



PSYCHOLOGICAL IMPACT OF COVID-19 AMONG UNIVERSITY STUDENTS AND THEIR COPING MECHANISM WITH REFERENCE TO JAMMU AND KASHMIR, INDIA

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Abstract-The mystery illness known as SARS n-Cov2 COVID-19 has revolutionized the lives of people irrespective of their age group; it has brought everything to a standstill. Lockdown was imposed which exacerbated the anxiety levels. It has to a great extent affected the physical and mental health of the masses across the globe. This quantitative and qualitative interpretative research aims to examine the level of anxiety among 251 college and university students studying in various universities and colleges across the Kashmir division of Jammu and Kashmir, India. The study was conducted in July 2020 when the lockdown was strictly in action. Convenience sampling was used to collect the data. This Study administered a questionnaire known as Generalised Anxiety Disorder Screener (GAD -7), an anxiety questionnaire which is self-reported to find out the anxiety level among students, and thematic analysis was used initially to measure the coping mechanism before the extracted code were put in frames. It was found out that most student's experienced moderate and severe anxiety due to the COVID-19 pandemic and the subsequent lockdown. Thematic data analysis outcome indicated five major themes-Developments of Personal interest, Putative coping, Religious Coping, Gaming and Maladaptive coping strategies. This research study discovered that students tried to mitigate stress but were mostly found aimless and the stance for handling such an uninvited situation wasn't clear. However, more research is required to investigate anxiety levels among students.

Keyword: Anxiety, COVID-19, Coping, University Students, Religious Coping.

1. INTRODUCTION

The mystery illness known as SARS n-Cov2 COVID-19 has revolutionized people's lives irrespective of age group; it has brought everything to a standstill. This virus first emerged in Wuhan city of Hubei district and was declared as a national health crisis by the WHO¹ COVID-19 pandemic was classified as an infection that causes contagious respiratory illness by The World Health Organization. To prevent the spread of this contagious deadly virus, the government of several nations had resorted to several lockdowns. In response to the pandemic, the Government of India had proactively taken a step where Prime Minister addressing the nation had announced the first lockdown from March 24, 2020, for three weeks, where every state, union territory, village, and the district was part of this lockdown. People had no apprehension that such stringent steps like lockdown will be resorted to, as a result of which they became restless and are anxious about their present and future which had agonized people mentally.

Lockdowns have exacerbated the anxiety levels. It has to a great extent affected the masses physically and mentally across the globe and has brought down the financial position of the countries and lead to major economical breakdowns. The ramifications of this virus are manifold. Apart from leading to deplorable conditions; COVID-19 has lead to economic slowdowns in the whole world. This economic downturn has an impact on mental health as well. Chakraborty & Maity⁴ in their research work stated that pandemic can elicit a catastrophic effect on the socio-economic and political predicament apart from causing critical public health anxiety and further stated that COVID-19 is not only the paramount peril to the public health globally but is now being deliberate as an indicator of disproportion.

Public health measures had also been implemented to prevent this deadly virus from spreading. As a preventive measure, people were asked to follow Social distancing; self-isolation, or quarantine, and to work from home. To trounce the pandemic one may undergo different feelings like to be anxious, overwhelmed, and stressed. Social distancing has to lead to fewer social interactions which made it harder to control the stress and anxiety of individual experiences. The decline in social activities has resulted in a looming mental illness crisis. The web of COVID-19 has engulfed every section of society. People of different sections whether employees of the Government or private sector, businessmen, homemakers, traders, farmers, laborers, middlemen, students, etc. are witnessing stress in some form or the other presently or in coming days due to several factors.

With the spread of fatal COVID-19, major re-modifications were the need of an hour. To maintain social distancing, how work was carried out was revamped. These measures were crucial to prevent this highly contagious disease



from spreading. The job with standard working from 9am to 5pm had been replaced by Work from Home. There has been a considerable change in the working styles owing to COVID-19. To prevent any further loss of the academic session of the students, schools, and colleges resorted to online classes. When these changes emerged suddenly, coping with such unprecedented changes became difficult and lead to psychological problems.

COVID-19 Pandemic has brought an agonizing psychological pressure apart from the threat of death. Various studies show that there are factors that contribute to the anxiety related to COVID-19. In bleak situations, feeling stressed and anxious is not an alien reaction. The measures to control COVID-19 have brought about the critical disruption of several human life activities, and this can be a reason for affecting the mental health of individuals, which includes students as well.

Low education symptoms of PTSD and negative coping styles affect the youth's mental health. Liang et al. in their study explored that young people have more propensity towards mental and psychological problems. There is notable evidence that the contagious disease of COVID-19 has resulted in a massive influence on the mental well-being of the youth. The mental health of the masses has been adversely affected owing to this public health emergency.

Since the emergence of the COVID-19 pandemic, a major consideration was given to the physical and biological factors of the pandemic to drape its spread. However, substantially less focus was paid to the mental health risks of the COVID-19 pandemic. Al-Tammemi et al. conducted a study on University Students in Jordan Using Kessler Psychological Distress Scale to find out the psychological impacts of the COVID-19 pandemic and came to the conclusion that this pandemic has led to drastic disturbance to human activities and as a result of which mental health can get affected adversely. A study on similar lines was conducted by Dong et al., they tried to identify the mental health of students enrolled in college and to find out the variables that affect the mental health of students. This study was conducted in the Guangdong Province of China. The results showed that students have awareness about this disease and the magnitude of anxiety varies with gender, age group, and area of residence.

Further studies also have witnessed COVID-19 has impacted psychological and mental health. Wang & Zhao¹⁰ in their study on the effect of COVID-19 on university students of China has found out that majority of the respondents were severely psychologically distressed. Varshney et al. undertook a study in India to investigate the initial psychological impact of COVID-19. A survey was conducted by the United Nations in Thailand in collaboration with the Children and Youth Council of Thailand on 6,771 students and the results indicated that out of 10 more than 7 children and young people thought that mental well-being was getting affected by the pandemic which was causing stress, worry, and anxiety and it was also reported that more than half of the respondents had anxiety related to their academics, future education and employment.

COVID-19 has brought a cycle of changes to students, which has taken a toll on the student's mental health. The education sector has been hit hard with the COVID -19 pandemic taking over the world schools, colleges, and other educational institutions across the globe; were declared shut across the world for months on end and making matters worse. The unexpected changes have resulted in anguish for students who are already preoccupied with their ongoing research and other academic activities. The classrooms have been changed overnight from campus to computers. Educational institutions postponed activities and prompted students to stay home and online platforms for distance e-learning were encouraged. Students have had various apprehensions that whether they will be able to complete their degree well on time. This pandemic has resulted in grave implications on the careers of university students since they faced blockades in teaching and assessment in their final semester and final years. The COVID-19 pandemic had a serious effect on the current batch of students as well. They were experiencing disruptions and upheaval in teaching and assessment in their last year as they may take time to finish up their degree and the passed out graduates are going to be victims of severe challenges due to the economic breakdowns and recession. These uncertain times can cause a great deal of anxiety and stress among students. Students who are in the last leg of their degree are distressed because of the catastrophic level of joblessness. In a developing nation like India, things are not that easy. But easier said than done, around 56 % of children have no access to smartphones in India as per a survey conducted by an NGO in 23 states across India which adds more to their mental health agonies.

COVID-19 has affected the regular sync of life and coping with it is not easy. There are studies where the coping mechanism is studied. Guo et al. in their study conducted in China has studied coping style adopted by adults against COVID-19. Kar et al. have suggested measures for coping with mental health. Therefore, the current studies aim to find out how the pandemic of COVID-19 has impacted the anxiety levels of students and what coping mechanism they have adopted to restore their sanity and reduce their anxiety in the Jammu and Kashmir Union territory.

2. NEED FOR THE STUDY

As far as our knowledge is concerned, this is the first of its kind study conducted in the union territory of Jammu and Kashmir which intends to gauge the psychological impact of COVID-19 among university students using Generalized Anxiety Disorder-7 (GAD-7) which is used to assess depression and anxiety. Studies report that the risk associated with mental health during COVID-19 is still scarce. Most of the studies on this topic were conducted in China or no studies in other regions. Preliminary or Pilot studies need to be conducted to analyze the scope of

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COVID-19 in other countries especially those where there is a lack of infrastructure and the consequence is severe. There is a scarcity of researches on mental and psychological health in conditions like these. Global mental health is impacted by the COVID-19 psychologically and has not been scrupulously examined.

During the pandemic, students have been at a receiving end not only in terms of exposure to news and social media distressed post²⁵ but education have widely been suffered accelerating their agonies, their career is at stake which leads them to anxiety and mental disorder. Hence their psychological impact needs to be studied and preventive measures need to be suggested and this research can provide a basis for instigating the policies. Therefore, this paper aims to find out the level of anxiety among university going students and the subsequent closure of universities.

It has been almost a year since COVID-19 has erupted. Very few studies have been conducted by the researchers about the coping strategies adopted by students during COVID-19 lockdown especially following the shutting of their educational institutions. This study attempted to discover the coping strategies of University students during the COVID-19 pandemic in Jammu and Kashmir for addressing this gap. This paper also highlights how students tried to cope up with this unprecedented condition and how they reduce the stress in such an uncalled situation through a narrative approach.

3. RESEARCH METHODOLOGY

3.1 Research Design

The study followed a mix of quantitative and qualitative research methods where an empirical investigation was performed to find out the level of anxiety among students. Furthermore, Qualitative data to explore the coping methods used by students were analyzed using Thematic Analysis initially before code extracts were put into frames. Keeping in view the past literature themes were outlined.

3.2 Population, Sample and Sampling Technique

For the current study, universities across the region of Jammu and Kashmir were chosen as the target population. The study was conducted in July 2020 when the lockdown was strictly in action. Data was collected from 251 students currently enrolled in various major universities to study the anxiety level and coping mechanism adopted by university students amidst the COVID-19 outbreak and the subsequent worldwide lockdowns which have resulted in a humongous amount of stress among the university community including the students. The stress harms the mental health and learning of students. The mental health was assessed through a structured questionnaire. To be sure of confidentiality and reliability, questionnaires were kept anonymous.

Online survey research is easy to use and faster. Keeping in view the pandemic, we have also resorted to digital means only. The questionnaires were electronically generated 'Google Form' which were circulated using various digital platforms like WhatsApp and Facebook among students groups of various universities across the Union territory of Jammu and Kashmir. Non-probability sampling technique was used. Due to the lockdowns and closure of universities, accurate data related to the population could not be generated, thus, Convenience sampling was adopted. Based on convenience sampling, a total of 251 respondents were selected to fill the questionnaires as a sample from different universities across Jammu and Kashmir. As it was required to answer all the questions, thus, the respondents filled the questionnaire completely and all were incorporated in the final analysis (100% response). The questionnaire comprised of close-ended questions and one open-ended question wherein respondents were enquired about their coping mechanism used to overcome the stress. An open-ended question survey can offer the researcher rich, unconstrained participant responses to broad questions and help the participants express their opinions in their peculiar fashion and the open-ended question was analyzed using Thematic Analysis.

3.3 Measurement

The study administered a questionnaire known as Generalised Anxiety Disorder Screener (GAD -7), a self-report anxiety questionnaire. It was designed by Spitzer et al. The 7-item Generalized Anxiety Disorder Scale (GAD-7) is widely used for screening of disorders related to anxiety, and it is a component of the 'Patient Health Questionnaire (PHQ). This questionnaire is being widely used in research and clinical setting because it's quick and easy to administer. GAD-7 is a reliable and valid self-report for anxiety. Owing to just 3 minutes completion time and ease in scoring, this questionnaire is widely used. Today in clinical practice, the GAD-7 questionnaire is extensively used and to research owing to its diagnostic reliability and efficiency GAD-7 is being applied for viewing, diagnosis, and assessment of the seriousness of anxiety disorders.

This questionnaire allows the users to gauge the anxiety levels as normal, mild, moderate, or severe. The symptoms are reported by using a 4-item Likert rating scale which ranges from 0 (not at all) to 3 (almost every day), such that the total score ranges from 0 to 21. By adding the numbers, a possible score from 0-21 comes up, 0-4 score level specifies minimal anxiety, 5-9 represents mild anxiety, 10-14 indicates moderate anxiety and 15-21 indicates severe anxiety. Spitzer et al. noted that it is the first of its kind self-reported questionnaire designed for primary care, to help in the process of diagnosis of specific disorders like phobia, post-traumatic stress disorders (PTSD), and disorders associated with panic.

The second part of the study in which students were asked about the coping mechanism was analysed using thematic analysis. The thematic analysis helps in organizing and analysing the responses for interpretation to determine the perspectives that are common among participants. Braun & Clarke, has detailed the phases of Thematic analysis: (1) Developing familiarity and acquaintance with the data; (2) Developing generating initial codes or labels; (3) Examining main themes and the central ideas; (4) Main themes review ; (5) Describing and deciding the name of the central themes; and (6) report development.

Based on the previous studies about the coping mechanism, five theme frameworks were developed. To acquire face validity relevant passages were confirmed by comparing themes framed by two researchers. Furthermore, the analysis and theme classification was discussed with some respondents to again check the arguments for correct or incorrect placing quotations in each box. Discussions were prompted between the researchers till a consensus was achieved. The framework that was established by this study was confirmed and conclusion in this last stage.

4. RESULTS

The demographics of the population on which the study was conducted depicted in table 4.1 and is shown as follows:

Out of 251 respondents, 117 (46.5%) were males and 132 (56.6%) were females and 2 belonged to the others category. 116 students (46.2%) were from the age group 18-22, 106 (42.2%) in the age group 23-25, and 29 (11.6%) were above 25 years of age. 162 (64.5%) respondents belonged to urban areas while 89 (35.5%) belonged to rural areas. 91 (36.3%) of the total respondents had an annual family income less than 2 lacs, 69 (27.5%) lied in the annual income group of 2 -5 lacs while as 56 (22.3%) lie in the income group of 5-10 lacs and 35 (13.9%) had an annual family income above 10 lacs. 180 (71.7%) respondents belonged to the University of Kashmir, 16 (6.4%) to the Islamic university of science and technology, 2 (0.8%) to Central University of Kashmir, and 53 (21.2%) to others whomostly belonged from Cluster University. 109 (43.4%) respondents were pursuing Bachelors, 102 (40.6%) Masters and 39 (15.5%) respondents were pursuing other courses which was Diploma and fewer were pursuing Doctorate program.

Table-4.1 Demographics of Population

Gender	Males	117	46.5%
	Females	132	56.6%
	others	2	0.1%
Age group	18-22	116	46.2%
	23-25	106	42.2%
	Above 25	29	11.6%
Area	Urban	162	64.5%
	Rural	89	35.5%
Annual income	less than 2 lacs	91	36.3%
	2 -5 lac	69	27.5%
	5-10 lacs	56	22.3%
	Above 10 lacs	35	13.9%
University	University of Kashmir	180	71.7%
	Islamic university of science and technology	16	6.4%
	Central University of Kashmir	2	0.8%
	Others	53	21.2%
Course pursuing	Bachelors	109	43.4%
	Masters	102	40.6%
	Others	39	15.5%

Table-4.2 Varying Anxiety Levels Of Students (N=251)

Anxiety level	Number	Ratio(%)
Minimal/Normal	19	7.57%
Mild	38	15.14%
Moderate	98	39.04%
Severe	96	38.24%

Table-4.2 depicts the varying degree of anxiety that the student underwent during the COVID-19 pandemic. Out of 251 students, 19 (7.57%) students showed a minimal level of anxiety, 38(15.14%) mild, 98 (39.04%) students showed moderate and 96 (38.24) depicted severe anxiety level.

5. FINDINGS

This paper aimed at exploring the level of anxiety and coping mechanism for anxiety among students studying in various colleges and universities across Jammu and Kashmir, a Union Territory in India. Data were collected from college and university going students of the union territory. Symptoms of depression, anxiety, and stress were very prevalent during the lockdown.

In past, Studies have suggested psychological effects are there on college or university students, which gets manifested in the form of anxiety, fear, and worry due to public health emergencies³⁹. Recently, a study in China investigated the psychological effect of the COVID-19 on college students and has shown about 24.9% of college students felt anxious due to this COVID-19 outbreak. Public health emergencies have resulted in the mental problems of college students, and need assistance, support, and attention of society, families, and colleges. The main purpose of this study was to evaluate the psychological condition of university and college students during the pandemic in Kashmir. This study indicated that 92.4% of students experienced due to COVID-19 outbreak. Of these students, 38.24% experienced severe anxiety, and 39.04% experienced moderate anxiety and 15.14% experienced mild anxiety which is in-line with the studies conducted by Rehman et al.. Though the sample size was small but it has vividly affected students and COVID-19 has significantly impacted their psychological health.

Secondly, students were asked about their coping mechanism since COVID-19 along with its subsequent closure of educational institutions which attributed to students staying indoors. Furthermore, Most of the students expressed that they tried to keep themselves busy by spending time with family members and use social support seeking behaviors. Some expressed that they have tried to take the path of positive reinterpretation and growth and have tried to develop new skills like cooking, played PUBG, watched movies, worked out, Indulged in reading books, and Channelised the irritation and anxiety, etc. towards working more productively. Most of these responses were inline with the findings of Fullana, Hidalgo-Mazzei, Vieta & Radua. One most common response was that they connected better with God and used religion to restore their sanity. However, some responses were bleak. One of the students stated "Due to Covid i am so stressed regarding my studies as well as my future and honestly i want to isolate myself to rest world feel irritated all time...I have started gardening now and my interest towards studies has gone so down i cannot figure out what's best for me now. I am being physically weak too....and of course mentally as well" Many students expressed that the Stress of COVID-19 was getting coupled with several other anxieties that people carry deep inside their subconscious brains. It was very difficult for them to segregate (and analyse individually) the stress caused by the COVID-19 pandemic. Many students mentioned that they tried to live in a world of oblivion and denial by staying away from the news which would disturb their sanity as the bombardment of information about the coronavirus from the media tends to augment anxiety especially for those who already tend to have such symptoms while some had suicidal thoughts and thoughts of self-destruction and two anonymous responses mentioned that they resorted to substance abuse.

From the multifaceted data that was collected, the underlying interconnected themes emerged after thematic analysis. These themes emerged from the coded transcripts under each core subject.

Theme 1-Religious Coping: The most common theme found among students to cope up with anxiety was religion. Religion and closeness to God helped students to distress and detox themselves. This theme is in concordance with the findings of Kasi; Brajkovi.

Theme 2-Putative Coping strategies: The putative coping strategies like internet usage and watching web series has significantly increased. Internet usage increased significantly during the lockdown for the information and communication needs. Technology is being used to diminish stress and anxiety levels but at the same time, the internet can enhance anxiety due to the spread of bogus information. The digital medium has explored itself in an unprecedented fashion. OTT platforms are widely explored to binge-watch webseries⁵³. Students resorted to these mediums to kill time and keep themselves occupied.

Theme 3-Personal Development: Another important theme that was common among the respondents was the development of personal interests that helped that cope with the anxiety which included reading, cooking, painting, calligraphy, and Music Therapies. Music has been found to have anxiety and stress-reducing powers and is being



used substantially when people experience stress. These findings are also in concordance with Kanekar & Sharma who anticipated the use of some strategies that will benefit mental wellbeing. They also suggested that painting has been used as a venting mechanism.

Theme 4- Gaming:The fourth theme prevalent among the students was playing PUB-G. The gaming and e-sports industry is believed to have suffered the least. It has been found the gaming and entertainment industry have used COVID-19 as an opportunity, profitability and subscriptions have increased.

Theme 5-Maladaptive Coping Strategy: Maladaptive coping strategies like living in denial and oblivion, resorting to substance abuse is yet another theme that was found common among university students. These coping strategies have been associated with lowering stress and anxiety levels among athletic during the COVID-19 pandemic. These findings are also in line with the findings of Umucu & Lee who found out that there was a positive association of perceived COVID-19 stress with coping strategies including denial, self-distraction, and substance abuse.

6. CONCLUSION

The study aimed to investigate the level of anxiety among students of the university and how they cope up with the anxiety. An interpretive approach was incorporated in which qualitative study to investigate the coping mechanism adopted by students to keep their anxiety in check due to the COVID-19 pandemic. A self-reported GAD questionnaire was used to find out the level of anxiety. It was found out that most of the students were moderately and severely stressed during the COVID-19 lockdown. Thematic analysis along with framework analysis was a method to analyze the data. Through the integration of the coded material arising from Google from responses, five themes emerged about what helps the students to cope up with the stressful situation. These themes were Religious coping strategies, Putative coping strategies, Personal development, Gaming, and Maladaptive Coping strategies. Students spend time learning new skills, indulged in reading, cooking, and painting. Religious coping was found to be a substantial coping mechanism. Also, students spent time playing games like PUB-G and watched webseries. However, some lived in denial and oblivion and resorted to drug abuse, and felt aimless at the situation.

7. LIMITATIONS AND NEED FOR FUTURE STUDY

No study is without limitations. The major limitations of the study undertaken were it used convenience sampling and therefore by using convenience sampling, generalisations cannot be drawn. Another limitation was that the sample was restricted to a small state of India. Furthermore, an online survey using Google forms was incorporated for carrying out the current study which hindered that major chunk of the population who are devoid of Internet accessibility. It is suggested that more research is required. Future researchers could incorporate a wider sample area and other professionals and migrant workers and incorporate other indicators of mental health in their study and use statistical techniques like correlation and regression to draw relations between anxiety and demographic variables. Since most students stated that religion was used to reduce anxiety, future studies can incorporate religiosity as a moderating variable.

8. POLICY IMPLICATION

Since anxiety among college and university goers is a real issue because going to college every day and meeting friends is usually an everyday routine for students which has been brought to a grinding halt by this pandemic. With the aid of technology stress among students can be mitigated. Educational institutions need to devise activities to keep students busy with interesting activities, webinars, and virtual fun sessions. Students need to be heard out. Authorities need to ensure that students take assistance from mental health professionals, counselors, and social workers to help them to overcome and reduce psychological issues related to COVID-19. University needs to keep one mental professional/counselor available so that students can contact them as and when needed. COVID-19 taught us to be better prepared for tomorrow and highlighted the loopholes which need to be filled.

9. ABBREVIATIONS

COVID-19 : Corona Virus Disease.
GAD: Generalised Anxiety Disorder
PTSD: Post-Traumatic Stress Disorder
WHO: World Health Organisation

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