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# Impact of COVID 19 on UG and PG students in Kashmir

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#### Abstract

This study was intended to examine the impact of COVID-19 on undergraduate and postgraduate students of Kashmir. To assess the impact, an online survey was conducted from November 20 2020 to December 10 2020. A close-ended questionnaire link using Google form was shared with the students through different social media platforms. A total of 108 students provided complete information regarding the survey. The data analysis was conducted using Google Sheets and MS Excel. The majority of students are not able to concentrate more on their studies, however, utilizing the time to upgrade their skills and for preparing competitive exams. The sudden closure of colleges and universities has negatively affected students' educational progress, but somehow information technology, online classes, and remote library services have kept their educational workflow on track. Students have been facing various problems related to study at home and poor internet connectivity. Prolonged use of electronic devices has affected their posture, cause strains, and feeling difficulty in relaxing. The family, followed by social media, has become the only support system for students. Regarding the post COVID phase, most students are prepared to push themselves to achieve their educational goals and are excited about incorporating new skills; however, students are also anxious about their future educational workflow. The study may provide insights for responsible stakeholders engaged with educational institutions in Kashmir.

Keywords: COVID 19 impact, undergraduate and postgraduate students, Kashmir, lockdown

#### 1. Introduction

Coronavirus had been first identified in 1960's which is a species of enveloped positive-sense RNA belonging to the order Nidovirales and family Coronaviridae. Till date, many Coronaviruses have been discovered, but only six (6) among them are known to infect humans (also called as HCoV), causing mild to severe respiratory symptoms (Yan et al., 2020) [44]. COVID-19 first originated in the city of Wuhan in China and within a short span of time spread like fire to many other continents. Chinese authorities, along with World Health Organization (WHO), after research, found a new virus to be the cause of the disease and consequently named it as Novel Corona Virus (2019-nCoV) (Roy et al., 2020) [35]. The city of Wuhan in early 2020 was in the news as the people there were found infected with a new virus, and with each passing day, the number of cases continuously increased. Those infected with the virus developed the symptoms like cough, fever, and even severe respiratory syndrome (Feng et al., 2020) [10]. Initially, it was declared as a public health emergency, but after analyzing and reviewing the situation, WHO on March 11 2020 announced the COVID-19 outburst as a pandemic and, in order to save the lives of the people, called upon all countries to take necessary steps and find ways and means to mitigate the transmission of the virus since no cure or vaccine is available ("Coronavirus disease," 2020). Later on, 2019-nCoV name was changed to Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) by the International Committee on Taxonomy of Viruses (Lai et al., 2020) [19]. COVID-19 is highly transmissible with high mortality rates, and the infection is tough to control due to the long latency period of the virus and the fact that the infection is transmitted from people with or without symptoms (Baek et al., 2020). The COVID-19 pandemic has dramatically affected and influenced the masses socially, economically, and politically across the globe. The reasons why COVID-19 became a talk globally include the obligatory self-isolation rules; closing of borders (both inter/intrastate and national/international ones); besides this disaster, health care initiatives have been planned at a global level. Therefore, it will not be wrong to say that COVID-19 had an unparallel impact on global society (Johnson et al. and WHO a, 2020) [15, 42]. As of August 03, 2020, the World Health Organization has reported 17,889,134 and 686,145death cases

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The virus has a high rate of transmission and has a robust throughput to cause the disease. The pandemic affected the people's health, and other sectors like business, tourism, and education at both college and university level suffered too (Aucejo, French, Araya, and Zafer, 2020) [5]. The rapid spread of the virus in China and other parts of the world forced the WHO to declare it an epidemic. This pandemic proved fatal, and the psychological trauma was also felt by the people worldwide. Furthermore, the government's guidelines to prevent its spread, like isolation, social distancing, and closing of all types of organizations and institutes, affected people's mental state in general and students in particular (Cao et al., 2020) [7]. The social distancing, which was followed to curb the spread of COVID many countries closed the educational institutes. significantly impacted the students wherein UNESCO played an essential role by facilitating distance learning to all especially to underprivileged ones. But the continuous closure of academic institutes and delay in starting the same have badly affected students' mental state. It has also increased depression and anxiety levels in them, affecting learners' mental health of all ages (Pragholapati, 2020) [30]. Due to the closure of educational institutes, all most all shifted to the online mode, which became a cause of increased anxiety among students. Many studies in China and other parts of the world showed that due the COVID 19 the lockdown have badly affected students' psychological state, and the levels of stress, anxiety and depression have increased beyond the norm (Sundarasen et al., 2020) [38]. After most of the governments, worldwide imposed strict restrictions to contain the spread of the COVID 19 disease, schools, colleges, and institutes of higher learning were also shut down to prevent the spread of the virus, but it adversely affected the emotional and psychological state of the student community. Besides this, they also faced the challenge concerning eLearning as suddenly the physical mode of learning shifted to virtual to cope with the technology, another factor that had a negative impact on them (Kapasia et al., 2020) [16]. The governments across the globe have given directions for the closure of campuses because of the pandemic, which has more likely affected international students from developing countries. These students experienced all sorts of stress and trauma, be it social, psychological, or economic (Firang, 2020) [11]. The abrupt shift to eLearning, curriculum changes, etc. created a sort of panic among students as many could not adjust to these changes. The other impacts on students' lives due to pandemic include loss of social connectivity, financial loss that accelerates stress and distress among students, thus causing more disruption in their day-to-day activities and studies (Lyons, Wilcon, leung, and Dearsly, 2020) [21]. Due to the COVID 19 outbreak, physical access to classrooms was restricted, and teaching-learning process was carried out using many online platforms. However, largely, students faced many difficulties, including psychological problems that may also be due to the fact that students have developed negative behaviour towards online learning. Also, there is fear among students of losing their academic year (Hasaon and Bao, 2020) [13]. One of the most important requirements for online classes is high speed connection to internet but unfortunately people in some states like Jammu and Kashmir have access to low speed internet connectivity which makes it very difficult for the students to attend their online classes (Pandita, Mishra and Chib, 2020) [29]. Looking at the scenario in Kashmir, after the abrogation of article 370 the most badly affected system was education sector because the students had to stay at home and they were not able to go to school. The internet was also banned during that tenure and because of that teachers were not able to give online classes as well (Kuthar, August 11, 2020) [18], so the current examination is an endeavour to evaluate the impact of COVID 19 on the already shattered education system of Kashmir.

#### **Review of Literature**

Aucejo, French, Araya and Zafer (2020) [5] analysed the impact of COVID-19 on students found that due to the epidemic 13% of learners have delayed education, 40% have either lost their job or offers. The study also showcased that one group of learners have increased the time for their studies due to the pandemic while as another group have decreased the same. Qiu et al. (2020) [31] performed a nation-wide survey on the people of China (including students) during COVID period to examine the level of psychological distress among them and came up with some implications and policy recommendation. In their survey they concluded that the pandemic stimulated many psychological problems like stress, panic etc. among all the residents of China. Marelli et al. (2020) [24] in their examination of COVID-19 lockdown on University students and staff concluded that student community was more affected by the COVID-19 as among the respondents it were students who showed more anxious symptoms. Moreover, females were more affected as compared to their counter parts. Zolotov, Reznik, Bender and Isralowitz (2020) [45] conducted a study on Israeli students to analyse the fear and mental health status in them in times of COVID where they observed that fear prevailed in them, though more in females than the males. Shafiq, Nipa, Sultana, Rahman and Rahman (2020) [36] performed a study on university students in Bangladesh to find out the factors of mental stress during COVID pandemic and found online classes to be a factor in stimulating psychological stress besides other factors associated with pandemic like academic fees, financial crises etc. Wang et al. (2020) [41] analysed the anxiety and depression symptoms in college students during COVID-19 where they established that the anxiety and depression symptoms were more prevalent in Under Graduate (UG) students while Post graduate (PG) students had lower risk of anxiety and depression symptoms. The mental health of students was seen affected not only due to the factors associated with pandemic but the other factors like education, health conditions also played a prominent role in deteriorating the mental health of students both at graduation and post-graduation level. for the same. Fordjour, Koomson and Hanson (2020) [28] assessed the impact of COVID-19 on students they revealed that majority of students are not able to give much time to their studies as compared to pre COVID. Adnan and Anwar (2020) [1] in their investigation on online learning during the times of pandemic inferred that a good number of pupils faced problems in virtual classes, majority were against of the view that online learning is better than conventional learning; maximum number of students faced difficulties in submitting and/or completing group projects and felt that face to face interaction with the teacher is must for learning. All these factors along with the spread of virus created panic among students thus, affecting their social, mental and economic aspects of living and learning processes. Griffiths

(2020) [20] in their study on suicides in India due to educational crises amid pandemic inferred that non-access to technology and/or education in view of pandemic had become a factor for mental stress for students of low-income groups and in that anxiety end their life for being too worried for their academic loss. Elmer, Mepham and Stadtfeld (2020) [9] in their examination of students' social networks and psychological health in times of pandemic observed that during the epidemic students realized of being more socially isolated and a sense of worry in them prevailed regarding family, friends, relatives, career, job etc. which resulted in stress, anxiety and depression. Their work also reflected that during this period there was least or no change in friendships or support groups. Radwan, Radwan and Radwan (2020) [33] examined the role of social media on students during epidemic inferred throughout this period students used different social sites mainly Facebook (81.8%) for studying as well as for getting information related to COVID 19. It was also observed using social media had much negative impact on the mental state of students largely females as compared to opposite gender. Al-Dwaikat, Aldalaykeh, Ta'an and Rababa (2020) [3] determined the relationship between social networking sites and mental distress among students during COVID time they found majority of respondents were females and the stress, anxiety, depression and fear prevailed more in them as compared to opposite sex. Moreover, it was also noticed by them that many social media platforms were used for various purposes like entertainment (91.1%), information, studying purpose and also for socializing. Khalil et al. (2020) [17] examined the views of students regarding online education during COVID period discovered that shifting of education to online mode, students had a mixed response as one group found it beneficial while other group disagreed to it. Also learners agreed that uploading audio lectures helped them in better understanding their course/studies. Shenoy, Mahendra and Vijay (2020) [37] analysed the impact of technological changes in teaching learning process they found that highly majority of students complained of suffering from eye-disorders and backaches however, good number of pupils agreed that using different gadgets for studying for too long made them feel lazy moreover, research showed that students can't develop social skills via online mode of learning and for learning to be effective they believed that in-person interaction with their tutor is essential.

#### **Objectives**

The objective of our study is to conduct a timely assessment of the effects of the COVID-19 pandemic on undergraduate and postgraduate students in the Kashmir valley by examining the following factors:

- 1. To investigate the time utilization by students during an ongoing pandemic,
- 2. To examine the Impact of COVID-19 on the educational progress of students,
- 3. To identify the problems faced by students related to studying at home during the pandemic,
- 4. To determine the Impact of prolonged use of electronic devices on students during a pandemic,
- To identify the students support system during ongoing crises.
- 6. To discover the Students post COVID-19 phase strategies,

#### **Data collection procedure**

An online survey was conducted from November 20 to December 10, 2020, to collect information from undergraduate and postgraduate students studying in various colleges and universities of Kashmir. A close-ended questionnaire link using 'Google form' was sent to students' through different social media platforms (Whatsapp, Facebook). Participants were provided full consent before participation in the online survey. A total of 108 students provided complete information regarding the survey.

## Data Analysis and interpretation Participant's characteristics

Table 1 displays the demographic profile of the study participants. Of 108 students, the majority of the respondents were male, 72(66.7) and almost two-thirds of them were in between the 20-25 years of age group. Moreover, the marital status of the majority (104, 96.3%) of the respondents are single, and most of the respondents 63 (58.3%) are currently studying in undergraduate classes.

Characteristics	Frequency_	Percentage	Characteristics_	Frequency	Percentage
Gender			Age		
Male	72	66.7%	15-20	27	25.0%
Female	35	32.4%	20-25	61	56.5%
Prefer not to say	1	0.9%	25-30	19	17.6%
-			Above 30	1	0.9%
Marital Status			Presently Studying		
Single	104	96.3%	UG	63	58.3%
Married	4	3.7%	PG	45	41.6%

Table 1. Characteristics of the study participants (n-108).

#### Time utilization by students during ongoing pandemic

The students were asked three questions against which they have to mark the level of their acceptance (Agree, Disagree, and Neutral); as shown in fig 1.it has been observed that the majority (55) of students disagree that they are able to concentrate more on studies during the ongoing pandemic on the other hand good number (42) of students agreeing that they are able to concentrate more on studies. In contrast, a least (11) number of students' shows a neutral

response.

Besides, The majority of students agreed that they have "utilized the time to upgrade their skills" (59); however, 34 students disagree with the statement while a few (15) students show a neutral opinion.

Regarding the "time utilization for competitive exams," it has been observed that a large score of students (57) agreeing with the statement while 29 students disagree with the same and 22 hold a neutral view in this regard.

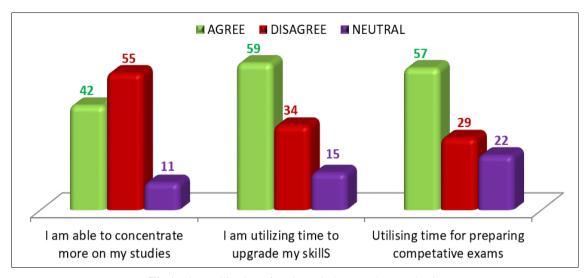


Fig 1: Time utilization of students during ongoing pandemic

### Impact of COVID-19 on educational progress of students

The students were asked to Considering the sudden closure of universities/colleges and uncertainty in reopening, please mark your level of agreement to the following statements. Regarding the effect of "closure of university/college," a larger score (86) of respondents believes that the same has affected them while 14 disagree with the same while as 8 hold a neutral view in this regard. In terms of "using IT for

the conduct of online classes", 46 respondents hold an opinion that the same has helped them to keep their educational workflow on track with 41 respondents disagreeing with the same while 21 respondents hold a neutral opinion in this regard. Observing the "remote library access," 52 respondents feel that the service has helped their studies, with 37 respondents disagreeing with the same while 19 hold a neutral opinion in this regard (Fig. 2).

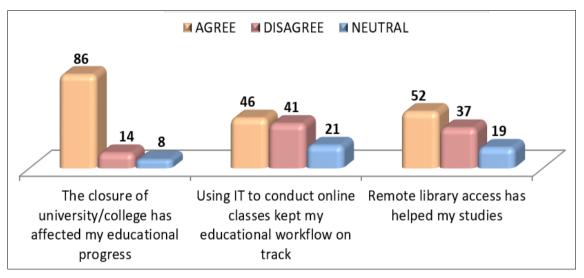


Fig 2: Impact of COVID-19 on educational progress of students

### Problems related to study at home during the pandemic

The Students were asked Please mark your response to the following statements considering the study from home situation fig 3. It was reported that the majority (81) of students agreeing that they are not able to concentrate on their studies at home; however, 18 students disagreeing with the statement, while 9 shows a positive response. Regarding the "interruptions in studies due to poor network and wifi

problem" majority of students agree that same has affected their studies while a significantly lower score of students disagreeing with the statement and shows neutral response (5 each). regarding the "limited resources," it has been observed that well score (53) of students disagree the statement, however, 44 students agree with the same while 11 students record a neutral opinion.

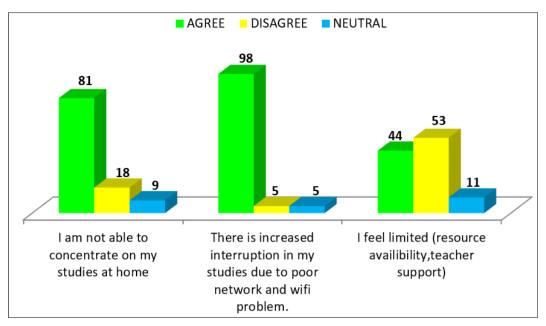


Fig 3: Problems related to study at home during the pandemic

### Impact of prolonged use of electronic devices during COVID 19

The students were asked to mark your level of agreement (Agree, Disagree, or Neutral) to the following statements fig 4.

**Statement 1:** The prolonged use of electronic devices has affected my posture

After analyzing the responses of the participants, it was found that the majority (76;70.37%) of the students are in favor that the prolonged use of the electronic device has affected their posture and causes strain while a very less

(17;15.74%) number of participants disagreed with the statement and few (15;13.88%) shows a neutral response. Statement 2: Now I feel better adopted to initial days Regarding this statement, the majority of students (48; 44.44%) are agreeing with the statement while on the other hand a good score (35; 32.40%) of students disagreeing with the same and some (25; 23.14%) shows neutral response. Statement 3: I feel restless and have difficulty in relaxing The majority of the students (73) are agreeing with the statement while a very less number (20) of the students disagreeing with the same; however, few (15) students shows neutral opinion.

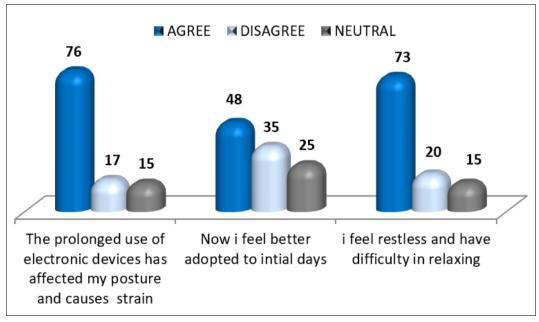


Fig 4: Impact of prolonged use of electronic devices

#### Students support system during ongoing crises

The students were asked the close-ended question that what is your support system during ongoing crises. The majority of the students (56) are of the opinion that family is the only support system to them, followed by social media (20);

however, 12 students believed that friends became their support system while as least number of students are of the opinion that teacher and others (10 each) becoming their support system during an ongoing pandemic. Fig 5

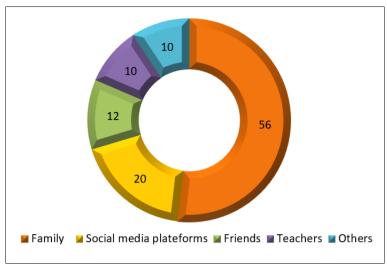


Fig 5: Students support system during ongoing crises

#### Students post COVID 19 phase strategy

The students were asked to mark their level of acceptance to the following statements regarding post COVID 19 phase. Regarding the "preparation to push oneself to reach his/her educational goals", the majority of the respondents (75) agree with the statement while 20 disagree with the same, while as 13 show a neutral response. In terms of "incorporation of new skills," 63 respondents agree with the

same, and 23 disagree about the incorporation of the new skills post COVID-19 phase, while as 22 show a neutral sentiment in this regard. Looking upon "future educational workflow", it is evident that a large score (86) agrees with the same while as a negligible score disagrees with the same. However, 15 respondents show a neutral response in this regard (Fig. 6).

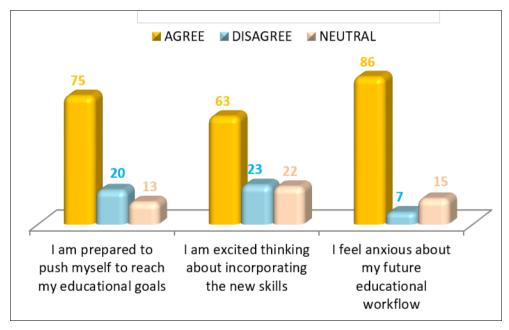


Fig 6: Students post COVID 19 phase strategy

#### **Findings**

The majority of students are utilizing the time to upgrade their skills and preparing for competitive exams. The sudden closure and uncertainty in reopening of universities and colleges have highly affected students' educational progress, but to some extent, information technology, online classes, and remote library services have kept their educational workflow on track. The findings aligned with the similar studies that have been conducted by (Radha, Mahalakshmi, Kumar, and Saravanakumar, 2020) [32]; they found that online learning has gained popularity among students during the lockdown period of COVID-19 and had become a way for them to be associated with their studies. Another study carried out by (Guo, Yang, Yang, Liu, Bielefield, Tharp,

2020) [12] perceived more than 90% of libraries associated with academic institutes in China provided not only remote library services to its users but also other services (like virtual reference service, providing e-content etc.) during COVID outbreak as a means of obtaining information by students and continue their academic journey. (Tsekea and Chigwada, 2020) [40] also recognized that due to the spread of the virus and closure of all institutes of learning, academic libraries played a crucial role in such times by providing access to e-resources using various ICT tools to its patrons and paved them a way to keep their studies going during such crises.

Regarding the study at home situation, it was found that students cannot concentrate on their studies and the poor

internet connectivity and wifi problem have increasingly interrupted the studies of students. (Nambiar; Neuwirth, Jovic and Mukherji, 2020) [26] also found learners are not able to give proper attention to their studies due to various reasons like disturbances and no quiet space available in their residential area or at homes. According to Pandita, Mishra and Chib, (2020) [29] people in some states like Jammu and Kashmir have access to low-speed internet connectivity, which makes it very difficult for the students to attend their online classes. Another study conducted by (Mahdy; Mishra, Gupta and Shree, 2020) [22] found that communication network connectivity, internet accessibility; access to ICT tools and so on are the main issues students and teachers face to carry the virtual learning process effectively and efficiently. Poor network connectivity, power cuts, broadband issue, and so on were the main obstacles faced by learners in online mode (Nambiar, 2020) [26]. It was found that the majority of students agreeing that prolonged use of electronic devices has affected their posture, cause strains, and feeling difficulty in relaxing but with time, students feel better adopted as compared to initial days. similar findings were revealed by (Majumdar, Biswas and Sahu, 2020) [23] where they found due to increased use of electronic devices for educational purposes and least physical activity due to lockdown restrictions, students complained of deteriorating physical health and suffered from joint pain, back pain and so on. (Celenay, Karaaslan, Mete and Kaya, 2020) [39] also noticed musculoskeletal related issues increased in people who worked from home including students and back pain was also prevalent in them during COVID times.

It has been found that family followed by social media have become the only support system for students during ongoing pandemic. Our finding are in line with the finding Aristovnik, Kerzic, Ravselj, Tomazevic and Umek, (2020) <sup>[4]</sup> who also reported that students are mainly dependent upon family and/or close family member for communication in times of COVID-19 and after family another way of communication were social networking sites.

Regarding the post COVID strategy of students it has been found that majority of students are prepared to push themselves to achieve their educational goals and are excited about incorporating new skills among themselves however, students are also anxious about their future educational workflow. (Rahiem, 2020) [34] also found although students lacked the pace to keep up with online learning yet they were determined and motivated to challenge themselves in circumstances like COVID and improve their grades and their academic progress. The research carried out by (Hau, Mao, Dong, Cai and Deng, 2020) also concluded anxiety and stress have increased among students due to the pandemic where main cause is their academic performance. The COVID 19 pandemic triggered anxiety among students which is attributed to the fact that learners are worried about their academic life and career as observed by (AlAteeq, Aljhani and AlEesa, 2020)

#### Conclusion

Coronavirus pandemic has influenced each area around the world—the educational sector of India, just as the world is seriously impacted by this. The pandemic has maintained the overall lockdown having a horrendous effect on the students' life. The valley of Kashmir, which was already under turmoil since the post abrogation of article 370 with

continuing internet barricade or low internet speed, has already affected college and university students; the cross country COVID-19 lockdown has added to their plight. The world has moved towards online education to proceed with their education framework; however, in Kashmir, because of low internet speed, it would not get workable for stakeholders, so the effect of COVID-19 on UG and PG students has been critical in Kashmir. The examination may provide insights for responsible stakeholders engaged with educational intuitions in Kashmir. The Government and educational organizations should take genuine note of students' predicaments and devise acceptable systems to defeat their issues and give sensible arrangements.

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