



IMPACT OF FEAR OF COVID – 19 ON SMARTPHONE ADDICTION AND MENTAL HEALTH PROBLEMS (ANXIETY, DEPRESSION, AND STRESS) AMONG YOUNG ADULTS

Syeda Razia Bukhari^{1*}, Komal Riaz², Shafia Tabassum³, Ayesha Nisar⁴

^{1*} Assistant Professor & Student Counselor, Faculty of Education and Social Sciences, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology, H-8/4 Islamabad (SZABIST, Islamabad Campus), Pakistan; ²MS Scholar Faculty of Education and Social Sciences, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology, H-8/4 Islamabad (SZABIST, Islamabad Campus), Pakistan; ³Psychologist, Department of Welfare and Women Development AJK, Pakistan; ⁴Registered Pharmacist, Al-Shifa School of Public Health, Pakistan Institute of Ophthalmology (PIO) Al-Shifa Trust Eye Hospital, Jhelum Road, Rawalpindi, Pakistan.

Email: ^{1*} dr.razia@szabist-isb.edu.pk, ² komalriaz9@gmail.com, ³ shifaraja408@gmail.com, ⁴ ayesha.nisarahmed@hotmail.com

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Abstract

Purpose of the study: The main objective of the current study was to look at the impact of fear of covid-19 and Smartphone addiction on mental distress.

Methodology: Effectively using purposive sampling from the twin cities Islamabad and Rawalpindi, the current study comprises 339 participants, out of which 179 were males and 160 female (18 – 69 years). A standardized measuring instrument (fear of Covid-19 scale) was utilized to self-report data gathering and other tools such as the smartphone addiction scale and psychological distress scale.

Main Finding: The results showed that fear of a novel pandemic had a substantial impact on depression (B=0.265, p=.000), anxiety (B=0.194, p=.000), and stress (B=0.153, p=.004), respectively. Fear of Coronavirus also has a noteworthy impact on Smartphone addiction (B=0.497, p=.000). The findings recommended that elevated fear of the Pandemic is directly related to high mental distress by positively affecting the populace's emotions and behavior.

Application of the study: Psychological well-being administrations given in the hour of the continuous COVID-19 Pandemic ought to be coordinated to help in fostering familiarity with sensations of dread and to elevate encountering these sentiments to exceptional levels. One among the cornerstones of psychosocial support administrations could likewise be creating abilities related to enthusiastic mindfulness, working on the ability to deal with sentiments and taking care of pressure and nervousness.

Novelty/ Originality of the study: The present study examines the impact of fear of COVID-19 on excessive smartphone usage and mental health problems. This review will give critical commitment to the significant writing concerning a portion of the mental impacts emerging as an outcome of the novel pandemic.

Keywords: Fear of Covid- 19, Smartphone Addiction, Mental Health Problems, Adults.

INTRODUCTION

In January 2020, the World Health Organization (WHO) declared the Coronavirus ailment 2019 (COVID-19) outbreak a global public health emergency. To slow the spread of the vicious disease, overworked health protection units and contamination-associated death, governments internationally have carried out seclusion of the affected, bodily quarantine and social distancing to regress the spread of the virus and maintain essential contamination control degree. These ugly and unpredictable adjustments convey the notion of confined freedom, extended psychological misery, network anxiety, multiplied fears, and misconceptions. These, thus, could significantly affect a singular's way of life and social relationships. Covid-19 expands an enormous scope of public emotional well-being issues, stresses, comprising wretchedness responses (rest issues, outrage, and grave concern), inappropriate ways of behaving (duplicated substance misuse, social disconnection) and diminished well-being. These reactions influence general well-being and fulfillment of life at personal and populace levels, undoubtedly adversely influencing state of mind and comprehension and setting off social dysfunction, widespread panic, shame, separation, xenophobia, and minimization.

Study Objectives

- To study the effect of fear of the Pandemic (covid-19) on smartphone addiction.
- To examine the impact of fear of the Pandemic (covid-19) on mental health problems (Depression, Anxiety & Stress).

LITERATURE REVIEW

The study scrutinizes the interrelation between fear of the Pandemic and psychological well-being among adults linking it with Smartphone addiction. Pandemics are a wide-ranging outburst of contagious diseases, which significantly surge morbidity and mortality over large geographical areas and result in social, economic and political disturbance (Ullah,

[Khan, Usman, 2020](#)). Coronavirus originated in December 2019 in China and has expanded to almost all countries present in this world. World Health Organization states the emergence of Coronavirus has come to the surface (as of December 10 2021) with a total of 267,865,289 confirmed cases in which 5,285,888 deaths have taken place globally. As of December 9 2021, an overall of 8,158,815,265 vaccines doses have been provided ([World Health Organization, 2021](#)). Keeping in mind that these figures have been achieved in a matter of two years only, it can be said that Covid 19 is spreading rapidly, proving it is highly contagious and has a fairly high level of death rate ([Lipstich, 2020](#)). This swift escalation of the virus had made it mandatory for every country reporting cases of the Pandemic to impose unyielding actions to hinder disease escalation. These safety measures work towards precluding individuals from coalescing together, either through social distancing about at least six feet, self-quarantining or self-isolating ([Abel, 2020](#)).

Primary and the most fundamental emotive reaction to the Pandemic was unveiling fear. Consequently, the general population resorted to rationality and irrationality when it came to an understanding of the genuine fear of the contagious spread, death, loss of a loved one, or spreading the disease to them. ([Montemurro, 2020](#)). A tad bit of fear defends us from danger. Still, an excessive amount of fear can cause consequential discomfort psychologically and in a number of instances, mental health issues as well ([Sandoiu, 2017](#)). An instrumental tool for human survival is Fear([Butter, 2012](#)). In spite of that, when felt superabundant levels, fear may cause ill-adjusted behavior ([Lum, 2020](#)). For example, an Indian man, nearly 50, who doubted himself being infected self-isolated to guard the members of his household and attacked them with stones when they tried to reach him. Eventually, due to the intense fear of exposure to the disease in his household, he committed suicide ([Goyal, 2020](#)). Likewise, a Bangali male, 36, performed suicide since people around him were suspicious of him having covid-19 because of the symptoms such as fever, cold symptoms, and loss of weight ([Mamun, 2020](#)). Another similar scenario of fearing Covid in Pakistan was a 68-year-old asthma patient who later complained about breathing difficulties and also resisted his family's attempt to take him to the hospital. Some of his family members and neighbours reckoned him to have Covid-19 due to the exact similarity of the symptoms. The man developed an intense fear of Covid – 19. He committed suicide by buying petrol and setting himself on fire in a nearby graveyard because someone from his area had informed him that he was a confirmed patient of Covid-19 ([Elderly Pakistani man kills self fearing coronavirus, 2020](#)).

As the catastrophic result of the Pandemic on the planet has increased, so have the intensity of safety measures such as maintaining distance, wearing a mask, self-quarantining, and self-isolating has increased ([Zhang, 2020](#); [Cao, 2020](#)). Since the measurements are frequent and highlighted too much during the time of the Pandemic, they have positive outcomes like creating awareness of the risks of Covid-19 among human beings around the globe. It can even allow people to worry too much about their health ([Starcevic, 2013](#)). Due to this reason, people who are excessively subjected to warnings about the novel virus that causes Covid – 19 are concerned about their health, frequently checking for their symptoms and doing their own research about the effects of the virus to reassure themselves ([Gao, 2020](#)). This fear of contracting the virus led to individuals searching for their symptoms online via their smartphones ([Faruk Caner Yam, 2021](#)).

Even though smartphones have many beneficial uses, especially when there is less in-person contact, troublesome Smartphone use occurs especially due to problematic and excessive use of social media. ([Griffiths, 2005](#); [Khan, Ullah, Usman, Malik, Khan, 2020](#)). Smartphones aren't only mobile phones; they have the characteristics of most computers. That being the case, Smartphones that yield access to the web are often valuable gadgets for obtaining knowledge related to the Pandemic and being in communication socially during the isolation events([Van Deursen, "Digital Inequality During a Pandemic: Quantitative Study of Differences in COVID-19-Related Internet Uses and Outcomes among the General Population.", 2020](#)). Technological advancements like a smartphone can create ease in our lives when used correctly and responsibly([Fino, 2019](#); [Ullah, Khan, Usman, 2020](#)). however, when used unnecessarily or irresponsibly, a Smartphone may disturb both somatic and psychological states among a small minority of people (Lapointe, 2013). Hence, smartphones can be useful tools to cope with Covid-19 and can be harmful to some people ([Rifat Kayis, 2021](#)).

Excessive usage of Smartphone is a phenomenon referred to commonly as cellular addiction; this is further defined as the most problematic use of the phone resulting in extreme levels of desire for the phone, when not being able to use the phone, feeling deprived and restless, failing to stop the usage of cell phones and procrastinating, that is delaying work due to excess use of Smartphone ([Bian, 2015](#)). Smartphone addiction is not properly identified by any psychiatric organization, but it has a positive correlation with mental issues whereas negative correlation with positive psychological well-being ([Horwood, 2019](#)).

During this peak, Covid season, people spent their everyday lives at home because of the ongoing Pandemic and started accessing all the information about the Pandemic online ([Garcia-Priego, 2020](#)). When the Pandemic persisted, a lot of information was present on the internet about the SARS-CoV-2 incorrectly ([Brown, 2019](#)). People began to spread this knowledge about the Pandemic without researching if the given information is true or false ([Hashemi, 2020](#)). Sharing of wrong information about the Pandemic online or other online medium applications can promotethe chances of fear of Covid-19([Jungmann, 2020](#)). The World Health Organization announced that the misleading information related to Covid-19 present online can lead to mental and chronic consequences physically ([World Health Organization , 2021](#)). As a result, like any other addiction, Smartphone addiction has adverse effects on the living conditions of people. Deriving



from the findings above, it is a possibility that an excess level of fear of the Pandemic can exacerbate addiction to smartphones altogether. (Rifat Kayis, 2021).

The sudden outbreak of the Covid – 19 pandemic may well be an intractable life event that is stressfully out of hand. Safety measures during the lockdown triggered an interruption of everyday lifestyle with a great deal of impact on older adults' health and well-being (López, 2020). A growing cognizance among researchers is that well-being is not only the deduction of emotional sufferings but also hints toward a positive physical, psychological and social atmosphere. Mental well-being is explained as an attempt to enhance ourselves and achieve our potential, which is expounded with having purpose and sense in life, managing challenges, and making a precise effort to beat and gain valuable goals. Personal growth and purpose in life are the fundamental elements of effective mental performance. The degree of growing and developing as a person and perceiving life full of meanings and goals seems to diminish with age (López, 2020). Mental prosperity is communicated as individuals being aware of their own true capacities, being sufficiently skilled to adapt to unpleasant circumstances in daily existence, fit to work actually and precisely, and helpful to the general public (Keyes, 2012; WHO, 2004).

Epidemics from the past have revealed that living in the areas where it is exposed to the widespread occurrence of infectious disease does not positively affect the people's well-being but rather affects negatively (Kwon, 2017). It can be concluded that the well-being of people can be affected negatively due to the novel pandemic. Conclusively intense fear caused by the Pandemic may promote dependency on many habits, such as excessive use of smartphones, as people decide to address these kinds of emotional problems, resulting in the maturing of maladjusted coping behaviours for stress. (Rifat, 2021).

Smartphone addiction is among the foremost typical non-drug addictions, amid negative effects, like anxiety, depression, family life, human relationships, impaired academic performance, and self-disclosing (Gligor, 2018). Some users have an inclined attachment to their Smartphones that they feel as if they aren't able to function without them, use them frequently, have become addicted, disregard their assignments and tasks and impact the users economically and mentally (Aljomaa, 2016). Prior research has shown a linkage between Smartphone addiction, anxiety, depression and stress (Bian M, 2015; Alosaimi, 2016) (MoK, 2015). Smartphone addiction has a positive effect on distress (Tangmunkongvorakul, 2019). Smartphone addiction can also result in pretty similar actions, such as internet addiction or social media addiction. Both of them predict negative well-being, causing an increased degree of mental distress (Yu, 2018; Kuss, 2017). Hence, emotional and behavioural issues that arise during the Covid-19 epidemic that occurred in 2019 and turned into a worldwide pandemic in 2020 are believed to positively affect some people's psychological distress levels known as anxiety, depression, or stress.

METHODOLOGY

Design

A cross-sectional study with regression analysis.

Sample

The present study contained 339 participants in the age range 21-30years, which were gathered through purposive sampling techniques from Rawalpindi and Islamabad.

Inclusion criteria

The sample consisted of those individuals who gave their consent and who volunteered to be a part of the study.

Exclusion criteria

Individuals with severe mental or physical health problems or who were handicapped were not included in the study sample.

Ethical considerations

All look at techniques were carried out following the ethical considerations. The records have been collected online, and the best volunteers were asked to participate. Informed consents were received. The optional ethical withdrawal of participants at any time was present during the research.

Description of measures

The informed consent form, consent form was signed by all the participants who volunteered for the experiment. Through it, the permission of the individuals to take part in the study was taken.

Personal information this form was then given to the participants to collect their personal and family information. It consisted of questions like their name, age, gender, family structure and socioeconomic status.

DASS (Depression anxiety stress scale), The DASS assesses negative emotional symptoms by using a 4-point Likert scale, ranging from 0 to 3. It has three subscales (depression, anxiety, and stress) with 07 items in each subscale for the DASS 21 (Lovibond & Lovibond, 1995).

Fear of covid 19 scale, The Fear of COVID-19 Scale, a seven-item scale, has robust psychometric properties. It is reliable and valid in assessing fear of COVID-19 among the general population (Ahorsu et al., 2020).

Smartphone addiction scale, Smartphone Addiction Scale (SAS) The SAS is a 33-item self-report measure of behaviors associated with problematic smartphone use. The 33 items are arranged into six subscales: Daily-Life Disturbance, Positive Anticipation, Withdrawal, Cyberspace-Oriented Relationship, Overuse, and Tolerance (Kwon et al., 2013).

Procedure

Participants were approached by the researcher and were entreated to participate in the study. Each of them was illustrated regarding the study's essence and motive. A demographic form and assessment scale were administered to all participants. Confidentiality was made sure in the matter of their recognition and procured data. Their participation was voluntary. Consent was acquired prior to administration.

Statistical analysis

For data analysis, descriptive statistical analysis and regression analysis were performed on (SPSS 21)

RESULTS

Table 1: Demographic characteristics of the Sample

Variables	Frequencies	Percentages %
Gender		
Male	179	52.8
Female	160	47.2
Socioeconomic Status		
High	29	8.6
Middle	287	84.7
Lower	23	6.8
Family Structure		
Joint	157	46.3
Nuclear	182	53.7
Mean Age	= 24.21	Std. Deviation = 5.202

Table 2: Multiple Linear Regression Analysis Impact of Fear of COVID-19 on adults' mental health (Anxiety, Depression, and Stress)

Variables	B	S.E	β	t	R^2	F	P
Constant	4.365	1.076		4.057			.000
Depression	.265	.063	.225	4.223	.050	17.834	.000
Constant	4.727	.784		6.031			.000
Anxiety	.194	.046	.225	4.234	.051	17.924	.000
Constant	5.361	.899		5.964			.000
Stress	.153	.053	.157	2.916	.025	8.503	.004

Table 3: Linear Regression Analysis Impact of Fear of Covid – 19 on Smartphone Addiction among adults

Variables	B	S.E	β	t	R^2	F	P
Constant	24.208	1.611		15.030			.000
Smartphone Addiction	.497	.094	.277	5.283	.077	27.911	.000

DISCUSSION

Putting forth the existing study, the effect of Fear of Coronavirus on addiction to smartphones and the effect of Fear of the Pandemic on psychological problems were analyzed. The results showed that this intense fear had a significant impact on depression (B=0.265, p=.000), anxiety (B=0.194, p=.000), and stress (B=0.153, p=.004), respectively. Fear of the Pandemic also has a noteworthy impact on Smartphone addiction (B=0.497, p=.000).

One reason fear of Covid – 19 is intensifying Smartphone addiction and positively affecting psychological problems primarily due to preventative measures like constantly staying indoors. With longer timeframes spent at home during the Pandemic, individuals have exorbitant extra energy, which causes more Smartphone use during recreation time that is looking at web-based entertainment, watching motion pictures and series on the web and getting a charge out of music (Abel, 2020).

Because of the Covid-19 Pandemic, the extended lockdown has elevated the display screen time of various digital gadgets, particularly in the urban regions that pose fitness dangers to developing children. "Health experts stated sitting for hours in front of a display screen reasons eye fatigue and impairment in visible acuity, recognition, ability to concentrate, and can reason complications as well as neck and shoulder pain. Symptoms performing after prolonged periods in front of displays are dryness and myopia. Sitting for long hours, especially in the front of touch gadgets, may adversely affect posture, inflicting neck and shoulder pain, pain inside the hands, and cause the development of early scoliosis (Kim et al., 2020). There changed into a time when mothers or grandmothers used to tell fairytales to the kids to feed them or put them to sleep.

However, the situation has unexpectedly been changed as nowadays, parents provide smartphones to children to keep them calm and quiet during their feeding time or playtime, which poses dangers to the eyes and intellectual health of these younger ones. Studies have observed that, among children and kids, display screen time is connected to weight problems due to unhealthy eating behavior, including snacking whilst looking at T.V. or viewing T.V. all through supper time. (Aljomaa et al., 2016; Kayis et al., 2021).

Evidence suggests that persistent sensory stimulation via excessive exposure to screen time can also terribly affect mental development. Excessive phone use may also boom the hazard of cognitive, behavioural, and emotional problems in teens and teenagers, increasing the chance of early-onset dementia in the past due to maturity (Moran, 2018).

As an ever-increasing number of people resort to remaining indoors to forestall the moreover stream of the microbe on the cultural degree, states need to go to the imperative lengths to offer intellectual wellness support as endorsed via the experts (Lipstich, 2020). Researchers stated that the overall well-being frameworks are gathering solely to battle the COVID-19 episode that can definitely affect the administration of various ailments alongside intellectual wellness, which usually intensifies over the length of the Pandemic. The quarantine can probably rationale an awful effect on one's intellectual wellness. To a review in The Lancet, the division between friends and family, loss of opportunity, weariness, and vulnerability can be the primary reason for a person's psychological decline. This can only be overcome if the person's social and cultural connections reach out. Under the state of the global art situation, the two youngsters and grown-ups are encountering a blend of feelings. They might be put experiencing the same thing or environmental elements that can be new and might be likely antagonistic to their well-being (Goyal, 2020).

Fears connected with the Pandemic have shown a new mental impact of the present Pandemic and are related to mental pain and debilitation (Kayis et al., 2021). Other hurtful impacts include an ascent in tension and anxiety and depression, and sorrow side effects (Moran, 2018). The present COVID-19 Pandemic has a genuine effect on a person's well-being from one side of the planet to the other. Most of the proof proposes that people of the general populace kept in quarantine felt critical pressure and enthusiastic effect, reflecting moderately high paces of tension and burdensome side effects. Dread might be a crude alert reaction to impending risk and related to activity, especially escape and evasion. In any case, dread becomes uneasiness when the activity is hindered or gone against, for example, because the risk isn't in charge. Dread frequently develops into nervousness when endeavours to manage a danger are ineffective. Also, close by the typically noticed observing that tension will generally go before the event of melancholy, it's been accounted that discouragement is difficulties of nervousness taking place in certain populace under specific circumstances. Distressing negative life occasions bring about clinical anxiety and, conceivably some while later, depression. It's been expressed that feeling of trepidation during formative stages (i.e., during youth and pre-adulthood) are, in many cases, a gamble factor for nervousness issues and other psychological problems (Zhang et al., 2020).

IMPLICATIONS

The ongoing review communicates that apprehension about COVID-19 impacted psychological well-being by causing maladjusted sentiments and conduct in people. Regardless, during the COVID-19 Pandemic, managing dysfunctional emotions, framing practical survival methods, and advancing present utilitarian ways of behaving will diminish the psychological pain of individuals and help their mental state. Also, getting ready exercises which people can perform with their family's home might defend one against broken ways of behaving like unnecessary Smartphone use, particularly exercises upheld making an item (painting, toys, food and drink, and so on) which can support people's innovativeness. Such exercises can ease dread as well as help characteristics related to mental well-creatures, such as finding capacities and being valuable and proficient. As an outcome, these people can safeguard their physical and psychological state. Even though trouble levels rise because the gamble of Smartphone enslavement expands, the powerful and savvy utilization of smartphones could likewise be significant in creating social necessities for people suffering from the Pandemic. Indeed, smartphones, which give fast admittance to the web, make it more straightforward for individuals to get data about COVID-19, require safety measures, and are a decent guide for reaching and associating in seclusion conditions. (Deursen, 2020). When smartphones are utilized gainfully, they energize the development of social connections and prosperity (Bae, 2019). stop the alteration of Smartphones into Smartphone addiction during the pandemic period; hobbies could also be executed, increasing active and responsible Smartphone use skills to cut back the negative effects of the Pandemic on people. It should be mindful of the fact that the use of smartphones that does not increase the chance of the user converting into addiction is also helpful in promoting mental health. Studies ought to likewise coordinate the approach to giving emotional well-being administrations from a distance because of the

well-being danger of meeting up close and personal during the Pandemic (Torous, 2020). In line with Protection Motivation Theory, invalid details regarding risk causes can result in unhealthy behaviours by growing risk cognition (Moran, 2018). Hereafter, mental state experts and professionals should supply individuals with abilities by the way they get more -correct and accommodating data on the web and online entertainment. Individuals can create better ways of behaving in dealing with the Pandemic. For sure, it's been uncovered that smartphones can concoct work on psychological wellness among more seasoned grown-ups who are among the classification of individuals who are at a high gamble of getting the infection whenever utilized carefully (Kim, 2020).

LIMITATIONS

There are not many constraints present in the current review. First and foremost, the examination information was assembled through self-report scales. Thus, the probability of regular techniques predispositions should be inspected (e.g., memory review, social allure). Furthermore, the review carries out a cross-sectional plan to see circumstances and logical results connections. As a result, trial and longitudinal investigations are proposed for future exploration to examine the interrelations between these factors. The members in purposive testing can, without much of a stretch control, distort or change the data, causing invalid examination results. These restrictions ought to be surveyed while summing up the consequences of the examination to the populace. The review carries out a cross-sectional plan which keeps it extreme to see circumstances and logical results connections. As a result, trial and longitudinal investigations are proposed for future exploration to examine the interrelations between these factors.

CONCLUSION

Fear of the Pandemic substantially affects mental health problems, including stress, depression, anxiety, and smartphone addiction. Social distancing, precautions of Covid-19 and the isolation had a huge impact on people and caused a great deal of disturbance; hence smartphone addiction came in as a distraction from everything happening following mental health problems.

Co-Author contribution

Dr Syeda Razia Bukhari Drafting and writing the complete Article, finalizing the Article, **Komal Riaz** Compiling Literature, **ShafiaTabassum** Data collection, **Ayesha Nisar** Data collection.

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