

Navigating Tomorrow: Understanding Future Anxiety And Fostering Resilience In Pakistan's COVID-19 Era

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Abstract

It's been documented that the COVID-19 outbreak has heightened fear, anxiety, and apprehension among people during lockdown and economic crisis. In this study, we aim to examine the level of future anxiety and suicide ideation among the general public during the COVID-19 period. The study is cross-sectional and conducted in Pakistan, we were collected data from adults (N = 4589) between 2020 and 2021. We employed multiple logistic regressions to examine the relationships between future anxiety and socio-demographic factors, as well as suicide-related behavioral characteristics. Among the participants, 62% have mild future anxiety, 21% reported moderate anxiety and 16% experienced severe anxiety. In term of suicidal ideation, 60% of participants had just a passing thought of suicide, 30% displayed moderate suicidal thoughts, and (9.1%) acknowledged having had suicidal thoughts and attempted suicide (a total of 233 individuals).

Notably, individuals who were divorced and living in urban areas had significantly higher rates of suicidal ideation. Moreover, those falling in the middle and upper income brackets reported having suicidal thoughts. The findings from the scale indicated that women experience higher level of future anxiety and suicidal ideation compared to males.

Keywords: Psychological well-being, Future anxiety, suicidal ideation, economic crisis, COVID-19.

Introduction

We have no idea how long the COVID-19 outbreak will endure or its long-term effects. Despite the emergence of immunizations of COVID-19 (Mushtaque et al., 2021), this disease remains challenging to treat. Hand washing, limiting physical contact, wearing masks in public, maintaining social distance, quarantine, and isolation remain the most effective methods of fighting the outbreak (Mushtaque et al., 2022; Gössling et al., 2020). People in the risk group were most concerned when they viewed the number of cases and deaths in the nation and the world and considered being ill or passing away. Death anxiety has social consequences (Mushtaque, Awais-E-Yazdan, et al., 2022). Nearly half of the world's labor force is at risk of unemployment, tens of millions are on the verge of famine, and millions of businesses are on the approach of extinction (Alauddin et al., 2021). The cost of the epidemic to the economy causes stress and long-term changes in behavior. Many challenges has faced by the public; lack of access to medical services (Khalid & Ali, 2020), dissatisfaction with health information (Rizwan et al., 2021), feeling like you're being discriminated (Nawaz et al., 2021), and stress about going back to work can all be caused anxiety. A study in behavioral science focuses on threats, stress, and coping (Bavel et al., 2020). In the early phases of the COVID-19 pandemic, researchers focused mostly on the physical health risks (Mehta et al., 2020), however there is an increasing study interest in the pandemic's mental health complications. Since the beginning of the pandemic, the attention has been on the psychological and economic repercussions (Bierman et al., 2021). Unknown is the impact of pandemic-prevention activities on mental health

costs (Alauddin et al., 2021). Numerous specialists feel that efforts to prepare for a pandemic will result in economic losses, suffering, and mental health issues (Timming et al., 2021).

The term "economic recession" refers to contractions that occur within an economic cycle, resulting in a decrease in economic productivity as measured by the gross domestic product and unemployment rate. If something goes wrong with the economy's cycle, the nation's GDP and unemployment rate decrease. Recessions are anticipated to have a significant impact on the mental health and well-being of individuals due to the relative and attributable dangers they bring. According to research, unemployment can significantly exacerbate mental health issues such as depression, anxiety, and stress (Oyesanya et al., 2015; Rafi et al., 2019). Early research suggests that initial job losses in the United States were unprecedented in history, with 20 million jobs lost between January and April 2020. As a result, psychological distress following COVID-19 stems from both health-related concerns about contracting the virus and economic concerns about losing one's job due to lockdown measures. It's unclear how health- and economic-related anxieties interact over time, whether one is more important as a predictor of psychological suffering, or how attitudes have changed in the early stages of the pandemic (Coibion et al., 2020). Two researches have analyzed the economic and health consequences of COVID-19. Mann et al. (2020) examined the association between personality and economic anxiety. Low self-esteem, conscientiousness, openness, neuroticism, and perceived disease risk were all related to economic concern during the pandemic. According to (Timming et al., 2021), COVID-19 anxiety was more prevalent in women than in males. Men worry greatly about their financial status. According to research, suicide rates tend to climb during and after a pandemic and the majority of suicides are triggered by the economic downturn caused by the shutdown. Fear of infection is the second factor that relates to suicidal behavior. The lockdown-caused unemployment exacerbates the life-threatening condition (Mamun & Ullah, 2020).

The current pandemic is producing economic instability and a new form of global crisis. The COVID-19 has had an exceptional long-term impact on the world economy (Bakker &

Wagner, 2020). Globally, industries are thriving, and politicians are taking severe measures to safeguard the survival of the economy. Following the Great Depression of the 1930s, global demand for goods has plummeted (the price of oil in the United States has gone negative for the first time in history), and a possible global financial downturn threatens the global economy. For the sake of survival, businesses all over the world are using a variety of cost-cutting strategies (e.g., lowering the number of employees or cutting existing employee compensation, etc). Recent assessments by the International Monetary Fund (IMF) and the International Labor Organization (ILO) indicate that the oncoming financial recession will cause irreparable damage to the global economy, and that unemployment will reach all-time highs (Kawohl & Nordt, 2020). As a result of the prevalence of dread and unpredictability, workers in a variety of industries, as well as prospective employees, are experiencing a range of mental distress (Mahmud et al., 2021).

Anxiety is a psychological and physiological response to the perception of impending danger (Parekh, 2017). While anxiety is a normal component of human psychology, it can progress to anxiety disorder, which is hazardous to one's health. The normal economic situation and way of life of people all over the world have been severely impacted as a result of the global spread of COVID-19. It is a personal, economic, and societal disaster all at once, and it is attacking 'societies at their core.' Future anxiety is a threat to people's health and behavior because it can be severe and cause an imbalance in their lives, which has psychological and physical consequences and impacts many aspects of their lives. Anxiety is a common part of life that influences one's actions. It reflects his humanity, it is a reality, it is a dynamic component of his character development, and it is a behavioral variable. Anxiety arises in all individuals as a natural response to the various challenging situations that they encounter, and it is considered a natural response because it motivates the individual to take the appropriate behavioral measures to deal with the situation; however, it becomes dangerous when its degree exceeds the normal limit, and it may be associated with behavioral disorders, and it may mix and intersect with Fear, conflict, delusion, and situations of frustration that the individual

encounters (AlHarbi et al., 2020). Future anxiety is most common in a person's twenties, when they start working and raising a family; as a result, university seniors are more apprehensive than other students. Future anxiety is most common in the second and early third decades, according to Rabei et al., (2020), and it is uncommon to emerge before the age of fifteen or after the age of thirty-five. The findings revealed that anxiety symptoms decreased throughout early adolescence and increased during late adolescence, as well as that girls are more apprehensive than boys. According to the experiences of their peers who were unable to find work and were forced to work in a new area or remain unemployed, university students in particular specialties are more apprehensive about the future due to a loss of trust in the future (Esra' & Mustafa, 2020).

The impact of the pandemic on suicidal ideation is unknown because to a lack of evidence. Despite the fact that the vast majority of people who have suicidal thoughts do not act on them, suicidal ideation is a significant risk factor for suicide and puts a large burden on society. Financial stress, debt, and unemployment are all substantial risk factors for suicidal ideation, in addition to being traditional suicide triggers (Elbogen et al., 2020). Financial hardship in susceptible communities may have escalated significantly during the pandemic. Suicidal ideation and behavior are also highly connected with relationship problems and domestic violence (Mushtaque, Rizwan, et al., 2021), and may have escalated in tandem with the pandemic's social and economic changes (KITANAKA, 2021).

As a result of the COVID-19 outbreak, Pakistan has lost 5 million jobs. COVID-19 has led in a higher number of employment losses than expected. Hunger has increased as a result of job and income losses, and quality of life has suffered as a result. The outbreak is quite dangerous. Hunger has increased as a result of job and income losses, and quality of life has suffered as a result (Bilal et al., 2020). Low-income people are at risk from the epidemic. Experts estimate that the COVID-19 epidemic might cost Pakistan \$15 billion. Pakistan's fourth-quarter GDP growth is expected to decline by 10% in 2020, according to experts (Shafi et al., 2020). The government

implemented full and smart lockdowns from March to June 2020, resulting in no actual GDP growth and negative (2% GDP) growth in 2020 and the first quarter of 2021. Unemployment in Pakistan, according to Gallup, might reach 28%. 6.65 million people will be unemployed in 2020–21, up from 5.8 million in 2020. According to researchers, the private sector has lost 190 billion dollars as a result of lengthy full or partial lockdowns (Asghar et al., 2020). In the worst-case scenario, the global unemployment rate would rise from 4936 to 5644 percent, resulting in an increase of 9570 suicides every year. In the worst-case scenario, unemployment would reach 50.88 percent, resulting in an increase of around 2135 suicides. Each suicide attempt is followed by more than twenty more attempts, according to the World Health Organization (Kawohl & Nordt, 2020b). Furthermore, 15 suicides were reported in Pakistan during the financial crisis (Mamun & Ullah, 2020), as were the suicides of two doctorate students (Gulzar, 2020), and adolescent suicidal ideation due to the educational and social adjustment problems was investigated in a recently published study (Mushtaque, Rizwan, et al., 2021). As a result of the economic downturn, the present goal of the research was to examine the Pakistani population's future anxiety as well as the prevalence of suicidal ideation.

Methodology

The researcher utilized a descriptive and analytic technique based on a questionnaire to achieve the study's objectives, as this method was appropriate for the nature of the investigation at hand. The research will be a cross-sectional survey and will be conducted between 2020 and 2021. The population of the study consists of graduate students, unemployed individuals, and part-time public and private employees. Convenience sampling technique was used to collect the data; 4589 individuals volunteered to take part in the study. We received the 6700 total responses; we screened the data incomplete forms were excluded. The response rate was 68%. When the data was collecting, participants continued their education, training, and employment in their hometown via distance education, the Internet, or day shift work, some participants were unemployed and they were looking for jobs.

Questionnaire for Data Collection

As data collection instruments, the participant information Form, the future anxiety scale, and the suicidal ideation Scale were utilized. These forms were transformed to an online format using Google and distributed to university students and groups, who were invited to participate online by getting a survey link through email or text message.

1. Participant Information Sheet

Probing questions about the participants were asked (e.g., gender, age, qualification, job status, monthly income, marital status, residential area, any psychological illness, physical illness).

2. Future Anxiety Scale

The future anxiety scale has 29 items with the four main domains (future problem fear, negative thoughts about future, worry about future and thoughts about death). It is a seven point likert scale; 0 indicates the decidedly false and 6 indicates the decidedly true. The reliability of the scale was 0.93. (Zaleski, 1996). From the mean score 1.00 to below 2.34 is considered low anxiety, over 2.34 to 3.67 is considered moderate anxiety and above near to 5 is considered high anxiety.

3. Suicidal Ideation Scale

The suicidal ideation scale developed by Osman et al (2001) was used to measure the population ideation towards suicide. It is a five point likert scale. The scale has four items. The reliability of the scale was 0.81.

Ethical Considerations

Participants signed a written informed consent form before taking part. They were told of the study's purpose and methodologies. They had no moral or financial obligation to participate. The confidentiality of the information was ensured. The study's findings will be published in a scholarly journal, where they will help to influence and improve policies and initiatives influencing their quality of life.

Statistical Analysis

Inferential analysis (multiple logistic regressions) was done by using SPSS v.25.

Results

Table 1 Socioeconomic characteristic of the participants on scale of future anxiety (N= 4589)

		Future Anxiety			Sig.
		Mild	Moderate	Severe	
Socioeconomic Variables	N=	n=	n=971	n=753	
	4589	2865	21.1%	16.4%	
		62%			
Gender					0.001
Male	289	664	1723	505	
	2	22.9%	59.5%	17.6%	
Female	169	567	785	345	
	7	33.4%	46.2%	20.3%	
Participant Age					0.001
20-45	312	1056	789	1275	
	0	33.8%	25.2%	40.8%	
46-65	969	481	344	144	
		49.6%	35.5%	14.8%	
66-above	500	285	187	28	
		57.0 %	37.4%	5.6%	
Education					0.001
Primary	857	472	285	100	
		55.0%	33.2%	11.6%	
Secondary	646	229	332	85	
		35.4%	51.3%	13.1%	
College	178	669	705	412	
	6	37.4%	39.6%	23.0%	
University	130	750	385	165	
	0	57.6%	29.6%	12.8%	
Job Status					0.0003
Student	198	536	876	575	
	7	26.9%	44.0%	28.1%	
Employed	114	610	472	65	
	7	53.1%	41.1%	5.8%	
Un-employed	145	374	875	206	
	5	25.7%	60.1%	14.1%	
Marital Status					0.001

Married	134	341	633	367
	1	25.4%	47.2%	27.3%
Un-married	157	745	283	543
	1	47.4%	18.01%	34.5%
Divorced	100	420	320	262
	2	41.9%	31.9%	26.2%
Widow	675`	102	245	328
		15.1%	36.2%	48.5%
Monthly Income				0.000
Low Income	198	875	427	684
	6	44.05	21.5%	34.6%
		%		
Middle Income	184	985	660	200
	5	53.3%	35.7%	10.8%
High Income	758	485	228	45
		63.9%	30.0%	5.1%
Live In				0.001
Rural Areas	285	2103	710	41
	4	73.6%	24.8%	1.6%
Urban Areas	173	875	483	377
	5	50.4%	27.8%	21.8%

The personal characteristics and future anxiety of the participants are summarized in table 1. The total participants were 4589, of which 63% were male and 37% were female. The participants' future anxiety was measured on a scale of mild, moderate, and high. In total, 62% of participants have mild future anxiety, 21% have moderate, and the rest have high levels of future anxiety. The multi-logistic regression was applied to the individual characteristics and level of future anxiety. On the scale of future anxiety, 59% of men have the moderate level of anxiety while 20% of women have the severe level of future anxiety ($p = 0.001$). Similarly, on the variable of age, future anxiety was also examined. 20–45age range participants have a severe level of future anxiety. The 46–65 age range has mild anxiety. Above age 65, only 5.6% of participants have severe future anxiety. Education is a significant factor in future anxiety. Those who have gotten a college level education have the most severe future anxiety (23%). Students and unemployed people also have a severe and

moderate level of future anxiety. Married people have a moderate level of future anxiety, while unmarried (34%) and widowed (48%) participants have a severe level of future anxiety. People with low incomes have severe future anxiety, whereas people with middle and high incomes have moderate future anxiety. Further results revealed that people who live in urban areas have more anxiety about the future as compared to people who live in rural areas.

Table 2 Socioeconomic characteristic of the participants on scale of Suicidal Ideation (N= 4589)

In the current study, on the scale of suicidal ideation, 1700 participants did not have suicidal ideation. A further test was applied to the rest of the participants who showed the symptoms on the suicidal ideation scale.

Socioeconomic Variables	N= 2889	Suicidal Ideation						Sig.
		Mild		Moderate		Severe		
		n=1789	61.9%	n= 867	30.0%	n= 233	9.1%	
Gender								0.001
Male	1955	1422	72.7%	358	18.3%	175	8.10%	
Female	934	702	75.1%	109	11.6%	123	13.1%	
Participant Age								0.281
20-45	1388	835	60.1%	433	31.1%	120	8.74%	
46-65	568	489	86.0%	58	10.2%	21	3.69%	
66-above	933	755	80.9%	143	15.3%	35	3.75%	
Education								0.001
Primary	198	86	43.4%	85	43%	27	13.6%	
Secondary	457	236	51.6%	145	31.7%	76	16.7%	
College	1483	866	58.3%	425	28.6%	192	12.9%	
University	751	688	91.6%	25	3.3%	38	5.1%	
Job Status								0.000
Student	968	539	55.6%	257	26.4%	172	18%	
Employed	522	433	82.9%	75	14.1%	14	2.0%	
Un-employed	1399	789	56.3%	423	30.2%	187	13.5%	
Marital Status								0.001
Married	1433	961	67.0%	358	24.9%	114	7.1%	
Un-married	533	322	60.4%	113	21.2%	98	18.3%	
Divorced	466	160	34.3%	61	13.0%	245	52.7%	
Widow	457	257	56.2%	163	35.6%	37	8.09%	

Monthly Income								0.000
Low Income	1599	593	37.0%	964	60.2%	42	2.8%	
Middle Income	855	421	49.2%	320	37.4%	114	13.4%	
High Income	435	266	61.1%	108	24.8%	61	14.1%	
Live In								0.000
Rural Areas	1756	899	51.1%	685	39.0%	172	9.9%	
Urban Areas	1133	687	60.6%	207	18.27%	239	21.2%	

Table 2 reveals the results of the suicidal ideation. Of the 2889 participants, 61% showed the symptoms of suicidal ideation, of which 61% had mild suicidal ideation—just passing thoughts of suicide. 30% of participants had moderate levels of suicidal ideation, and 9% revealed that they wanted to commit suicide. Furthermore, men and women both showed suicidal ideation symptoms. 72% of men had mild symptoms of suicidal ideation and 8% of men had severe suicidal thoughts, while 75% of women had mild suicidal ideation and 13% of women suffered from severe suicidal ideation. On a scale of suicidal thoughts, age is the most important factor. Of the people who took part in the study, 8% had the most severe suicidal thoughts. Similarly, education seems to also be an important factor in suicidal thoughts. Individuals who are less educated (primary and secondary education) have more severe suicidal thoughts as compared to college and university graduate participants. In the current study, the unemployed (13%) and students (18%) displayed severe suicidal symptoms. Moreover, marital status is also an important factor of mental well-being. On a socio-demographic level, marital status also has a significant association with suicidal ideation; individuals who have divorced or are unmarried are more likely to have suicidal thoughts. Individuals living in urban areas suffer more from suicidal thoughts.

Discussion

We examined, based on the results of the community health survey, that the general public had a significant prevalence of future anxiety and suicidal ideation, with severe future anxiety (16 %) in the year and suicidal ideation (9.1 %). Suicidal tendencies were influenced by depressive mood, loneliness, perceived stress, and happiness. Suicidal tendencies were high when feeling defeated, lonely, stressed, and dissatisfied.

Attempts at suicide and future anxiety were found to be associated with socio-demographic features. Prior study has linked some demographic characteristics to anxiety (Park & Lee, 2022). For example, women are more concerned than men. This may be due to the fact that women are more sensitive to stress and, as a result, have a higher risk of anxiety and depression, as well as the fact that young people are more concerned than older people. The negative effects of anxiety and depressed symptoms diminish with age. Children raised in two-parent households are less anxious than those raised by a single parent. This could be due to the fact that two-parent households enjoy greater financial stability and excellent family time. Moreover, urban folks are more concerned than their rural counterparts. This may be due to the competitive nature of the metropolitan economy, which is more prone to create anxiety (Chen et al., 2021; Zhang et al., 2020). The Pakistan Bureau of Statistics estimates that 41.6 % of Pakistan's 63.4 million workforces are at risk. Vulnerable employment includes self-employed and domestic workers, as well as daily wage employees, in total employment. These employees will be the ones that suffer the most. They may lose their jobs as a result of the COVID-19 epidemic in Pakistan. Experts worry that the government's complete or partial lockdowns to combat the pandemic will exacerbate poverty and unemployment in the coming months (Blustein et al., 2020). It has hindered economic activity, leaving a large number of people in precarious situations. According to PIDE, Pakistan's moderate limits may result in the layoff of 12.3 million employees, or 46.3 % of all vulnerable occupations and 19.4 % of all positions. Retail and wholesale layoffs are expected to total 4.55 million people, according to experts. Pakistan's poverty rate might climb from 23.4 % to 44.2 %, decreasing people's living standards (Zomalheto et al., 2020; Noreen et al., 2020).

Everyone is vulnerable to stress, regardless of age, gender, or other characteristics (table-1). Stress is seen to be strongly related to, if not a component of, human life. According to research, stress has been related to the onset and advancement of a range of diseases. Its detrimental effects on human health range from emotional disturbance to immune system breakdown. Stress has the potential to destabilize the entire system. The brain, which is also in charge of mental

control, maintains the body's chemical equilibrium. Everything starts with a thought: negative thinking affects the body's chemical homeostasis (AlHarbi et al., 2020). Future anxiety impacts people's self-perceptions of what will and might happen in the future, and the future can become a source of anxiety and fear due to a misunderstanding of probable future events and a lack of confidence in one's ability to deal with and interpret them in a specific way. Negativity as a result of overlapping concepts connecting the past, present, and future, results in his inability to adapt to events that may hinder his future. Hence, it increased the individual's future-related concern (Li et al., 2018). As a result, the value of optimism should not be underestimated. According to Freud, anxiety is the anticipation of risk, and birth trauma is the first hazard a person faces. All subsequent risk situations involve the individual's appraisal of his strength in relation to the degree of danger, as well as his identification of physical handicap if the risk is objective or psychological incapacity if the risk is instinctual. This person is influenced by his real-world experiences (Bonab & Koohsar, 2011).

The results of suicidal ideation in Pakistan create tension in the country and cause alarm in surrounding developing nations. 55% of the world's population lacks appropriate social safety; these losses will echo throughout society, hurting education, human rights, and basic food security and nutrition under extreme conditions. At the time of the COVID-19 epidemic, these statistics forewarned of increased unemployment, poverty, and hunger, all of which are major contributors to mental illness (and, in extreme cases, suicide). We do not know how long the COVID-19 outbreak will run, how many people will die, or when it will end (Mamun & Griffiths, 2020). National and international governments should aid the poor voluntarily. If free aid is infeasible due to limited global resources, interest-free and discretionary moratoriums on EMI loans can help alleviate economic recessions and pressures. In order to prevent the economic downturn, all past loans should be put on hold until the COVID-19 outbreak has subsided.

Implication of the study

These economic worries and suicidal thoughts appear to be especially harmful to employed men, many of whom are concerned about losing their employment. These findings imply that organizations, particularly those with male employees, should integrate mental health support into their COVID-19 health and safety assessments. According to the findings, COVID-19 health-related spending must include major investments in mental health. Individuals whose mental health has been damaged by the pandemic require evidence-based care. Because of the enormous number of people affected, scalable solutions are required. No matter what the source of your pandemic anxiety, congestive behavioral therapy can assist. Such treatments have the potential to reduce economic concern while simultaneously enhancing health and well-being, which should excite the interest of policymakers.

Conclusion

Individuals who experienced suicidal thoughts during the COVID-19 period were found to be more prone to future anxiety (16%) and suicide ideation (9.1%). Researchers observed age and gender-specific correlation between socioeconomic status and both future anxiety and suicide attempts, suggesting that with women of lower socioeconomic status may be more susceptible. Individuals at high risk of suicidal thoughts have been identified for potential therapeutic interventions.

Conflict of Interest

None

Data Availability

Data will be provided on reasonable request.

References

- Alauddin, M., Khan, F., Imtiaz, S., Ahmed, S., & Amyotte, P. (2021). Pandemic risk management using engineering safety principles. *Process Safety and Environmental Protection*, 150, 416–432. <https://doi.org/10.1016/j.psep.2021.04.014>
- AlHarbi, B., Ibrahim, K., Al-Rabaah, J., & Al-mehsin, S. (2020). The Ego Depletion and Its Relationship with the Future Anxiety among the University Female Students. *International Journal of Higher Education*, 10(2), 128. <https://doi.org/10.5430/ijhe.v10n2p128>

- Asghar, N., Batool, M., Farooq, F., & Rehman, H. ur. (2020). Covid-19 Pandemic and Pakistan Economy: A Preliminary Survey. *Review of Economics and Development Studies*, 6(2), 447–459. <https://doi.org/10.47067/reads.v6i2.222>
- Bakker, A., & Wagner, D. (2020). Pandemic: lessons for today and tomorrow? *Educational Studies in Mathematics*. <https://doi.org/10.1007/s10649-020-09946-3>
- Bavel, J. J. V., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., Crockett, M. J., Crum, A. J., Douglas, K. M., Druckman, J. N., Drury, J., Dube, O., Ellemers, N., Finkel, E. J., Fowler, J. H., Gelfand, M., Han, S., Haslam, S. A., Jetten, J., & Kitayama, S. (2020). Using social and behavioural science to support COVID-19 pandemic response. *Nature Human Behaviour*, 4(1), 460–471. <https://doi.org/10.1038/s41562-020-0884-z>
- Bierman, A., Upenieks, L., Glavin, P., & Schieman, S. (2021). Accumulation of Economic Hardship and Health During the COVID-19 Pandemic: Social Causation or Selection? *Social Science & Medicine*, 113774. <https://doi.org/10.1016/j.socscimed.2021.113774>
- Bilal, Latif, F., Bashir, M. F., Komal, B., & Tan, D. (2020). Role of electronic media in mitigating the psychological impacts of novel coronavirus (COVID-19). *Psychiatry Research*, 289, 113041. <https://doi.org/10.1016/j.psychres.2020.113041>
- Blustein, D. L., Duffy, R., Ferreira, J. A., Cohen-Scali, V., Cinamon, R. G., & Allan, B. A. (2020). Unemployment in the time of COVID-19: A research agenda. *Journal of Vocational Behavior*, 119(103436), 103436. <https://doi.org/10.1016/j.jvb.2020.103436>
- Bonab, B. G., & Koohsar, A. A. H. (2011). Relation between Emotional Intelligence and Attachment Styles in Delinquent Adolescents. *Procedia - Social and Behavioral Sciences*, 30, 963–967. <https://doi.org/10.1016/j.sbspro.2011.10.187>
- Chen, Y., Xu, H., Liu, C., Zhang, J., & Guo, C. (2021). Association Between Future Orientation and Anxiety in University Students During COVID-19 Outbreak: The Chain Mediating Role of Optimization in Primary-Secondary Control and Resilience. *Frontiers in Psychiatry*, 12. <https://doi.org/10.3389/fpsy.2021.699388>
- Coibion, O., Gorodnichenko, Y., & Weber, M. (2020). Labor Markets During the COVID-19 Crisis: A Preliminary View. National Bureau of Economic Research. <https://doi.org/10.3386/w27017>
- Elbogen, E. B., Lanier, M., Montgomery, A. E., Strickland, S., Wagner, H. R., & Tsai, J. (2020). Financial Strain and Suicide Attempts in a Nationally Representative Sample of US Adults.

- American Journal of Epidemiology, 189(11), 1266–1274.
<https://doi.org/10.1093/aje/kwaa146>
- Esra', & Mustafa, O. (2020). FUTURE ANXIETY AMONG JORDANIAN UNIVERSITY STUDENTS DURING THE CORONA PANDEMIC IN LIGHT OF SOME VARIABLES. *British Journal of Education*, 8, 70–82. <https://www.eajournals.org/wp-content/uploads/Future-anxiety-among-Jordanian-university-students-during-the-Corona-pandemic-in-light-of-some-variables.pdf>
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1–20. Tandfonline. <https://doi.org/10.1080/09669582.2020.1758708>
- Gulzar, F. (2020). Pakistan: Karachi student reportedly pursuing PhD for 15 years commits suicide, institute accused of harassment. *Gulfnews.com*.
<https://gulfnews.com/world/asia/pakistan/pakistan-karachi-student-reportedly-pursuing-phd-for-15-years-commits-suicide-institute-accused-of-harassment-1.1597679435409>
- Kawohl, W., & Nordt, C. (2020a). COVID-19, unemployment, and suicide. *The Lancet Psychiatry*, 7(5), 389–390. [https://doi.org/10.1016/S2215-0366\(20\)30141-3](https://doi.org/10.1016/S2215-0366(20)30141-3)
- Kawohl, W., & Nordt, C. (2020b). COVID-19, unemployment, and suicide. *The Lancet Psychiatry*, 7(5), 389–390. [https://doi.org/10.1016/S2215-0366\(20\)30141-3](https://doi.org/10.1016/S2215-0366(20)30141-3)
- Khalid, A., & Ali, S. (2020). COVID-19 and its Challenges for the Healthcare System in Pakistan. *Asian Bioethics Review*. <https://doi.org/10.1007/s41649-020-00139-x>
- KITANAKA, C. (2021). Domestic Violence During the COVID-19 Pandemic. *TRENDS in the SCIENCES*, 26(12), 12_38–12_41. https://doi.org/10.5363/tits.26.12_38
- Li, S., Zhang, D., & Han, Z. (2018). STATUS AND DETERMINANTS OF DEATH ANXIETY AMONG OLDER ADULTS IN RURAL CHINA – AN EMPIRICAL STUDY FROM ANHUI. *Innovation in Aging*, 2(suppl_1), 227–228. <https://doi.org/10.1093/geroni/igy023.845>
- Mahmud, Md. S., Rahman, Md. M., Masud-Ul-Hasan, Md., & Islam, Md. A. (2021). Does “COVID-19 phobia” stimulate career anxiety?: Experience from a developing country. *Heliyon*, 7(3), e06346. <https://doi.org/10.1016/j.heliyon.2021.e06346>
- Mamun, M. A., & Griffiths, M. D. (2020). First COVID-19 suicide case in Bangladesh due to fear of COVID-19 and xenophobia: Possible suicide prevention strategies. *Asian Journal of Psychiatry*, 51, 102073. <https://doi.org/10.1016/j.ajp.2020.102073>

- Mamun, M. A., & Ullah, I. (2020). COVID-19 suicides in Pakistan, dying off not COVID-19 fear but poverty? – The forthcoming economic challenges for a developing country. *Brain, Behavior, and Immunity*, 87.
<https://doi.org/10.1016/j.bbi.2020.05.028>
- Mann, F. D., Krueger, R. F., & Vohs, K. D. (2020). Personal economic anxiety in response to COVID-19. *Personality and Individual Differences*, 167, 110233.
<https://doi.org/10.1016/j.paid.2020.110233>
- Mehta, P., McAuley, D. F., Brown, M., Sanchez, E., Tattersall, R. S., & Manson, J. J. (2020). COVID-19: consider cytokine storm syndromes and immunosuppression. *The Lancet*, 395(10229), 1033–1034. [https://doi.org/10.1016/S0140-6736\(20\)30628-0](https://doi.org/10.1016/S0140-6736(20)30628-0)
- Mushtaque, I., Awais-E-Yazdan, M., Zahra, R., & Anas, M. (2022). Quality of Life and Illness Acceptance among End-Stage Renal Disease (ESRD) Patients on Hemodialysis: The Moderating Effect of Death Anxiety during COVID-19 pandemic. *OMEGA - Journal of Death and Dying*, 003022282210752.
<https://doi.org/10.1177/00302228221075202>
- Mushtaque, I., Dasti, M. R., Mushtaq, M., & Ali, A. (2021). Attitude towards Covid-19 Vaccine: A Cross-Sectional Urban and Rural Community Survey in Punjab, Pakistan. *Hospital Topics*, 1–8.
<https://doi.org/10.1080/00185868.2021.2001399>
- Mushtaque, I., Khan, M. R., Zahra, R., Fatima, S. M., Ejaz, M., Lak, T. A., Rizwan, M., Awais-E-Yazdan, M., & Raza, M. (2022). Prevalence of Coronavirus Anxiety, Nomophobia, and Social Isolation Among National and Overseas Pakistani Students. *Journal of Population and Social Studies*, 30, 408–422.
<https://doi.org/10.25133/jpssv302022.024>
- Mushtaque, I., Rizwan, M., Abbas, M., Khan, A. A., Fatima, S. M., Jaffri, Q. A., Mushtaq, R., Hussain, S., Shabbir, S. W., Naz, R., & Muneer, K. (2021). Inter-Parental Conflict's Persistent Effects on Adolescent Psychological Distress, Adjustment Issues, and Suicidal Ideation During the COVID-19 Lockdown. *OMEGA - Journal of Death and Dying*, 003022282110543.
<https://doi.org/10.1177/00302228211054316>
- Nawaz, M. A., Saeed, L., & Mushtaque, I. (2021). Mediating Role of Spousal Support on Internalized Stigma and Marital Satisfaction among depressive Patients. *Review of Education, Administration & LAW*, 4(4), 561–572.
<https://doi.org/10.47067/real.v4i4.207>
- Noreen, N., Dil, S., Niazi, S. U. K., Naveed, I., Khan, N. U., Khan, F. K., Tabbasum, S., & Kumar, D. (2020). COVID 19 Pandemic &

- Pakistan; Limitations and Gaps. *Global Biosecurity*, 1(4).
<https://doi.org/10.31646/gbio.63>
- Oyesanya, M., Lopez-Morinigo, J., & Dutta, R. (2015). Systematic review of suicide in economic recession. *World Journal of Psychiatry*, 5(2), 243. <https://doi.org/10.5498/wjp.v5.i2.243>
- Parekh, R. (2017). What Are Anxiety Disorders? *Psychiatry.org*.
<https://www.psychiatry.org/patients-families/anxiety-disorders/what-are-anxiety-disorders>
- Rabei, S., Ramadan, S., & Abdallah, N. (2020). Self-efficacy and future anxiety among students of nursing and education colleges of Helwan University. *Middle East Current Psychiatry*, 27(1).
<https://doi.org/10.1186/s43045-020-00049-6>
- Rafi, Md. A., Mamun, M. A., Hsan, K., Hossain, M., & Gozal, D. (2019). Psychological Implications of Unemployment Among Bangladesh Civil Service Job Seekers: A Pilot Study. *Frontiers in Psychiatry*, 10. <https://doi.org/10.3389/fpsyt.2019.00578>
- Rizwan, M., Ahmad, T., Qi, X., Murad, M. A., Baig, M., Sagga, A. K., Tariq, S., Baig, F., Naz, R., & Hui, J. (2021). Social Media Use, Psychological Distress and Knowledge, Attitude, and Practices Regarding the COVID-19 Among a Sample of the Population of Pakistan. *Frontiers in Medicine*, 8. <https://doi.org/10.3389/fmed.2021.754121>
- Shafi, M., Liu, J., & Ren, W. (2020). Impact of COVID-19 Pandemic on Micro, Small, and Medium-Sized Enterprises Operating in Pakistan. *Research in Globalization*, 2(1), 100018. <https://doi.org/10.1016/j.resglo.2020.100018>
- Timming, A. R., French, M. T., & Mortensen, K. (2021). Health Anxiety versus Economic Anxiety Surrounding COVID-19: An analysis of psychological distress in the early stages of the pandemic. *Journal of Affective Disorders Reports*, 100152. <https://doi.org/10.1016/j.jadr.2021.100152>
- Zaleski, Z. (1996). Future Anxiety: concept, measurement, and preliminary research. *Personality and Individual Differences*, 21(2), 165–174. [https://doi.org/10.1016/0191-8869\(96\)00070-0](https://doi.org/10.1016/0191-8869(96)00070-0)
- Zhang, J., Yang, Z., Wang, X., Li, J., Dong, L., Wang, F., Li, Y., Wei, R., & Zhang, J. (2020). The relationship between resilience, anxiety, and depression among patients with mild symptoms of COVID-19 in China: A cross-sectional study. *Journal of Clinical Nursing*, 29(21-22).
<https://doi.org/10.1111/jocn.15425>
- Zomalheto, Z., Assogba, C., & Dossou-yovo, H. (2020). Impact of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV2) infection and disease-2019 (COVID-19) on the quality of life of rheumatoid arthritis patients in Benin. *The Egyptian Rheumatologist*.

<https://doi.org/10.1016/j.ejr.2020.07.001>

Park, J.-Y., & Lee, I. (2022). Factors influencing suicidal tendencies during COVID-19 pandemic in Korean multicultural adolescents: a cross-sectional study. *BMC Psychology*, 10(1).
<https://doi.org/10.1186/s40359-022-00867-9>