physical health and psychosocial considerations during the COVID-19 outbreak. *Psychosomatics*. 2020; (January): 1–6.
6. Coronavirus Disease 2019 (COVID-19) – Symptoms [Internet]. Centers for Disease Control and Prevention. 2020 [cited 5 September 2020]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>.
7. World Health Organization 2020. Novel coronavirus (2019-nCoV): Situation report–8. Retrieved from <https://www.who.int/docs/default-source/coronaviruse/situationreports/20200128-sitrep-8-ncov-cleared.pdf>
8. Coronavirus outbreak declared global health emergency [Internet]. Abc.net.au. 2020 [cited 5 September 2020]. Available from: <https://www.abc.net.au/news/2020-01-31/whocoronavirus-global-emergency/11916276>
9. Wen J, Aston J, Liu X, Ying T. Effects of misleading media coverage on public health crisis: a case of the 2019 novel coronavirus outbreak in China. *Anatolia* [Internet]. 2020 Apr 2; 31 (2): 331–6. Available from: <https://www.tandfonline.com/doi/full/10.1080/13032917.2020.1730621>
10. National Health Commission of the People's Republic of China. Notice of the National Health Commission on the provisional naming of the new coronavirus pneumonia. Retrieved from <http://www.nhc.gov.cn/xcs/zhengcwj/202002/18c1bb43965a4492907957875de02ae7.shtm>

11. Wen J, Aston J, Liu X, Ying T. Effects of misleading media coverage on public health crisis: a case of the 2019 novel coronavirus outbreak in China. *Anatolia*. 2020; 31 (2): 331-336.

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AUTHORSHIP AND CONTRIBUTION DECLARATION

Serial No.	Author's Full Name	Intellectual/Contribution to Paper in Terms of:
1.	Noor-ul-Huda Maria	Paper writing, referencing, data collections.
2.	Asif Shabbir	Study design and methodology.
3.	Ali Hammed	Data collection and calculations.
4.	Saif Salman	Analysis of data and interpretation of results etc.
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