

FACTORS AFFECTING PSYCHOLOGICAL HEALTH AND CAREER CHOICE AMONG STUDENTS DURING COVID-19 PANDEMIC

NelofarAra^a, Halima Ali Ahmada^b, Tariq AbubakarAlly^c, SukanyaDas^d, Aswathy V K^e

 ^aResearch Scholar Department of Sociology, Lovely Professional University, Phagwarda Punjab
 ^bPh.D, Counselling Psychology, Lovely Professional University, Phagwara, Punjab, India
 ^cResearch Scholar, Tariq Abubakar Ally, Deportment of Law, Lovely Professional University, Punjab, India
 ^dAssistant Professor, Department of Sociology, Lovely Professional University, Phagwarda, Punjab, India
 ^eAssistant Professor, Department of Sociology, Lovely Professional University, Phagwarda,

Punjab, India

Email: ^anelofarara2017@gmail.com, ^bhalimaahmada@gmail.com, ^ctariqally333 @gmail.com, ^dsukanya.23327@lpu.co.in, ^easwathy.28401@lpu.co.in

Abstract

Background: The global Covid-19 epidemic is still spreading, and its detrimental effects on people's mental health are just now becoming apparent. Students are acting as the healthcare system's backup talent since they are not yet professionally developed enough to handle the worst worldwide public health crises. This may exert increased mental stress and loneliness feelings, which in turn undesirably influence the student's future career choices. To address the issue, we conducted a digital survey using 'SurveyMonkey software', investigating how the epidemic affects the mental health as well as the career attitude of students during severe public health crises such as the Covid-19 pandemic. The study findings revealed that 99% of students never attended online classes while 99% of students faced weak internet connectivity during the pandemic. 80% of students were unsatisfied with the online system of education and 72.73% were facing mental health issues by the sudden and unwelcoming change in the entire education system. It further revealed preliminary evidence showing that the perceived stress induced by the Covid-19 epidemic might depressingly affect student's future career choices, and the feeling of loneliness may play a mediating role.

Keywords:Covid-19, Education, Health, Pandemic, Mental health, Students

1. Introduction

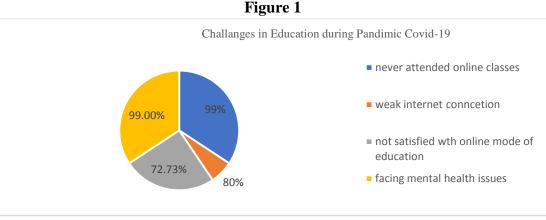
The covid-19 pandemic has affected every part of the life of people around the world. Every year, the world observes Mental Health Awareness Week, which means that people who already have pre-existing mental health issues including anxiety, mood, or substance addiction disorders are likely to have worsening symptoms as a result of the global Covid-19 pandemic. With the pandemic's emergence, there has been an increase in addictive coping methods, such as the abuse of alcohol, narcotics, nicotine, and online gaming, as a result of both the countless uncertainties people had to deal with and the global lockdowns and physical separation preventive measures. The United Nations reports that many people who had previously been able to adjust well found themselves less able to do so as a result of the

multiple stressors caused by the pandemic. According to reports, 20% of Canadians between the ages of 15 and 49 increased their alcohol consumption as a result of the pandemic. Early in the epidemic, UN Women drew attention to the grave physical and mental risks that women and children were at because of a rise in DV (domestic violence) and other exploitation. In addition to other preventive measures, numerous Southern African nations, including Botswana, Lesotho, Madagascar, Malawi, Namibia, South Africa, Zambia, and Zimbabwe, have resorted to establishing limitations on the sale of alcohol during the pandemic to lessen acts of violence like these. The epidemic not only disrupts the economy and politics but also poses a serious threat to public health, both physically and mentally (Qiu, et al, 2020). Hence, multidisciplinary researchers advised that attention be paid to mental health in many groups, among which a major concern was knowing how the pandemic impacts students in their educational careers (O'Byrne et al., 2020). The Covid-19 pandemic has placed a significant strain on the world's healthcare system (Baker et al, 2020). Schools have faced hitherto unheard-of difficulties as a result of the worldwide Covid-19 outbreak, including the need to swiftly switch to an online format for all classes, ensure that every student has fair access, support teacher's and student's educational needs, and develop plans in the face of significant unpredictability. Nonetheless, students from underdeveloped nations experienced more significant difficulties than any other group. The pandemic itself has generated a lot of anxiety, tension, and sorrow. Everyone experiences mental health issues as a result of these stressors, and those who were already having mental health issues develop acute symptoms as a result. A common indicator that teachers were supposed to employ was the ability to spot children who were having mental health issues. Normally, the teacher could not meet with the students in person. Some teachers were not having the same student drop-ins while others were unable to read student's masked faces. Teachers may therefore be concerned about their pupils' progress or the extent of their difficulties, particularly in relation to emotional issues. In the paragraphs above, we discussed how teachers might use the procedures already in place in schools to identify kids who may require further assistance, particularly in the case of mood disorders such as depression and anxiety, which can frequently go unnoticed during the best of circumstances.

The Covid-19 pandemic pushed higher education institutions all around the world to undergo remarkable adjustment. Universities and colleges were compelled to transition to online instruction. The transition to emergency inaccessible teaching and learning caught many people off guard. (Czerniewicz, et al, 2020). But then several nations were under lockdown for over a year at that point. Then, a variety of universities adopted a blended learning strategy. They were striving to create a seamless learning environment that incorporated both in-person and online training. It was likely that things would continue as they were for a while. Although there were numerous vaccines accessible worldwide, distribution and vaccination rates were low in underdeveloped, poorer nations¹. This has significant effects on higher education because the students were not able to interact offline even in an emergency. The university campus serves as more than simply a place for learning for many students; it also serves as a place for interactions that enable them to build significant networks and

¹ "How COVID vaccines are being divvied up around the world", cited from: https://www.nature.com/articles/d41586-020-03370-6/

alliances that develop and go beyond their academic experience². The study's objective is to exfoliate students' mental health during a serious public health emergency like the Covid-19 outbreak. Thus, shortly after the epidemic began, we conducted research that also looked at how teaching and learning had been impacted. This study showed that managing online learning from a distance had been difficult for pupils.



Prepared by the researchers

Figure-1 shows that the online system of education was challenging for the students in Kashmir because 99% students never attended online classes. And it was more frustrating for the students from the same region, facing unending political unrest since decades now and because of such conditions, the internet connectivity remains very unsatisfactory and 99% of students faced weak internet connectivity during the pandemic. And 80% of students were unsatisfied with the online system of education. Because of facing several challenges in education during the pandemic covid-19, out of 100 students 72.73% were facing mental health issues. Also, we discovered that because of the pandemic lockdown, undergraduates, full-time students, and female students were particularly susceptible while studying online at home. Several young female students have encountered difficult and risky circumstances as a result of their at-home education. The global pandemic has made the future more unpredictable, particularly for those who are pursuing higher education and the workforce. Our research showed that this uncertainty has a significant impact on mental health.

2. Key Themes

A variety of undergraduate, graduate, PhD, and foreign students participated in our study. The inquiries came in an online form. During COVID-19 and its implications on higher education, the questions also looked into student involvement, views of readiness and motivation for online teaching, as well as those factors' effects on the covid. They prompted the pupils to consider the pandemic's disturbance. The data revealed several themes. These constituted difficulties that made it difficult for students to learn effectively online during the Covid-19 era. The themes were:

- Connection issues
- Mental health
- o Individual difficulties or abilities

² "Sense of responsible togetherness, sense of community and participation: Looking at the relationships in a university campus". Cited from: https://www.degruyter.com/document/doi/10.1515/humaff-2019-0020/html

- Expensive education
- Family chores
- Being alone
- Distraction by kids, guests and other family members
- Time management
- o Unable to download or upload the documents online
- Issues in interaction between teachers and students

We found that undergraduate full-time students reported mental health concerns at rates that were around twice as high as those of postgraduate part-time students. As comparison to students over the age of 24, students under the age of 18 had a roughly 1.75 times greater probability of presenting mental health difficulties.

The results also show that our study's findings on mental health have a gender component as well. It has been found that stress, anxiety and sadness were prevalent with 1.83 times more among female students as compared to male students. Students discussed time management difficulties, distractions, and issues with family members. The concepts of self-directed learning and self-management where they were placed. These ideas include self-control, dedication, drive, and so on. Self-directed learning, according to researchers, is crucial for success (Askin, &Demirel, 2018). Yet, students suffered from the absence of physical support from peers and professors. They alleged that when learning remotely on their own, they struggled to stay focused and pay attention. A prominent theme that developed was internet connectivity. This demonstrates how severe India's digital divide between urban and rural areas is (Reuben et al, 2020). Older had a higher likelihood of having connectivity problems than the students' younger ones. This bolsters the claim that younger college students are more likely than older ones to be digital natives (Margaryan, et al, 2011). The biggest connectivity issues were faced by international students, many of whom were in their home countries as a result of the epidemic. Local students were given data bundles by the institution so they could access live courses. Results on this issue as a whole revealed a widespread problem in internet connectivity in backward zones, particularly in those provinces experiencing political upheaval like Kashmir. The degree to which students reported having trouble connecting to the internet was significantly correlated with unrest in various areas around the nation.

3. Children's mental health, Prior to and during the Covid-19 pandemic

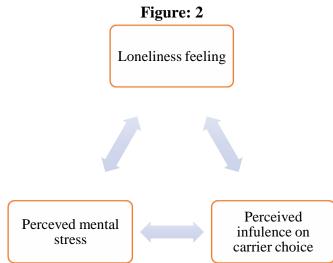
According to the UNESCO assessment, children and young people already bore the burden of mental health disorders before the Covid-19 crisis without receiving significant funding to address them. The most recent estimates indicate that more than 1 in 7 teenagers aged 10 to 19 worldwide are thought to be living with a mental condition. According to the survey, the majority of these teenagers with mental problems were found in South Asia. Children in India with mental health conditions are usually not recognised and reluctant to seek treatment. At least 50 million Indian children experienced mental health issues prior to the pandemic, according to the Indian Journal of Psychiatry, and 80 to 90 percent of them did not seek help. There are still significant budget and need gaps for mental health. Indian Journal of Psychiatry 2017 reports that just 0.5% of India's annual health budget is allocated to mental health. Specified mental illnesses, such as schizophrenia, bipolar disorder, depression, eating disorders, and ADHD, can have adverse effects on a child's or adolescent's health, education,

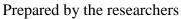
results in life, and earnings. The World Health Organization estimates that the economic cost caused by mental health issues in India between 2012 and 2030 will be USD 1.03 trillion, even though the impact on children's lives is immeasurable. The impact on children's and young people's mental health is still felt strongly as the Covid-19 Epidemic enters its third year, according to the UNESCO research. Due to lockdown measures, children have had restricted access to social services during the outbreak. As a result of the disruptions to routines, education, and recreation as well as concerns about family finances and health, many young people are feeling terrified and worried about their future. According to UNESCO data, about 286 million students in India's kindergarten through sixth grade missed school between 2020 and 21. In 2021, a fast assessment conducted by UNICEF revealed that just 60% of children could access digital classrooms. Many were unable to continue their education. The National Commission for Women received a disproportionately large number of domestic abuse reports, which suggests that the children who live in such homes experience severe trauma that impacts their mental health. Domestic abuse reports were reported to the National Commission for Women in an abnormally high amount, which may indicate that the children who reside in such households suffer grave trauma that affects their mental health.

Fears of infection, fear of death, and fear of losing family members are just a few of the uncertainties surrounded by the widely disseminating sickness. Along with these, there were additional worries about nourishment and survival for millions of people around the world because many have lost their sources of income as a result of the pandemic and the preventative measures taken to stop its spread. At the same time, widely disseminated false information about the virus and its preventative methods, conspiracy theories, uncertainty about the future, and the possibility of losing loved ones without having the opportunity to say goodbye or arrange funerals are important sources of sorrow. Worldwide reports seemed to indicate that no continent is immune, with information on extreme psychological suffering coming from China, the United States, and Ethiopia. Almost 50% of those who have depression do not obtain treatment, according to MatshidisoMoeti, WHO Regional Director for Africa, and many individuals are discouraged from getting help for psychiatric problems due to hurdles such aa a lack of knowledge, stigma, and cultural challenges. Prior research has identified parallels between the mental health impacts of Covid-19 and the Ebola outbreak in West Africa between 2014 and 2016—when it was estimated that up to 50% of people infected with the disease experienced fear, despair, post-traumatic stress disorder (PTSD), and stigmatisation in their communities. The links between infectious diseases and rising mental health disorders are not new, and earlier research has found similarities between the mental health consequences of infectious diseases and these illnesses. It is understandable that there have been reports of widespread loneliness throughout the world given Covid-19 prophylactic measures including lockdowns, physical distance, and social isolation. Even before the epidemic struck, according to health insurance statistics released in January, over 60% of American adults reported feeling some level of loneliness. The number of people who were admitted for experiencing greater loneliness, from adults to teenagers, had significantly increased since Covid-19.

Governments all across the world have implemented strict measures to contain the coronavirus, including border closures, curfews, a general prohibition on assembly, and the

closing of public spaces. These restrictions isolated millions of individuals and may have a negative impact on their mental health (Banerjee & Rai, 2020). Inconsistency between desired and real social contact causes loneliness, a painful emotional experience (Cacioppo&Hawkley, 2009). Medical personnel faced more difficulties than ever during the Covid-19 pandemic and were over-identified with sensitivity to criticism, which causes emotions of loneliness to worsen. (Dor-Haim &Oplatka, 2020). More importantly, loneliness may depressingly impact on a person's future career orientation (Seginer&Lilach, 2004). The study aims to exfoliate the condition of mental health among student's during severe public health crises such as the Covid-19 pandemic. The important thing we found from the data we gathered from the students is that, the result of lineless creating mental health issues so severely.





The above Figure:2 shows, how loneliness feeling impacts mental health and later becomes that reason after adversely influencing carrier choices among students. During covid-19 pandemic the students attended classes in isolation from their peers and even from classroom teaching to examination everything was online. There was no choice, the students were forced either to accept the sudden change in the entire educational system or to forget about their further educational carrier. If talking about today's condition when the world is a little free from covid-19, we should not overlook the previous loss. Indeed, there should be some protective precautions, so that in future if we face any such kind of change or threat again then we can at least protect our future generation from frustration or any other kind of foulest condition.

4. Protective features

The study explores how a range of early experiences and environmental factors, including as parenting, schooling, relationship quality, exposure to abuse, prejudice, poverty, humanitarian crises, and health emergencies like Covid-19, all affect and moulds children's mental health. over the course of their lifetime. Despite the fact that protective factors like devoted parents, secure schools, and supportive peer relationships can help to lower the risk of mental disorders, the report warns that significant obstacles like stigma and a lack of funding are keeping too many kids from having a good mental health or getting the help they require. Governments and partners in the public and private sectors are urged by The State of

the World's Children 2021 to support mental health for all children, adolescents, and parents, to help those in need, and to watch out for the most vulnerable people, including:

- Immediate asset in promoting up an entire approach to prevention, promotion, and care for child and adolescent mental health across sectors, not just in health
- Breaking the silence surrounding mental illness by addressing stigma and fostering a better understanding of mental health
- Including parenting programmes and making sure schools support mental health in interventions throughout the health, education, and social protection sectors
- Immediate funding for programmes that prevent gender-based and other types of violence and foster mental health

Good mental health is just as important as good physical health for children to meet developmental goals. It supports young children's social and emotional development. On the other hand, poor mental health during childhood can have a major impact on a child's capacity to learn, behave, or cope with feelings. Everyone's mental health was impacted by the Covid-19 pandemic's wide variety of challenges, especially the mental health of children and teenagers. Sadly, parental conflict, sadness, anxiety, concern, uncertainty, social isolation, and rising screen time have a negative impact on children's mental health. When the illness spread rapidly, more than 330 million children were reportedly confined to their homes starting in March 2021 for at least nine months. It was difficult for parents to allay their children's anxieties because of the stress and uncertainty in their own lives. The occupational or emotional challenges parents were facing were also impeding their ability to normally respond to their children's demands and worries. And here are some concerns that children frequently were having: When will school restart? When are they allowed to play outside? When are they able to visit their favourite locations? Negative emotions in children, such as fear, disappointment, sadness, anxiety, rage, loss, etc., are common. Nonetheless, the Covid-19 pandemic's protracted, constrictive, and pervasive characteristics worsened the situation.

5. The Objective of the Study

✓ The study aims to exfoliate the condition of mental health among students during severe public health crises such as the Covid-19 pandemic

6. Methodology

In a research paper, there is a structural approach that proposes appropriate study design, type, and philosophy. The methodology also suggests methods for gathering and analysing data. The structural method of research that aids in carrying out the research study is referred to as the research design. Although there are other designs, the qualitative research design used in this work has made the study go more smoothly. Research kinds are important for a research study since it concentrates on having a thorough understanding of the subject. Exploratory research type is selected to exfoliate the condition of mental health among students throughout unembellished public health emergencies such as the Covid-19 pandemic. On the other hand, research philosophy focuses on having a comprehensive grasp of the research area and deals with the origin, nature, and development of knowledge. To allow for flexible evolution of the problem and the research process, this study adheres to the interpretivism research philosophy. The gathering and analysis of data facilitate decision-making from the research study and also facilitates the creation of solutions more quickly.

For this study to better grasp the problem, qualitative data analysis techniques are more appropriate. The collection of qualitative data advances knowledge about the problem. It aids in a thorough understanding of the problem and enhances the effectiveness of the research. A thematic analysis has been used to help the research study become more focused and relevant based on the characteristics of the qualitative data collection process that have been explored. It provides a more approachable style of analysis that streamlines research and saves time.

7. Discussion

When talking about the entire period of the Covid-19 pandemic, was truly a serious challenge with the uprising phenomenon is that it escalates and nearly becomes out of control. Starting from the educational sector to the economic, health, formal and informal sectors all suffered a lot. But when talking about the educational sector, makes the new generation suffers a lot as the aim of the current study is to examine student's mental health during a serious public health emergency like the Covid-19 outbreak. This study has explored that sudden change in the educational system has created several mental health issues among students of different ages.

We collected data for this study from a variety of students. The survey questions were distributed using the Survey Monkey programme. The questions also looked into student engagement, views of readiness and drive for E-learning, and assessment, attitudes towards Covid-19, and its consequences on higher education. They made the students reflect on the disruption caused by the pandemic. The data revealed a number of patterns that suggested challenges keeping students from learning online throughout the Covid-19 era. The subjects were: Data services, individual characteristics, expensive education, family chores, being alone, distraction by kids, guests and other family members, time management, difficulty in downloading or uploading the documents online, Issues in interactions between lecturers and students and so on. Therefore, all the above themes indicate the troublesome signs of serious mental health issues among students.

8. Conclusion

While summing up the above study, we come to the conclusion that, the pandemic has caused much worry, stress, and grief. These stressors cause mental health challenges for everyone and cause acute symptoms to appear in people who experienced pre-existing mental health challenges. Schools have indeed faced previously unheard-of difficulties as a result of the worldwide Covid-19 pandemic, including the need to swiftly switch to an online setting for all classes, provide universal access for all students, support educator needs for both teachers and students, and make plans in the face of significant uncertainty. But when talking about the students from developing countries, faced more serious challenges than any other. Mild signs of anxiety, such as difficulty in sleeping or concentrating, were common. But as children are very resilient, most will manage to cope with parent's and peer's support. Nonetheless, given their high level of resilience, most kids can get by with the help of their parents and peers. But certain kids are more likely to experience strong reactions, such as extreme anxiety, depression, and suicidal thoughts. Children who already struggle with mental health issues, have been traumatised or abused in the past, come from unstable families, or have just lost a loved one are more likely to develop major mental health illnesses. Nonetheless, parents and other primary carers should provide the first counselling to youngsters (school-age children), as only they are the ones who know their children the

best. If parents see a sudden, significant change in their child's behaviour that lasts for months than a week, particularly during emergencies like the pandemic lockdown, they should immediately seek online psychological counselling.

Better to create a positive atmosphere at home to try to make kids feel comfortable and at peace during these hard times. Undoubtedly, extra issues came from increased screen usage, disturbed family dynamics, or a sedentary lifestyle at home but at such challenging time the finest thing parents can do for their kids is to look after themselves, in addition to it:

- Taking care of oneself during these trying times is not selfish since it allows the carer to be there for their kids as a steady, reassuring parent. In this approach, parents may better understand their kids and give them reassurance, relaxation, and focus.
- It is crucial to maintain composure and be proactive when speaking with kids; ask them how they're doing frequently. They will experience frequent changes in emotion, and you must let them fell relaxed.
- Be it at home or at school, carers can encourage children to engage in arts and crafts and paint as a way to communicate and transmit any uncomfortable sensations they may be having in a safe and welcoming environment. Because of this, children can express difficult feelings like anger, anxiety, or sadness in constructive ways.
- As parents and teachers are two of the main adults in children's life and frequently serve as their emotional role models, it is crucial that adults control their own emotions, remain composed, and respond to and comfort children when they express worries.
- Mental health problems that go untreated can make it difficult for a kid to function at home, at school, and in the community. Being the first to detect changes in a child's emotions or behaviour, parents and teachers should receive training on how to spot and treat the early signs of mental health issues in kids.

In addition to the above recommendations, the management and authority should plan to save the future generation from any such kind of threats. Although covid-19 was very challenging for everyone or the people around the world, it has also taught an important and unexpected lesson forever.

References

- [1] Aanes, M.M., Hetland, J., Pallesen, S., Mittelmark, M.B. (2011). Does loneliness mediate the stress-sleep quality relation? The Hordaland health study. *IntPsychogeriatr*.23:994–1002. doi: 10.1017/S1041610211000111
- [2] Akosah-Twumasi, P., Emeto, T.I., Lindsay, D., Tsey, K., Malau-Aduli, B.S. (2018). A systematic review of factors that influence youths career preferences-the role of culture. *Front Educ.* 3:1029–35. doi: 10.3389/feduc.2018.00058
- [3] Alexander, L., Ashcroft, J., Byrne, M., Wan, J. (2020). All hands-on deck: Early graduation of senior medical students in the COVID-19 pandemic. *MedEdPublish*.
 9:96. doi: 10.15694/mep.2020.000096.1
- [4] Aşkin, T. İ, &Demirel, M. (2018). An Investigation of Self-Directed Learning Skills of Undergraduate Students. *Front. Psychol.* 9:2324. doi: 10.3389/fpsyg.2018.02324

- [5] Banerjee, D., & Rai, M. (2020). Social isolation in Covid-19: the impact of loneliness. *Int J Soc Psychiatry*. 66:525–7. doi: 10.1177/0020764020922269
- [6] Cacioppo, J.T., &Hawkley, L.C. (2009). Perceived social isolation and cognition. *Trends Cognit Sci.* 13:447–54. doi: 10.1016/j.tics.2009.06.005
- [7] Cacioppo, J., Fowler, J., Christakis, N. (2009). Alone in the crowd: the structure and spread of loneliness in a large social network. *J PersSoc Psychol.* 97:977–91. doi: 10.1037/a0016076
- [8] Doman, L.C.H, & Le, R. A. (2010). The causes of loneliness and the factors that contribute towards it a literature review. *TydskrifVirGeesteswetenskappe*. 50:216–28.
- [9] Dong, L., &Bouey, J. (2020). Public mental health crisis during COVID-19 pandemic, China. *Emerge Infect Dis.* 26:1616–8. doi: 10.3201/eid2607.200407
- [10] Dor-Haim, P., &Oplatka, I. (2020). School principal's perception of loneliness: a career stage perspective. *J Educ Admin History*. 52:211–27. doi: 10.1080/00220620.2019.1689106
- [11] Gallagher, T., &Schleyer, A. (2020). We signed up for this! Student and trainee responses to the Covid-19 pandemic. *N Engl J Med.* 382: e96. doi: 10.1056/NEJMp2005234
- [12] Goel, S., Angeli, F., Dhirar, N., Singla, N., Ruwaard, D. (2018). What motivates medical students to select medical studies: a systematic literature review. *BMC Med Educ.* 18:16. doi: 10.1186/s12909-018-1123-4
- [13] Harrison, A.L, & Kelly, D.G. (1996). Career satisfaction of physical therapy faculty during their pretenure years. *PhysTher.* 76:1202–18. doi: 10.1093/ptj/76.11.1202
- [14] Harvey, A. (2020). Covid-19: Medical students and FY1 doctors to be given early registration to help combat covid-19. *BMJ*. 368:m1268. doi: 10.1136/bmj.m1268
- [15] Holmes, E., O'Connor, R., Perry, V., Tracey, I., Wessely, S., Arseneault, L. et al. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *Lancet Psychiatry*. 7: e36. doi: 10.1016/S2215-0366(20)30168-1
- [16] Killgore, W., Cloonen, S., Taylor, E., Dailey, N. (2020). Loneliness: a signature mental health concern in the era of COVID-19. *Psychiatry Res.* 290:113117. doi: 10.1016/j.psychres.2020.113117
- [17] Kumar, A., &Nayar, K. (2020). COVID 19 and its mental health consequences. *J Ment Health*. 30:1–2. doi: 10.1080/09638237.2020.1757052
- [18] Luchetti, M., Lee, J.H., Aschwanden, D., Sesker, A., Strickhouser, J.E., Terracciano, A, et al. (2020). The trajectory of loneliness in response to COVID-19. *Am Psychol.* 75:897–908. doi: 10.1037/amp0000690
- [19] Margaryan, A., Littlejohn, A., &Vojt, G. (2011). Are digital natives a myth or reality? University students' use of digital technologies. *Computers & education*, 56(2), 429-440.
- [20] Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., Xu, Y. A. (2020). Nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. *Gen Psychiatry*. 33: e100213. doi: 10.1136/gpsych-2020-100213

- [21] O'Byrne, L., Gavin, B., McNicholas, F. (2020). Medical students and COVID-19: the need for pandemic preparedness. *J Med Ethics*. 46:623–6. doi: 10.1136/medethics-2020-106353 2.
- [22] Pappa, S., Ntella, V., Giannakas, T., Giannakoulis, V.G., Papoutsi, E., Katsaounou, P. (2020). Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: a systematic review and meta-analysis. *Brain Behav Immun.* 88:901–907. doi: 10.1016/j.bbi.2020.05.026
- [23] Reuben, L., Ashley, G., Markus, B., &, Mwazvita, T. B. D. (2020). The same course, different access: the digital divide between urban and rural distance education students in South Africa, Journal of Geography in Higher Education, 44:1, 70-84, DOI: 10.1080/03098265.2019.1694876
- [24] Romeo, A., Benfante, A., Castelli, L., Di-Tella, M. (2021). Psychological distress among Italian University students compared to general workers during the COVID-19 pandemic. *Int J Environ Res Public Health*. 18:2503. doi: 10.3390/ijerph18052503
- [25] Seginer, R., &Lilach, E. (2004). How adolescents construct their future: the effect of loneliness on future orientation. *J Adolesc.* 27:625–43. doi: 10.1016/j.adolescence.2004.05.003
- [26] Serafini, G., Parmigiani, B., Amerio, A., Aguglia, A., Sher, L., Amore, M. (2020). The psychological impact of COVID-19 on the mental health in the general population. *QJM*. 113:529–35. doi: 10.1093/qjmed/hcaa201
- [27] Slaten, C.D., Baskin, T.W. (2014). Examining the impact of peer and family belongingness on the career decision-making difficulties of young adults: a path analytic approach. *J Career Assess.* 22:59–74. doi: 10.1177/1069072713487857
- [28] Stickley, A., Matsubayashi, T., Ueda, M. (2021). Loneliness and COVID-19 preventive behaviours among Japanese adults. *J Public Health*. 43:53–60. doi: 10.1093/pubmed/fdaa151
- [29] Tull, M.T., Edmonds, K.A., Scamaldo, K.M., Richmond, J.R., Rose, J.P., Gratz, K.L. (2020). Psychological outcomes associated with stay-at-home orders and the perceived impact of COVID-19 on daily life. *Psychiatry Res.* 289:113098. doi: 10.1016/j.psychres.2020.113098
- [30] Wang, C., Pan, R., Wan. X, Tan, Y., Xu, L., Ho, C., et al. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *Int J Environ Res Public Health*. 17:1729. doi: 10.3390/ijerph17051729
- [31] Yarcheski, A., Mahon, N.E., Yarcheski, T.J. (2011). Stress, hope, and loneliness in young adolescents. *Psychol Rep.* 108:919–22. doi: 10.2466/02.07.09.PR0.108.3.919-922