



## Virtual Studies—Academic Revolution of COVID-19: A Case Study of Department of Anthropology, University of Arid Agriculture, Rawalpindi

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**Abstract:** *The pandemic of Covid-19 has indeed affected the overall modern lifestyle globally. The lockdown leads to the closure of educational institutes around the world. The situation is not different in twin cities (Rawalpindi and Islamabad). The present research was designed to collect the opinions and perceptions of students regarding virtual learning. Department of Anthropology offers Facebook online classes for its students combined with the University's central learning management system (LMS) to provide an online platform for sharing course material(s). 64 students of Anthropology participated in this study voluntarily. Google form was designed and shared with the students through Google link for the collection of data on certain indicators such as class, location of the respondent, internet access and related technological issues, comprehension of LMS, etc. The shift towards virtual studies has revolutionized and also created certain operational challenges.*

**Key Words:** Virtual Studies, Learning Management System, Education, Covid-19, COVID-19 and Education, Distance Learning

### Introduction

World Health Organization (WHO) announces on 12-Jan-2020 that Coronavirus was the main reason for a respiratory infection among the people of Wuhan, China ([Elsevier, Jan-2020](#); [Reynolda, March-4, 2020](#)). If we compare Severe Acute Respiratory Syndrome (SARS) that occurred in 2003 and COVID-19, the ratio of fatal cases in COVID-19 is much lower, but the rate of transmission is significantly greater, followed by a considerably high death rate ([WFSA, March-11, 2020](#)).

COVID -19 not only affects the health care system around the globe but also affects the education system of the world. Schools, colleges, and universities are almost entirely close. As of 27 April 2020, almost 1.725 billion students have been disturbed as a result of the precautionary measures to restrain the infection spread. UNICEF monitoring reports mentioned that around the globe, 186 countries are presently executing

countrywide closures of educational institutions, while 8 counties are instigating termination of classes at the local level, impacting around 98.5% of the student population of the world (UNESCO, 2020).

### Historical Perspective

During the influenza pandemic of 1918-1919 in the USA, the closure of educational institutions and public gatherings were linked with lower rates of mortality ([Barnum, March-09, 2020](#)). Towns and cities that implemented closure practices in the early days can reduce the mortality rates ([Jackson et al., 2013](#); [Markel et al., 2007](#)). During the Spanish flu, educational institutions had been closed for an average period of 4 weeks, as per a study of 43 US cities ([Markel et al., 2007](#)). Historically it was documented that during the 1957-58 Asian flu outbreak, termination of

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learning activities in schools were shown to decrease disease up to 90% (Chin et al., 1960), and up to 50% in controlling influenza in 2004-2008 in the US (Wheeler, Erhart, & Jehn, 2010).

**Table 1.** Education Institution's closure and Global Overview

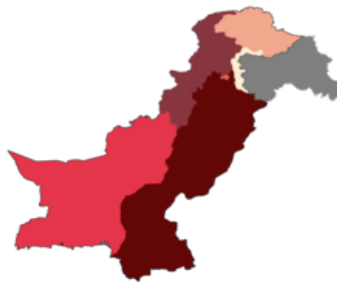
Date	The Practice of Educational Institution Closure
26-Jan-2020	China's state close all educational institutions and extending the Spring festival Holidays
23-Feb-2020	Iran; Ministry of health officially stated the closure of education institutes within numerous cities and provinces
03-Mar-2020	UNESCO reported first global school closure numbers and affected students as a result of preventive measures
04-Mar-2020	Italian state announced complete closure of all educational institutions nationwide when confirmed death toll touches 100.
05-Mar-2020	233 million students from China, 16.5 million from Japan, and 14.5 million learners from Iran affected by COVID-19
13-Mar-2020	49 countries implemented the same policy of school closure. The majority with nationwide closure, and some exercised localized school closure.
16-Mar-2020	The number of countries increased from 49 to 73 countries.
20-Mar-2020	The number of affected students stretched over 70%, with 124 countrywide school closures
27-Mar-2020	Additionally, around 90 percent of the global learners were not in class. Constituencies with schools continuing open comprised Singapore, Taiwan, Sweden, Australia, and some US states.
29-Mar-2020	Above 1.5 billion kids and other students were affected by the countrywide school shutdown, while others were disturbed by the limited shutdown.

Source: UNESCO, 2020

### COVID-19 and Pakistan

On 26-Feb-2020, it was confirmed that COVID-19 reached Pakistan when an Iran return student tested positive in Karachi (GOP, 2020). In the third week of March, cases had been reported around the country, including four provinces, FATA, PATA, Gilgit Baltistan, and Islamabad. In Punjab, recorded cases were over 7100. In KPK, reported deaths were 172, which shows the highest

death toll among all provinces in Pakistan (Gul, Feb-26, 2020). With the changing situation, authorities directed an order to implement nationwide lock until May-09-2020 (Rizwan, April-24, 2020), which was originated on April-01 and later extended twice (The Statesman, April-2, 2020). Rendering statistics updated on May-03, 2020, there had been 19,100 above confirmed patients with recoveries 4,315 and 385 deaths nationwide.



**Figure 1.** Pakistan's Map of Coronavirus confirmed cases (as of 4 May)

Sources: National Institute of Health (NIH) and Government tracker

- 1-99 Positive cases
- 100-399 Positive cases

- 400-999 Positive cases
- 1000-2999 Positive cases
- 3000-6999 Positive cases
- 7000 above Positive cases

### Commencing of Online Classes

Many Pakistani students all over the world were stranded in hopes of assistance from the Pakistani government. In the UK, for example, a nationwide lockdown was announced on March 23, and this led to the cancellation of flights and immobility (Zeeshan et al., 2020). The students faced serious stress and anxiety globally. As Coronavirus containment measures spread in South Asia, universities in countries such as India, Pakistan, and Afghanistan have begun to discover that they are ill-prepared for online learning or remote classes as their campuses are close and their students return home, sometimes to remote areas without internet or proper facilities to continue classes (Khan et al., March-26, 2020). Amid the COVID-19 pandemic in Pakistan, the Higher Education Commission of Pakistan announced the closure of all public and private universities and Higher Education Institutes from mid of March 2020 (Zeeshan et al., 2020).

As per the instructions by HEC, universities try to manage online/virtual education systems within the least possible time, as both public and private educational institutions close down. Arid Agriculture University, Rawalpindi is among those many institutions that have implemented the online education system at their earliest. For this purpose, the Department of Anthropology of Arid Agriculture University utilized the Facebook Live feature to deliver online lectures to the students, where each teacher delivers their session(s) according to the shared class timetable. The present research is an effort to obtain an opinion of the students on this online effort of the department as well as the usage of the university's

Learning Management System (LMS). Their opinions and suggestions have been gathered to analyze the situation of Pakistan.

### Materials and Methods

The present research was designed to collect the opinions of students regarding virtual learning after the global closure of the universities due to the Coronavirus pandemic. PMAS-Arid Agriculture University, Rawalpindi (UAAR) has been selected for this study, while students of the Department of Anthropology have been selected as the sample. Department of Anthropology offers Facebook online classes for its students, combined with University's central LMS to provide an online platform for sharing course material. 64 students of Anthropology participated in this study voluntarily. To collect data, Google form was designed and shared with the students through Google link. Later, the responses were edited and analyzed in Microsoft Excel.

### Results and Discussion

Most of the governments across the globe have provisionally closed educational institutions to comprehend the spread of the COVID-19 pandemic. These countrywide terminations are impacting over 72 % of the global student population. Many other nations have executed limited closures affecting millions of extra learners. UNESCO is facilitating states to boost their energies to mitigate the immediate impact of education terminations, mostly for a more helpless and deprived population and, to facilitate the continuity of education for all through remote learning (UNESCO, 2020).

Table 2.

Basic Indicator	Category	n	%
Gender	Female	51	79.7%
	Male	13	20.3%
Class	BSc	11	17.2%
	MPhil	1	1.6%
	MSc	51	79.7%
Current Location	NA	1	1.6%
	Rural	27	42.2%

Basic Indicator	Category	n	%
Living with whom	Urban	37	57.8%
	Alone	2	3.1%
	Family	58	90.6%
	Relatives	4	6.3%

Table 2 shows the demographic indicators of respondents, including gender, class, current location, and living with whom during the current lockdown. In gender-wise distribution, female students make a higher percentage than that male students. The educational category shows that a total of 13 students participated from the class of BSc, while 51 students belonging to the class of MSc took part in the study, bringing their

percentage to 79.7%. About 42.2% of students involved in this research currently reside in rural localities, while about 57.8% of the students are urban residents, marking as the majority of the participants. In response to the 'living with whom' category, only 2 participants were marked as living alone, while about 90.6% of respondents shared their status as 'living with their families'.

**Table 3.**

Internet Usage and Expenses	Category	n	%
Do you have an internet connection	No	6	9.4%
	Yes	58	90.6%
If Yes, what type of internet connection do you possess	Other	9	14.1%
	CharG	4	6.3%
	Landline	15	23.4%
	Mobile Data	36	56.3%
Do you manage the internet costs from your pocket money	Mostly	11	17.2%
	No	32	50.0%
	Yes	21	32.8%
How much do you pay extra for internet charges in this new situation/online studies, if any?	<500	7	10.9%
	501-1000	14	21.9%
	1001-1500	11	17.2%
	1501-2000	6	9.4%
	>2000	13	20.3%
	NA	13	20.3%

Table 3 is used to describe the available internet facilities for students to participate in the online classes arranged by the department to address their educational loss during the COVID-19 lockdown. The majority of the respondents possessed internet facilities [90.6%], while 9.4% of the respondents did not own the basic internet requirements. In response to the question regarding 'type of internet connection', about 56.3% of the respondents checked 'mobile data',

whereas 23.4% went for the landline services. Upon inquiring whether the internet costs were managed from their pocket money or not, 32.8% of the respondents claimed to have paid for the bills themselves, 17.2% stood at a median point, while a majority of 50% did not bear their internet costs themselves. The majority of the respondents also reported that the virtual classes had posed additional charges on their internet bills.

**Table 4.**

Online Education and Student's Response	Category	n	%
Are you attending the online lectures offered by the department?	Yes	64	100.0%
If yes, which device do you use?	Android Mobile	55	85.9%
	Laptop	9	14.1%

Online Education and Student's Response	Category	n	%
What is the medium of your online classes?	Facebook	64	100.0%
	Any Other	3	4.7%
Which medium is easier to handle?	Facebook	56	87.5%
	NA	2	3.1%
	Skype	1	1.6%
	Zoom	2	3.1%
	1.5GB	3	4.7%
	1GB	5	7.8%
On average, how much is your internet used for online lectures per day?	2GB	5	7.8%
	500MB	3	4.7%
	More Than 2GB	12	18.8%
	No Idea	36	56.3%
	2	6	9.4%
	3	4	6.3%
	4	12	18.8%
How many lectures did you attend weekly?	5	3	4.7%
	6	20	31.3%
	7	3	4.7%
	8	10	15.6%
	9	6	9.4%

Table 4 categorizes the responses regarding the online educational practices of students. According to the responses recorded in this table, almost every respondent reported having attended the online lectures, out of which 85.9% claimed to use Android mobiles while 14.1% made use of their laptops. A complete fraction of the respondents were found to have used Facebook as the medium to attend the online lectures; and 87.5% of these respondents voted for Facebook to be convenient for them to use as compared to other media software, with only 3 respondents in favor of media other than Facebook. An important aspect of these series of questions included the internet data spent per day to attend the online lectures. A majority of 56.3% of respondents claimed that they did not track the internet data spent, while 18.8% of the respondents reported having spent about 2 GB internet volume daily.

The responses regarding the frequency of attended lectures per week varied significantly. About 9.4% went for 9 lectures per week, about 15.6% for 8 lectures per week, whereas the maximum number of respondents, i.e. 31.3% claimed to have attended 6 lectures a week.

### Revisiting Live Lectures

Facebook Live enables the faculty to document their online sessions in the form of videos, from where the students may refer back to them in case they had missed the online class due to poor connectivity. The respondents proclaimed that the lectures were easily available on the relevant Facebook page from where they would access them. Some of the students also reported that they would either download the online lectures or share the post on their timeline to revisit whenever they needed it.

Table 5.

Virtual Studies and Student's Opinion	Category	n	%
Do you think online lectures will help you continue your studies?	No	18	28.1%
	Yes	46	71.9%
Do you think the faculty gives you quality time and material for your studies?	No	4	6.3%
	Yes	60	93.8%
How do you rate this live teaching activity?	1	13	25.3%
	2	18	33.1%
	3	16	15.0%
	4	7	10.9%

Virtual Studies and Student's Opinion	Category	n	%
Do you think that the university LMS is easy to use?		5	15.6%
	No	14	21.9%
	Yes	50	78.1%
Do you think any improvement is required about LMS of UAAR?	No	30	46.9%
	Yes	34	53.1%

Table 5 elaborates on the student's opinions regarding the online learning system and their extent of satisfaction with this activity. Where a greater proportion of about 71.9% of the respondents declared the online classes to be a convenient way to address the current educational crisis amid the Coronavirus lockdown, about 28.1% of the students disaccorded with this notion and deemed the online lectures to be unsound. When inquired about the quality of the study material provided to the students and the time spent for this purpose, about 93.8% of the students reported being satisfied with both. Moreover, more than half of the respondents rated the 'live' scheduled classes in the first and second ranks, whereas 15% of respondents ranked it third. To evaluate the university's Learning Management System, 78.1% signified it to be convenient and user-oriented, while as many as 14 respondents found it to be user-hostile in terms of operating it. Due to this, options were provided to the students to obtain a range of desirable suggestions for improving the quality of LMS, where 53.1% of students went in favor of taking measures towards precision.

### Enhancing Online Learning Opportunities

Regular university classes involving face-to-face interaction may not be compensated and/or replaced with online sessions—that lack the opportunity for the students to conduct presentations and for teachers to assess the students on a spectrum of criteria such as social behavior, expressions, and response to the class environment. However, the students shared their opinions and suggestions to further improve the online education system. Devising solutions for the experienced technical issues stood above all the measures that could be taken to better the cause. Furthermore, they also recommended the provision of orientation sessions to the students regarding the handling and managing of the technology. As the department faculty manage to give their best by making use of high-quality

cameras and microphones to deliver the virtual lectures, the students put forward their proposition of developing the department's official website as a common platform for making available all the scheduled online lectures, presentations, and supplementary reading material to all students. Incorporating slides into the video screens to promote clarity was another factor proposed by some students. Besides potential additions and amendments on the part of the department, they also stressed enhancing the sense of responsibility and a serious approach by the students themselves to prove the department's efforts effective and fruitful.

### Limitations of Virtual Learning

Novel COVID-19 has proved to have disrupted not only the general lifestyles of people but also the economic patterns, social behaviors, and other aspects such as education systems around the globe. Schools, colleges, and universities have been shut down globally, and institutions have been trying to establish new methods for education since then. Students have complained about how the current situation has impacted their physical presence in the classrooms, library visits, and group studies. At home, a student is unable to deliver his/her best and spend quality time for education due to domestic responsibilities and scheduled family patterns. As a result, the pandemic has immensely troubled the research students who had been working with their respective supervisors and contacting their respondents to learn and produce quality scientific research work. University examination, scheduled presentations, teacher-student meetings, field research activities, etc., have come to a halt as a result of the pandemic lockdown. An important component of an influential lecture is the teacher-student interaction, which is not possible during an online lecture. Mode of communication, lecture delivery styles, study timing, and habits are disturbed, which may result in inappropriate conduction of the examinations and incompetent marking patterns in the future.

Where most students have reported evident disruption of their academic lives, they have also complained about increasing levels of anxiety and

depression whilst staying at home, seriously aggravating their physical as well as mental health issues.

**Table 6.**

Studies and Household Chores	Category	n	%
Are you doing household chores while staying at home?	Yes	33	51.6%
	No	2	3.1%
	Mostly	16	25.0%
	Sometime	13	20.3%
Is it difficult for you to adjust your time between household chores and online lectures?	No	17	26.6%
	Yes	47	73.4%
If Yes, how do you manage?	Household chores first	3	4.7%
	Lecture first	15	23.4%
	Mix	29	45.3%
	No	6	9.4%
Do you think your family spares you for your virtual studies?	Yes	32	50.0%
	Yes, Mostly	26	40.6%

Table 6 portrays the student's struggles of managing virtual studies along with their domestic responsibilities during the Coronavirus lockdown. Most numbers of students were found to have managed their studies with their household chores, whereas only 3.1% disfavored the subject. About 73.4% of respondents asserted the management of both household chores and online lectures to be 'difficult', in contrast to which 26.6% of respondents checked the alternate

option. As many as 45.3% of the respondents were found to execute both tasks interchangeably, while 23.4% of the students prioritized their online lectures over the household chores, and only 4.7% went for the latter first. The obtained data also reveals that a majority of the student's families had spared them from domestic responsibilities when it came to their virtual studies.

**Table 7.**

COVID19: Knowledge and Practices	Category	n	%
Do you know what Coronavirus is?	Maybe	6	9.4%
	Yes	58	90.6%
	Maybe	12	18.8%
Do you know what Novel Coronavirus is?	No	21	32.8%
	Yes	31	48.4%
Are you practicing to stay at home?	No	2	3.1%
	Yes	62	96.9%
	Mostly	6	9.4%
Are you practicing social distancing?	No	3	4.7%
	Yes	55	85.9%

Table 7 sheds light upon the level of awareness among the students regarding the COVID-19 outbreak. 90.6% of the respondents were aware of the basics of the Coronavirus, whereas 6 respondents were reported to have an unconfirmed realization about the disease. About 48.4% of the respondents showed an

Understanding of the Novel Coronavirus, whereas 32.8% had no consciousness about what the Novel Coronavirus is. A major fraction of about 96.9% of the respondents was found to be staying at home, whereas 85.9% of the participants were reported to be practicing social distancing as well.



## Virtual Studies—Challenge or Way Forward?

The pandemic has revolutionized the education system and the academic world around the globe. The trend of virtual studies has increasingly been adopted by most-to-all educational institutions worldwide. Reaching out to the students appeared as a major challenge to the public sector universities of Pakistan, which have a larger mandate and quota of students from all across the country (Zeeshan et al., 2020). Yet, This provides an exceptional opportunity to experience the new form of learning, identify the gaps, and struggle to improve what needs to be improved for both: the teachers and the learners. Usually, many students belonging to remote and peripheral zones do not own the basic requirements of internet connections. However, the onset of virtual studies might as well provide them with a chance to avail themselves of internet connections and continue their studies. Where many students did not consider the online studies more convenient than regular classes, most of them acknowledged and appreciated the efforts and contribution made by the Department of Anthropology, Arid Agriculture University, Rawalpindi in arranging resources to utilize their time efficiently. Talking about how virtual learning has proven to be fruitful for them, most students referred to it as a productive activity to be engaged in during the lockdown. While most of the people are locked inside their homes, with little or no activities, most students preferred attending online classes to make their locked-down lives creative. On the contrary, virtual learning has also pushed some students to bring complaining comments to light while expressing their views. Not being able to meet with their teachers instilled a thought of augmenting distance in their relationship, while some feared their self-grooming, personality development, and real-life exposure might be the potential costs of not being able to physically attend the classes. Others expressed how their families had engaged them in household chores, thinking the lockdown has instated a vacation.

## COVID-19—Transcending Realities

In order to contain the spread of Coronavirus (COVID-19) disease, strict border closure measures have been taken globally (Zeeshan &

Sultana, 2020). The novel Coronavirus has emerged as a war with humanity. Ever since the onset of this disease, man has been applying scientific wisdom to eradicate or minimize this wave. Multiple nations around the globe have been utilizing their human capital as well as their economic assets to develop a potential vaccine, where some are under clinical trials as well. Amidst this crisis, COVID-19 has not only proved to be catastrophic for the general public's socio-cultural practices, but it has also severely disrupted their emotional and psychological health. Pakistan, an underdeveloped country; who is already on the verge of a breakdown, has been burdened by this new pandemic. The steps taken by the government of Pakistan are exceptional to counter the effect of COVID-19, but it is still a question mark whether the policies will be enough to surpass this Pandemic (Khan et al., 2020). This pandemic has also revealed the current status of developing as well as developed nations regarding their preparedness and crisis management at national levels. Statistics show a higher rate of deaths in the developed nations as compared to developing and under-developed countries, implying that this virus transcends the usual economic stratifications. Among the numerous shock waves triggered by this pandemic are health crises, shortage of basic use accessories, inflated market rates, and increased unemployment levels for the daily wagers, small businessmen, and families with no male earners. Many people still do not practice the measures instructed to curb the spread of the disease. However, where the terrors of the novel Coronavirus prevail, people of the technological era are spending time with their families, cooking and dining in along with small talks, and regaining their ever-important relationships. Where they once used to live alone together, entangled in the technological web of the present age, the COVID-19 lockdown has spared people from their monotonous routine to breathe fresh air, hear the unheard, see the unseen, and live with their loved ones. Transcending all realities of the modern world, the Coronavirus has brought even the most economically sound nations to their knees. However distressing, the novel Coronavirus has seemingly invited human beings to explore their true selves and unite—once again—in the name of humanity.



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