Digital resilience: Understanding the influence of social media and support networks on university students' isolation during COVID-19

Ketahanan digital: Memahami pengaruh media sosial dan jaringan dukungan terhadap isolasi mahasiswa selama COVID-19

Yuyun Wahyu Izzati Surya[1*] iD **, Ibtesam Mazahir**[2] iD **, Safeena Yaseen**[3] iD **,**
& Nimas Safira Widhiasti Wibowo[1] iD

[1]Department of Communication, Universitas Airlangga
[2]Department of Social Sciences, Muhammad Ali Jinnah University
[3]Department of Media Studies, Bahria University Karachi
Address: [1]Dharmawangsa Dalam, Airlangga, Surabaya, East Java–60286, Indonesia
[2]Shahrah-e-Faisal, PECHS, Karachi–75400, Sindh, Pakistan
[3]13 National Stadium Rd, Karachi, Sindh, Pakistan
E-mail: yuyun.surya@fisip.unair.ac.id

Abstract

The global COVID-19 pandemic has led to widespread social isolation measures, potentially exacerbating mental health issues, especially among young adults. This demographic, known for its high social media usage, faces increased risk of negative mental health outcomes such as isolation and depression. This study explores how social media engagement and social support seeking mediate the relationship between age and social isolation symptoms during the pandemic. Using a qualitative research methodology, data was collected from twenty university students in Pakistan through semi-structured interviews. The interviews delved into various aspects including depressive symptoms, loneliness, coping mechanisms, and changes in daily routines due to the pandemic. The analysis reveals that university students experienced greater levels of loneliness compared to older age groups. Additionally, they exhibited increased use of social media platforms while seeking less social support. These findings highlight the mental health implications of fear and isolation during a global pandemic, both in Pakistan and in other countries. The study underscores the importance of targeted interventions to address the mental well-being of young adults during and after the COVID-19 crisis.

Keywords: college student; digital resilience; pandemic COVID-19; self-isolation; social media; social support

Abstrak

Pandemi global COVID-19 telah menyebabkan diberlakukannya langkah-langkah isolasi sosial secara luas, yang berpotensi memperburuk masalah kesehatan mental, terutama di kalangan orang dewasa muda. Kelompok ini, dikenal dengan penggunaan media sosialnya yang tinggi, menghadapi risiko lebih tinggi terhadap hasil kesehatan mental negatif seperti isolasi dan depresi. Studi ini mengeksplorasi bagaimana keterlibatan media sosial dan pencarian dukungan sosial memediasi hubungan antara usia dan gejala isolasi sosial selama pandemi. Dengan menggunakan metodologi penelitian kualitatif, data dikumpulkan dari dua puluh mahasiswa di Pakistan melalui wawancara semi-struktural. Wawancara tersebut membahas berbagai aspek termasuk gejala depresi, kesepian, mekanisme penanganan, dan perubahan dalam rutinitas harian akibat pandemi. Analisis menunjukkan bahwa mahasiswa mengalami tingkat kesepian yang lebih tinggi dibandingkan dengan kelompok usia yang lebih tua. Selain itu, mereka menunjukkan peningkatan penggunaan platform media sosial sambil mencari dukungan sosial yang lebih sedikit. Temuan ini menyoroti implikasi kesehatan mental dari ketakutan dan isolasi selama pandemi global, baik di Pakistan maupun di negara lain. Studi ini menekankan pentingnya intervensi yang ditargetkan untuk mengatasi kesejahteraan mental orang dewasa muda selama dan setelah krisis COVID-19.

***Kata Kunci:** mahasiswa; ketahanan digital; pandemi COVID-19; isolasi mandiri; media sosial; dukungan sosial*

Introduction

The COVID-19 pandemic, which emerged in 2019, precipitated a global public health crisis, thrusting individuals into an unforeseen and distressing predicament (Ciotti et al. 2020). This crisis significantly

disrupted personal emotions, daily routines and interpersonal relationships, primarily driven by concerns of potential infection and the experience of social estrangement. The inherent ambiguity surrounding the pandemic's duration further compounded people's anxieties, stress levels and sense of disorientation (Varma et al. 2021). As indicated by Kowal et al. (2020), both younger and older populations encountered heightened anxiety and increased feelings of social isolation due to the imposed quarantine measures.

Researchers around the world have been diligently investigating the impact of the pandemic on mental health since the early days of COVID-19 (Cullen et al. 2020). This scrutiny has prompted individuals to devise coping strategies to contend with the challenges posed by enforced social isolation (Fluharty et al. 2021). The disruption of established routines and reduced opportunities for social interactions have given rise to sentiments of ennui, frustration and isolation among individuals. These emotional states can lead to significant distress and elevate the susceptibility to mental health disorders, notably depression.

In this context, it is pertinent to emphasize that the subjective perception of loneliness serves as a profound indicator of individuals' adverse sentiments concerning the absence of meaningful social connections, encompassing both quantitative and qualitative aspects of their social interactions (Tuijt et al. 2021). While a distinction exists between objective social isolation and subjective loneliness (Holt-Lunstad et al. 2015), it is undeniable that social detachment stands out as one of the most potent determinants of loneliness, exerting detrimental effects on overall health and well-being (Kanitz et al. 2014). Notably, social isolation resulting from disengagement from society exacerbates the experience of loneliness in affected individuals.

The global COVID-19 pandemic, accompanied by stringent lockdown measures, precipitated a widespread occurrence of social isolation, significantly impacting the mental well-being of the general populace on a global scale. This pervasive phenomenon led to a discernible increase in psychological distress, manifested as heightened levels of depression and anxiety. These psychological ramifications were occasionally observed alongside notable alterations in emotional states and lifestyle patterns. Such modifications encompassed reduced engagement in physical activity, adoption of unhealthy dietary habits, compromised sleep quality and an overwhelming sense of loneliness (Luciano et al. 2021). Notably, parents grappled with pronounced psychological distress, primarily stemming from the pervasive uncertainty surrounding their financial stability, the closure of educational institutions and the suspension of educational services (Mazza et al. 2021). This multifaceted distress permeated various facets of their lives.

In parallel, children and adolescents increasingly displayed adverse emotional responses, characterized by heightened stress, pronounced anxiety, a prevailing sense of helplessness, the emergence of social and hazardous behavioural challenges and a notable upsurge in depressive symptoms. Furthermore, these younger demographic groups exhibited significant modifications in their lifestyle practices. These changes encompassed disruptions in sleep patterns, a substantial increase in screen time engagement, a reduction in physical activity levels and the adoption of suboptimal dietary habits.

On January 30, 2020, the World Health Organization (WHO) officially declared the COVID-19 outbreak as a global public health emergency. Subsequently, in March 2020, the WHO escalated its classification to the status of a pandemic. This reclassification aimed to underscore the severity of the situation and to compel all governments worldwide to take comprehensive measures for case identification and containment efforts (Mazza et al. 2021).

It is crucial to acknowledge that the COVID-19 virus, with its multifaceted impacts spanning health, economy, politics and societal order, poses a formidable and far-reaching challenge to our civilization. Despite the existence of treatments and significant advancements in our society, the most potent and efficacious defence mechanism against this virus remains the prevention of its transmission. Key strategies for curtailing the spread of the disease within society encompass stringent adherence to hand hygiene practices, the implementation of social distancing measures and the application of quarantine protocols. Enhanced and more stringent quarantine regulations play a pivotal role in the identification and isolation of additional COVID-19-positive individuals within communities, thereby bolstering testing capacities and contributing to the elimination of secondary cases.

In formalized settings, such as support groups, as well as more casual interpersonal relationships like friendships, the term "social support" pertains to the reservoir of social resources accessible to or extended to an individual by non-professional associates (Frison & Eggermont 2015). Scholars have categorized social support into three distinct forms: emotional support, encompassing elements like affection, compassion and empathy; informational assistance, encompassing responses to specific queries; and instrumental support, involving aid with day-to-day responsibilities, provision of essential physical resources and assistance with transportation (Burleson 2003).

One type of social support that scientists have paid a lot of attention to is when people intentionally ask their friends and family for help when they're stressed out (Helsen et al. 2000). Researchers have looked at this kind of support quite a bit. Social media includes online platforms Facebook, Instagram and Twitter where people can connect and share things online. Because of the COVID-19 pandemic, when people can't go out for anything except essential stuff and can't meet in person, social media has become even more important for communication. Even before the pandemic, lots of young adults were already using social media a whole lot – about 90% of them, according to a study in 2021 (Kumar et al. 2021).

In the past ten years, scientists have started looking at how using social media more might be linked to worse mental health in young people (Sanchez et al. 2020). They've been focusing on how social media affects things like young adults' feelings of being supported, loneliness, how they feel overall and whether they get depressed (Lisitsa et al. 2020). One study found that when teenagers asked for help and felt they got it through Facebook, they felt less sad. But when they didn't get the support they needed, they felt even sadder (Wadley 2016). If this pattern also happens with young adults, it might mean that their ability to get support, both online and offline, could make them feel better or worse and it could keep going in a loop.

In older people, loneliness and social isolation are all too prevalent and typically coexist. Social isolation is based on the volume and frequency of social interactions, whereas loneliness is related to an individual's subjective feelings. Social isolation is defined as the objective state of a person's social surroundings and patterns of interaction, whereas loneliness is defined as the subjective feeling of being alone (Page 2013). Page provided clarification that loneliness and social isolation are distinct concepts, yet research has demonstrated that both have negative impacts on health, albeit through similar yet distinct mechanisms. One of the drawbacks of the aforementioned studies is their reliance on generalized assessments that only encompass overall levels of seeking assistance. A substantial portion of the current research on social support and support-seeking has defined social support by inquiring about participants' social network size or their perception of the availability of support resources (Antonucci 1986).

A subsequent study defines that the act of seeking assistance from one's partner is associated with increased emotional closeness, greater relationship satisfaction, and reduced levels of anxiety (Collins & Feeney 2000). In studies examining daily experiences of pain and coping, a frequently employed methodology is the daily diary method (Gunthert & Wenze 2012). These investigations, even though they only encompass a small aspect of help-seeking, offer valuable insights. In the context of managing arthritis pain, social support plays a role, and research has found that higher levels of pain are correlated with greater efforts to seek emotional support, suggesting that the perceived severity of a negative event influences the likelihood of seeking assistance (Smyth et al. 2014).

Even before the general public gained access to the Internet, computer-mediated communication had already been utilized extensively for fostering social connections. This practice of employing computer-mediated communication for exchanging supportive messages, often anonymously, persisted into the Internet era. Discussion forums, commonly referred to as "newsgroups," emerged during the early stages of the Internet as a means of disseminating information and promoting group discussions among scholars and system administrators (McKenna & Bargh 1998).

Nonetheless, a recent study brings to light that individuals' online and offline social networks are becoming increasingly intertwined. Historically, the Internet served as a groundbreaking medium for providing support to specific groups, particularly in the realm of social support (Romiszowski & Mason

2013). However, as the Internet's prevalence has grown, the individuals one interacts with at their workplace or within their local community have also become the same individuals they engage with through email and chat (Luppicini 2007). The surging popularity of online social networking services plays a pivotal role in driving this transformation.

With the emergence of new web services that accentuated social interaction, the Internet gained widespread recognition as a facilitator of social connectivity (Keenan & Shiri 2009). Platforms such as MySpace, Facebook, YouTube, and Twitter gained prominence in the mid-2000s, offering diverse communication channels (including video, audio, and text) for connecting with others, fostering new relationships, and maintaining existing ones. Consequently, significant shifts in how the Internet is utilized and its position within the social landscape began to manifest.

Loneliness has far-reaching physical and psychological implications, including elevated systolic blood pressure and an increased susceptibility to heart disease. Even middle-aged individuals with no prior history of myocardial infarction face a heightened risk of coronary artery disease-related death when experiencing loneliness and social isolation (Valtorta et al. 2016). Moreover, research underscores that both social isolation and loneliness independently contribute to a higher overall mortality risk (Plagg et al. 2020).

The detrimental effects of loneliness extend to mental health. Loneliness has been linked to a 7% reduction in sleep efficiency and prolonged wakefulness following sleep onset (Christiansen et al. 2016). Furthermore, it can give rise to a range of adverse outcomes, including diminished self-reported health, decreased functional capacity, vision impairments, a perceived decline in quality of life, and an escalation in depressive symptoms (Segrin & Passalacqua 2010). Systematic analysis has demonstrated a connection between loneliness and both attempted and completed suicide among older individuals, as illustrated in the study by Gomboc et al. (2022). Loneliness, akin to depressive symptoms, has also been associated with a decline in cognitive function over time. A comprehensive examination has revealed a strong correlation between social isolation, loneliness, and the onset of dementia (Rafnsson et al. 2020).

The proposed cause of the adverse health effects associated with loneliness centres on the physiological stress response, particularly the elevation of cortisol levels. These aberrant stress reactions can significantly undermine one's health. Furthermore, the mechanism linking social isolation to health issues may involve behavioural alterations, such as adopting an unhealthy lifestyle characterized by smoking, excessive alcohol consumption, reduced physical activity, poor dietary choices, and non-compliance with medical directives (Pinto et al. 2021). These problems can be exacerbated by having a smaller social network and limited access to healthcare. An improved understanding of these potential pathways can aid in the development of more effective therapeutic approaches.

The younger generation notably increased their use of social media during the pandemic, as they encountered an unprecedented situation. Coping with this novel challenge posed a significant adjustment for them (Lemenager et al. 2020). Quarantine and social distancing measures were implemented as strategies to manage the pandemic's impact (Shah et al. 2020). These measures effectively eliminated direct interpersonal contact, which, in turn, gave rise to feelings of isolation, boredom, anxiety, and depression. Social media emerged as a novel outlet for expressing and alleviating the problems arising from isolation (Bonsaksen et al. 2021).

Amidst the COVID-19 pandemic, individuals in Taiwan exhibited diversified information-seeking behaviours, influenced by factors such as gender, age, occupation, and their degree of pandemic-related concern (Chu et al. 2020). Notably, there was a pronounced preference for seeking information about COVID-19 over academic coursework, reflecting a heightened prioritization of health-related matters over other facets of life (Vokinger et al. 2020). Crucially, it is worth noting that the younger demographic exhibited a greater reliance on internet-based sources for obtaining COVID-19 information in comparison to their older counterparts, who displayed a preference for traditional media channels (Orben 2020).

Social media emerged as a pivotal information dissemination platform during the pandemic, leveraging its reach to engage health experts, psychologists, and psychiatrists. These professionals utilized social media as a conduit to provide guidance and counsel on coping mechanisms and strategies for managing

anxiety and stress induced by the pandemic's circumstances (Liu 2021). Adolescents, in particular, harnessed the potential of social media as a constructive coping strategy to navigate the challenges of anxiety, depression, and frustration arising from the pandemic's impact (Cauberghe et al. 2021). For those experiencing limitations in direct social interactions, social media platforms serve as a vital means to fulfil their essential social and survival needs.

An additional benefit observed during the period of quarantine and isolation was the positive impact on individuals' physical well-being. With the closure of gyms as a consequence of the lockdown measures (Inasaridze 2021), physical activity opportunities were curtailed. However, people turned to social media platforms to engage in digital exercise routines, which not only contributed to improved physical health but also provided a means to alleviate symptoms of depression, fostering overall well-being. Furthermore, the lockdown period facilitated the emergence of online identities and the establishment of social networks, particularly among the younger generation, through social media channels. These platforms played a crucial role in fostering valuable social support mechanisms (Qin et al. 2022). Additionally, social media served as an avenue for self-expression, enabling individuals to openly share their thoughts and feelings without the fear of judgment or exposure.

The discovery that social media has a significant influence on teenagers' lives during the COVID-19 quarantine is also explained in the findings of Abbas et al. (2021) in the journal titled *'The Role of Social Media in the Advent of COVID-19 Pandemic: Crisis Management, Mental Health Challenges and Implications'.* The existence of social media among the younger generation is likened to a double-edged sword, especially during the COVID-19 era. On the one hand, it has positive impacts as it can increase emotional support, provide information, and facilitate friendship networks. However, on the other hand, it can have negative impacts on mental health, such as depression and anxiety.

This crucial theme is what makes the topic related to social media and support networks regarding university students' isolation during COVID-19 interesting to explore. By adopting a different approach and informant identity from previous studies, in this research, the researchers formulate three research questions to be explored, including: (1) How are university students affected by isolation in the COVID-19 lockdown?; (2) What are the reasons for isolation for university students?; (3) What strategies do university students use to cope with isolation in lockdown? Therefore, this study aims to assess and understand how social media and support networks impact university students' isolation amid the COVID-19 pandemic.

In alignment with theoretical frameworks and empirical evidence, we argued that individuals experiencing heightened levels of loneliness amidst the COVID-19 pandemic would exhibit a greater propensity for anxiety and heightened engagement in excessive use of social media platforms, potentially as a coping strategy. Consequently, our investigation sought to ascertain whether participants reporting elevated loneliness during the enforced isolation period of COVID-19 were more susceptible to experiencing anxiety and indulging in addictive patterns of social media utilization. Additionally, we explored the interplay between excessive social media engagement and the subjective experiences of loneliness and anxiety.

Research Method

This qualitative research study offers a descriptive analysis of self-perceived stress among late adolescents during the COVID-19 pandemic, which transpired in the year 2021. Against the backdrop of the COVID-19 crisis, the research adopted a cross-sectional approach employing semi-structured interviews to investigate the levels of perceived stress among late adolescents attending both public and private universities in Pakistan. Additionally, the study sought to identify key attributes associated with perceived stress in this demographic and shed light on the reasons behind the utilization of social media platforms for seeking social support during the period of quarantine.

This study focuses on examining the phenomena occurring among teenagers from various universities scattered across Pakistan. The research recruited individuals aged between 18 to 24 years old, using a strategy of selecting informants found and meeting the criteria specified by the researcher. Recruitment

efforts were facilitated through engagement with university student organizations on popular social media platforms such as Facebook and Instagram. Eligibility criteria included age within the specified range, residence in Pakistan, and a history of residing in regions subjected to COVID-19-related safety measures. Ultimately, a total of 20 adolescents participated as informants in this study during the early months of 2021.

Results and Discussion

This section elucidates the perspectives of the participants concerning the COVID-19 lockdown and ensuing isolation. The results section is structured into three delineated segments. The initial segment elucidates the repercussions of the COVID-19 lockdown. Within this ambit, the qualitative data analysis unveiled a spectrum of thematic elements, with some exhibiting ubiquity across Pakistan. Subsequently, the ensuing section delineates the findings derived from the perspectives of participants hailing from Pakistan.

The investigation revealed a multifaceted array of rationales underpinning the heightened proclivity of Pakistani university students toward augmented social media utilization during the COVID-19 pandemic. Furthermore, the section expounds upon the coping mechanisms employed by this cohort to contend with the concomitant isolation experienced during this period.

The COVID-19 lockdown had an impact on university students in Pakistan

The primary source of the feeling of isolation stems from the stringent government-imposed lockdown measures in both nations. Transitioning from a traditional lifestyle to a predominantly virtual one was described as one of the most challenging phases in the lives of the participants. University students from Pakistan noted that the shutdown of public venues, travel restrictions, the shift of in-person classes to online platforms, closure of cultural and recreational institutions, suspension of shopping opportunities, the absence of gym facilities, restrictions on social gatherings and limitations on visiting relatives had adverse effects on students in both countries.

The COVID-19 pandemic and the subsequent implementation of 'Stay-at-Home' measures have had a profound impact on the 'Health-Related Behaviors' of university students. Participants noted that COVID-19 not only posed substantial risks to physical health but also had adverse effects on social, psychological, and mental well-being due to factors such as lockdowns, job losses, financial stress, and, most significantly, disruptions in daily routines.

Furthermore, the COVID-19 lockdown had a significant and widespread impact on the 'Public Transport System' globally. In response to the COVID-19 pandemic, cities in Pakistan with elevated transmission risks were compelled to enforce stringent restrictions on public transportation to curb the virus's spread and ensure the safety of essential personnel. These measures resulted in substantial financial losses, with bus operators estimated to have incurred millions of dollars in daily fare revenue losses.

One of the formidable global challenges is the issue of "Food Security." Respondents provided insights into the food security challenges faced by Pakistan and the resulting socioeconomic consequences. Despite extensive efforts, including government initiatives to enhance the efficiency of Pakistan's agri-food systems, many livelihood and food security needs in rural areas of Balochistan, Sindh, and KPK remain unaddressed due to limited resources.

The outbreak of the COVID-19 virus prompted governments worldwide to implement the "Closure of Educational Institutions." In Pakistan, this led to a transition from in-person education to virtual instruction, impacting various stakeholders and posing a threat to the global education system. University and college students, in particular, highlighted the challenges they faced with the abrupt shift to online education. Insufficient internet infrastructure in remote areas exacerbated these issues, causing distress among both students and educators. The condition was expressed by one of the interviewees we encountered, SAT (24 years old), who admitted that the lockdown policy made him feel stressed and lonely. The expression is elaborated as follows:

> "Being away from friends and family during the lockdown made me feel incredibly lonely. It was difficult not having those face-to-face interactions that I was used to. I realized that I wasn't reaching out for social support as much as I should have. I think I was trying to deal with everything on my own, which only made things worse." (Informant SAT).

A similar sentiment was also expressed by MIT (20 years old), who revealed that studying from home had changed his life, making it difficult for him to stay motivated and productive. The expression is elaborated as follows:

> "My motivation and productivity definitely took a hit during the lockdown. It was hard to stay focused when everything felt so uncertain. I noticed changes in my mood and mental health during the lockdown. There were days when I just felt overwhelmed by everything." (Informant MIT).

Based on the interview, Pakistani students emphasized that the COVID-19 pandemic brought about profound changes and significantly affected all aspects of life. They noted that the direct consequences of the virus and the secondary effects of measures like lockdowns and the resulting economic hardships had a notably adverse impact on their mental well-being, leading to stress, depression, and anxiety. This finding is further underscored by the expressions of Maital & Barzani (2020) that almost all over the world, COVID-19 has caused the collapse of national economies, triggering stress among the population. Especially in the context of Pakistan, where the spread of the COVID-19 virus has been so massive, with more than 65,000 positive cases and a total death toll of around 2.10% or approximately 1,317 deaths by mid-2020 (Abbas et al. 2021).

As reported by the participants, the widespread outbreak of COVID-19 had a detrimental effect on employment conditions within the country, leading to a significant number of individuals losing their jobs due to the implementation of lockdown measures. Additionally, the pandemic compelled many individuals who had previously secured employment opportunities abroad to return to the country, further exacerbating the issue of unemployment.

The results of coping with isolation in Pakistan

Amid the COVID-19 pandemic, students experienced profound feelings of isolation and depression, prompting their active engagement in various activities. This section focuses on the outcomes in Pakistan, particularly highlighting the extensive use of the TikTok application. During the initial COVID-19 lockdown, stringent measures were enforced to enforce social distancing and safeguard public health, compelling students to confine themselves to their homes. Respondents emphasized that TikTok, unlike any other platform, offered content that not only entertained but also alleviated stress during these trying times. TikTok's content was described as humorous, relatable, and uniquely suited for consumption during lockdowns. This is because TikTok, with its short, vertical video format, allows users from various parts of the world to actively share content, ranging from educational content, hobbies, self-expression, to humor (Savira et al. 2022). It's no wonder then that the platform attracted more than 1.6 billion users worldwide in the third quarter of 2023, a number that has rapidly increased since the social restrictions of the Covid-19 pandemic (Annur 2023). The use of TikTok as a medium to relieve stress is also practiced by UHI (21 years old), who admitted to using social media, especially TikTok, to alleviate feelings of loneliness. It is elaborated as follows:

> "I found myself spending more and more time scrolling through social media, especially TikTok when I felt isolated. Maybe I could scroll for more than 5 hours a day. It was like a temporary escape from the loneliness." (Informant UHI).

In contrast, SKI (23 years old) mentioned that his lockdown period was spent watching series and films available on OTT platforms like Netflix. The explanation is detailed as follows:

> "I spent time watching movies, dozens of series, and films that I've already watched. From sci-fi genre to adventure. For me, social media, Netflix, and the like provided a much-needed distraction from the stress and anxiety of the pandemic. It was a way to escape from everything, even if just for a little while." (Informant SKI).

This is related to second thematic area pertains to the 'Elevated Utilization of Netflix.' Participants reported a significant increase in their usage of Netflix during the lockdown, resulting in binge-watching tendencies. This is because Netflix, as part of the new popular culture worldwide, offers a new way of watching that can be accessed anytime and anywhere with a variety of film and series genres (Burroughs 2019). The convenience of immersing themselves in virtual reality while confined to their homes held a strong allure. Although offering comfort in watching, this habit fostered a dependence on Netflix to the extent that some individuals began to eschew physical interactions with family members, often reacting with irritation when urged to participate in physical activities. If this condition persists, it can have an impact on family relationships that are strained or even destroyed.

In this section, a thematic category labeled 'Cavalier Approach to Education' emerges. Participants expressed their challenges with online education during the COVID-19 pandemic. They noted that online education mandated access to a computer or laptop, a stable internet connection, and reliable electricity, and the absence of any one of these components disrupted their learning experience. Participants also voiced concerns regarding the digital preparedness of their instructors, difficulties maintaining concentration during virtual lectures, and a perceived lack of support from higher education institutions. This situation, as articulated by Nambiar (2020) in his journal article titled *'The impact of online learning during COVID-19: students' and teachers' perspective,'* where the quantitative calculation of respondents stated that online classes made students less motivated to receive lessons compared to face-to-face classes. This is because there is no supervision or satisfactory technical assistance from the campus. ARI (19 years old) expressed similar concerns as follows:

> "I noticed changes in my mood and mental health during the lockdown. There were days when I just felt overwhelmed by everything. How could I not? During online learning, there wasn't a single topic that I truly understood. My attention was easily distracted by trivial things, like social media notifications. This caused my grades to plummet." (Informant ARI).

Furthermore, ARI (19 years old) and HAS (19 years old) mentioned that to improve their mood during the pandemic, they formed online gaming groups. Usually, they would play online games throughout the day.

> "I enjoy playing Mobile Legends with my friends (in a group). I don't like the silence of being alone at home, so playing games keeps me sane. I can still laugh with my friends." (Informant HAS).

When connected with the theme of 'Excessive Engagement in Online Gaming' emerged as a response to the prohibition of face-to-face communication during the lockdown. Participants found online gaming to be a platform that allowed them to maintain connections with their friends, such as ke Apex Legends, Rocket League, or Mobile Legend, and etc (Washington Post 2021). Together with their peers, they would engage in extended gaming sessions to alleviate boredom, given the limited availability of leisure activities while confined to their homes. Participants cited factors such as anxiety, entertainment, and escapism as motivations for their increased involvement in online gaming. The increased access to online games has subsequently transformed students' lives, with online gaming becoming a global relaxation activity for teenagers that is almost done every day for hours (Naaj & Nachouki 2021).

Besides, during the COVID-19 lockdown, a 'Surge in Online Shopping' trend simplified and enhanced participants' lives by offering round-the-clock shopping convenience. This is similar to Sharma's finding (2020), which states that the closure of shopping centers and public areas during COVID-19 has led people to flock to online marketplaces to buy goods. Online shopping allowed them to make purchases without being constrained by store operating hours; instead, they could browse the internet, locate their desired items, and place orders at their convenience. This trend was more prevalent among male students, as the lockdown prevented them from visiting physical stores. The purchased items varied, ranging from daily necessities to accessories to decorate their rooms. This aligns with the experience of AYA (18 years old) who stated that she bought certain items online to avoid feeling like she was missing out on her friends' activities.

> "I felt like I was missing out on so many important social interactions. It was hard seeing everyone else on social media having fun while I was stuck at home. So, to cope with that, I usually shop online. For example, I bought a hairdryer that was trending on social media." (Informant AYA).

This research reveals the various challenges faced by students in Pakistan from various aspects of life during the COVID-19 isolation period, with a focus on the role of social media and support networks. During the pandemic, students experienced profound feelings of isolation and depression, yet they also showed active engagement in various activities as a response to these conditions. The research provides an overview of how students in Pakistan use social media to cope with stress and isolation during lockdowns. Overall, this study provides new insights into how the development of digital technologies, such as social media, has become an important tool for students to survive and adapt to the drastic lifestyle changes caused by the COVID-19 pandemic.

Conclusion

The findings of this study shed light on the multifaceted impact of the COVID-19 pandemic on university students in Pakistan. The stringent lockdown measures imposed by the government significantly contributed to feelings of isolation among the participants. Transitioning from traditional to virtual lifestyles presented unprecedented challenges, affecting various aspects of daily life, including education, employment, and mental well-being. The consequences of the pandemic were particularly pronounced among university students, who faced disruptions in their routines, academic challenges due to the sudden shift to online education, and heightened levels of stress, depression, and anxiety. Additionally, the study highlighted the broader socio-economic impact, with issues such as food security, unemployment, and the return of overseas workers contributing to the complex challenges.

Furthermore, the coping mechanisms employed by students during isolation underscored the pivotal role of technology and digital platforms. The widespread use of TikTok and Netflix served as not just sources of entertainment but as means to alleviate stress and foster connections in a socially distanced world. However, challenges in online education, excessive engagement in online gaming, and a surge in online shopping also reflected the diverse ways in which students adapted to the constraints of the lockdown. In essence, the study paints a comprehensive picture of the profound changes brought about by the pandemic, emphasizing the need for tailored support systems and interventions to address the varied challenges faced by university students in Pakistan during these unprecedented times.

The study recommends the implementation of targeted interventions and support mechanisms to address the diverse challenges faced by university students in Pakistan during the COVID-19 pandemic. Specifically, it suggests enhancing mental health support services to help students cope with isolation, stress, and anxiety. Additionally, improving digital preparedness in education and ensuring equitable access to technology are crucial for a smoother transition to online learning. The study also underscores the importance of addressing broader socio-economic issues such as food security and unemployment, as well as promoting healthy coping mechanisms and social interactions among students. Overall, the recommendations highlight the need for a holistic approach to supporting students' well-being and academic success during and after the pandemic.

References

Abbas J, Wang D, Su Z, & Ziapour A (2021) The role of social media in the advent of COVID-19 pandemic: Crisis management, mental health challenges and implications. Risk Management and Healthcare Policy 14: 1917-1932. https://www.tandfonline.com/doi/full/10.2147/RMHP.S284313.

Annur CM (2023) Jumlah pengguna TikTok terus bertambah sampai Kuartal III-2023. Databoks, 30 November. [Accessed 15 March 2024]. https://databoks.katadata.co.id/datapublish/2023/11/30/jumlah-pengguna-tiktok-terus-bertambah-sampai-kuartal-iii-2023.

Antonucci TC (1986) Measuring social support networks: Hierarchical mapping technique. Generations: Journal of the American Society on Aging 10 (4):10-12. https://www.jstor.org/stable/44876253.

Bonsaksen T, Ruffolo M, Leung J, Price D, Thygesen H, Schoultz M, & Geirdal AØ (2021) Loneliness and its association with social media use during the COVID-19 outbreak. Social Media + Society 7 (3):205630512110338. https://doi.org/10.1177/20563051211033821.

Burleson BR (2003) Emotional support skills. In: Greene JO & Burleson BR (ed). Handbook of Communication and Social Interaction Skills. New Jersey: Lawrence Erlbaum Associates Publishers. 551-594.

Burroughs B (2019) House of Netflix: Streaming media and digital lore. Popular Communication 17 (1):1-17. https://doi.org/10.1080/15405702.2017.1343948.

Cauberghe V, Van Wesenbeeck I, De Jans S, Hudders L, & 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. https://doi.org/10.1089/cyber.2020.0478.

Christiansen J, Larsen FB, & Lasgaard M (2016) Do stress, health behaviour and sleep mediate the association between loneliness and adverse health conditions among older people? Social Science & Medicine 152: 80-86. https://doi.org/10.1016/j.socscimed.2016.01.020.

Chu W, Shieh G, Wu S, & Sheu WH (2020) Use of Facebook by academic medical centres in Taiwan during the COVID-19 pandemic: Observational study. Journal of Medical Internet Research 22 (11):e21501. https://doi.org/10.2196/21501.

Ciotti M, Ciccozzi M, Terrinoni A, Jiang W-C, Wang C-B, & Bernardini S (2020) The COVID-19 pandemic. Critical reviews in clinical laboratory sciences 57 (6):365-388. https://doi.org/10.1080/10408363.2020.1783198.

Collins NL & Feeney BC (2000) A haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. Journal of personality and social psychology 78 (6):1053. https://psycnet.apa.org/doi/10.1037/0022-3514.78.6.1053.

Cullen W, Gulati G, & Kelly BD (2020) Mental health in the COVID-19 pandemic. QJM: An International Journal of Medicine 113 (5):311-312. https://doi.org/10.1093/qjmed/hcaa110.

Fluharty M, Bu F, Steptoe A, & Fancourt D (2021) Coping strategies and mental health trajectories during the first 21 weeks of COVID-19 lockdown in the United Kingdom. Social Science & Medicine 279: 113958. https://doi.org/10.1016/j.socscimed.2021.113958.

Frison E & Eggermont S (2015) The impact of daily stress on adolescents' depressed mood: The role of social support seeking through Facebook. Computers in Human Behavior 44: 315-325. https://doi.org/10.1016/j.chb.2014.11.070.

Gomboc V, Krohne N, Lavrič M, Podlogar T, Poštuvan V, Zadravec Šedivy N, & De Leo D (2022) Emotional and social loneliness as predictors of suicidal ideation in different age groups. Community Mental Health Journal 58 (2):311-320. https://doi.org/10.1007/s10597-021-00823-8.

Gunthert KC & Wenze SJ (2012) Daily diary methods. In: Mehl MR & Conner TS (ed). Handbook of Research Methods for Studying Daily Life. New York: The Guilford Press. 144-159.

Helsen M, Vollebergh W, & Meeus W (2000) Social support from parents and friends and emotional problems in adolescence. Journal of youth and adolescence 29 (3):319-335. https://doi.org/10.1023/A:1005147708827.

Holt-Lunstad J, Smith TB, Baker M, Harris T, & Stephenson D (2015) Loneliness and social isolation as risk factors for mortality: a meta-analytic review. Perspectives on psychological science 10 (2):227-237. https://doi.org/10.1177/1745691614568352.

Inasaridze K (2021) Psychological health and physical activity during the COVID-19 pandemic. https://europepmc.org/article/ppr/ppr362007.

Kanitz E, Hameister T, Tuchscherer M, Tuchscherer A, & Puppe B (2014) Social support attenuates the adverse consequences of social deprivation stress in domestic piglets. Hormones and behaviour 65 (3):203-210. https://doi.org/10.1016/j.yhbeh.2014.01.007.

Keenan A & Shiri A (2009) Sociability and social interaction on social networking websites. Library Review 58 (6):438-450. https://doi.org/10.1108/00242530910969794.

Kowal M, Coll-Martín T, Ikizer G, Rasmussen J, Eichel K, Studzińska A, Koszałkowska K, Karwowski M, Najmussaqib A, Pankowski D, & Lieberoth A (2020) Who is the most stressed during the COVID-19 pandemic? Data from 26 countries and areas. Applied Psychology: Health and Well-Being 12 (4):946-966. https://doi.org/10.1111/aphw.12234.

Kumar S, Xu C, Ghildayal N, Chandra C, & Yang M (2021) Social media effectiveness as a humanitarian response to mitigate the influenza epidemic and COVID-19 pandemic. Annals of Operations Research 319: 823-851. https://doi.org/10.1007/s10479-021-03955-y.

Lemenager T, Neissner M, Koopmann A, Reinhard I, Georgiadou E, Müller A, Kiefer F, Hillemacher T (2020) COVID-19 lockdown restrictions and online media consumption in Germany. International Journal of Environmental Research and Public Health 18 (1):14. https://doi.org/10.3390/ijerph18010014.

Lisitsa E, Benjamin KS, Chun SK, Skalisky J, Hammond LE, & Mezulis AH (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.

Liu PL (2021) COVID-19 information on social media and preventive behaviours: Managing the pandemic through personal responsibility. Social Science & Medicine 277: 113928. https://doi.org/10.1016/j.socscimed.2021.113928.

Luciano F, Cenacchi V, Vegro V, & Pavei G (2021) COVID-19 lockdown: Physical activity, sedentary behaviour and sleep in Italian medicine students. European Journal of Sport Science 21 (10):1459-1468. https://doi.org/10.1080/17461391.2020.1842910.

Luppicini R (2007) Review of computer-mediated communication research for education. Instructional Science 35 (2):141-185. https://doi.org/10.1007/s11251-006-9001-6.

Maital S & Barzani E (2020) The global economic impact of COVID-19: A summary of research. Samuel Neaman Institute for National Policy Reseacrh. 1-12.

Mazza C, Marchetti D, Ricci E, Fontanesi L, Di Giandomenico S, Verrocchio MC, & Roma P (2021) The COVID-19 lockdown and psychological distress among Italian parents: Influence of parental role, parent personality and child difficulties. International Journal of Psychology 56 (4):577-584. https://doi.org/10.1002/ijop.12755.

McKenna KY & Bargh JA (1998) Coming out in the age of the Internet: Identity "demarginalization" through virtual group participation. Journal of personality and social psychology 75 (3):681-694. https://psycnet.apa.org/doi/10.1037/0022-3514.75.3.681.

Naaj MA & Nachouki M (2021) Distance education during the COVID-19 pandemic: The impact of online gaming addiction on university students' performance. International Journal of Advanced Computer Science and Applications 12 (9):365-372.

Nambiar D (2020) The impact of online learning during COVID-19: Students' and teachers' perspective. The International Journal of Indian Psychology 8 (2):783-793.

Orben A (2020) Teenagers, screens and social media: A narrative review of reviews and key studies. Social Psychiatry and Psychiatric Epidemiology 55 (4):407-414. https://doi.org/10.1007/s00127-019-01825-4.

Page RE (2013) Stories and Social Media: Identities and Interaction. London: Routledge.

Pinto AD, Oppong Asante K, Puga Barbosa RM, Nahas MV, Dias DT, & Pelegrini A (2021) Association between loneliness, physical activity and participation in physical education among adolescents in Amazonas, Brazil. Journal of Health Psychology 26 (5):650-658. https://doi.org/10.1177/1359105319833741.

Plagg B, Engl A, Piccoliori G, & Eisendle K (2020) Prolonged social isolation of the elderly during COVID-19: Between benefit and damage. Archives of gerontology and geriatrics 89: 104086. https://doi.org/10.1016%2Fj.archger.2020.104086.

Qin X, Yang F, Jiang Z, & Zhong B (2022) Empathy not quarantined: Social support via social media helps maintain empathy during the COVID-19 pandemic. Social Media Society 8 (1):205630512210862. https://doi.org/10.1177/20563051221086234.

Rafnsson SB, Orrell M, d'Orsi E, Hogervorst E, & Steptoe A (2020) Loneliness, social integration and incident dementia over 6 years: Prospective findings from the English Longitudinal Study of Ageing. The Journals of Gerontology: Series B 75 (1):114-124. https://doi.org/10.1093/geronb/gbx087.

Romiszowski A & Mason R (2013) Computer-mediated communication. In: Handbook of research on educational communications and technology. London: Routledge. 402-436.

Sanchez C, Grzenda A, Varias A, Widge AS, Carpenter LL, McDonald WM, Nemeroff CB, Kalin NH, Martin G, Tohen M, & Filippou-Frye M (2020) Social media recruitment for mental health research: a systematic review. Comprehensive Psychiatry 103: 152197. https://doi.org/10.1016/j.comppsych.2020.152197.

Savira R, Rifai M, & Wahyunengsih W (2022) Correlation between TikTok use and teenagers' self esteem. Indonesian Journal of Learning Studies 2 (1):19-24.

Segrin C & Passalacqua SA (2010) Functions of loneliness, social support, health behaviours and stress in association with poor health. Health communication 25 (4):312-322. https://doi.org/10.1080/10410231003773334.

Shah SG, Nogueras D, Van Woerden HC, & Kiparoglou V (2020) The COVID-19 pandemic: A pandemic of lockdown loneliness and the role of digital technology. Journal of Medical Internet Research 22 (11):e22287. https://www.jmir.org/2020/11/e22287/.

Sharma A (2020) Changing consumer behaviours towards. Academy of Marketing Studies Journal 24 (3):1-11.

Smyth JM, Zawadzki MJ, Santuzzi AM, & Filipkowski KB (2014) Examining the effects of perceived social support on momentary mood and symptom reports in asthma and arthritis patients. Psychology & Health 29 (7):813-831. https://doi.org/10.1080/08870446.2014.889139.

Tuijt R, Frost R, Wilcock J, Robinson L, Manthorpe J, Rait G, Walters K (2021) Life under lockdown and social restrictions experiences of people living with dementia and their carers during the COVID-19 pandemic in England. BMC geriatrics 21 (1):1-12. https://doi.org/10.1186/s12877-021-02257-z.

Valtorta NK, Kanaan M, Gilbody S, Ronzi S, & Hanratty B (2016) Loneliness and social isolation as risk factors for coronary heart disease and stroke: Systematic review and meta-analysis of longitudinal observational studies. Heart 102 (13):1009-1016. https://doi.org/10.1136/heartjnl-2015-308790.

Varma P, Junge M, Meaklim H, & Jackson ML (2021) Younger people are more vulnerable to stress, anxiety and depression during COVID-19 pandemic: A global cross-sectional survey. Progress in Neuro-Psychopharmacology and Biological Psychiatry 109: 110236.

Vokinger K, Nittas V, Witt C, Fabrikant S, & Von Wyl V (2020) Digital health and the COVID-19 epidemic: An assessment framework for apps from an epidemiological and legal perspective. Swiss Med Wkly 150: w20282. https://doi.org/10.4414/saw.2020.20282.

Wadley G (2016) Mood-enhancing technology. Paper presented at the Proceedings of the 28th Australian Conference on Computer-Human Interaction. 326-332. https://doi.org/10.1145/3010915.3010954.

Washington Post (2021) The games that got us through the pandemic. Washington Post, 2 June. [Accessed, 15 January 2024]. https://www.washingtonpost.com/video-games/2021/06/02/video-games-covid-19-pandemic/.

Author Biographies

Yuyun Wahyu Izzati Surya is a lecturer in Department of Communication Universitas Airlangga Indonesia. She got her PhD at the University of Auckland, New Zealand. She has published several books and articles in international and national-indexed journals. Herresearch interest is in the area of ethnic identity, multiculturalism, gender and media, social media activism and cyberculture. Currently she is appointed as Postgraduate in Media and Communication Program Coordinator. She can be contacted in yuyun.surya@fisip.unair.ac.id | Orcid ID: 0000-0003-3906-5349 | Scopus ID: 57224889813.

Ibtesam Mazahir is an Assistant Professor at Muhammad Ali Jinnah University and a Postdoctoral candidate at Universitas Airlangga, Indonesia. He recently completed his postdoctoral fellowship at Chulalongkorn University, Thailand. Dr. Mazahir has authored several book chapters and articles in both international and national journals. He has been awarded the HEC travel grant twice for presenting his research on international platforms. His research interests include crisis management, public relations, political communication, and media studies. He can be contacted at ibtesam.mazahir@gmail.com | ORIC ID: 0000-0003-3982-2231 | Scopus ID: 57222627712.

Safeena Yaseen is an Assistant Professor in the Department of Media Studies at Bahria University Karachi. She recently completed her postdoctoral fellowship at Universitas Airlangga. Dr. Yaseen has published numerous articles in international journals and has received the HEC travel grant for presenting her research on global platforms. With over 15 years of experience, she has worked with various local and international advertising agencies as a communication and research specialist. Her research areas include digital media, controversial products, consumer behavior, advertising communication, attitude theories, gender studies, consumer psychology, and marketing management. She can be contacted at safeenayaseen.bukc@bahria.edu.pk | ORCID ID: 0000-0002-8458-7472 | Scopus ID: 57422925300.

Nimas Safira Widhiasti Wibowo is an academician currently completing her Master's degree in Media and Communication at Airlangga University, with a primary focus on media studies, creative industries, and film. Through her remarkable dedication, Nimas has explored various aspects of modern media and communication, with several of her works on film being published and nationally recognized. From analyzing representations to examining the impacts of globalization and technological influences on cinematic aesthetics, her contributions have enriched the understanding of the complexities within the film industry. She can be contacted in nimassafira04@gmail.com | ORCID ID: 0009-0005-3893-6941.