

ORIGINAL ARTICLE

Analysis of Effects of Covid-19 Pandemic on Students' Academic Performance at Post Graduate Level

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ABSTRACT

The viruses which effect human respiratory system especially throat belongs to SARS family of viruses. Covid-19 stands for Corona Virus Disease, 2019. The corona virus pandemic belongs to family of severe acute respiratory syndrome (SARS) which cause difficulty in breathing. Corona virus originate from china in December 2019. The present study was conducted in Punjab, and Pakistan. The sample of 187 respondents was selected for data collection. Questionnaire was used for data collection. The data were collected from University of Agriculture Faisalabad, Quaid-e-Azam Medical College/Bahawal Victoria Hospital Bahawalpur and GC University for women Madina Town, Faisalabad. The collected data were analyzed by using computer software i.e Statistical Package for Social Sciences (SPSS). It was concluded from the present study that Covid-19 had badly affected the educational activities of the students. The students were not getting effective education due to poor availability of internet services and lack of trainings regarding online learning. The educational institutions should train the students to with such pandemic situations with the help of ICTs institutions.

Keywords: Viruses; Disease; Education; Internet; Training

INTRODUCTION

The viruses which effect human respiratory system especially throat belongs to SARS family of viruses. Covid-19 stands for Corona Virus Disease, 2019. The corona virus pandemic belongs to family of severe acute respiratory syndrome (SARS) which cause difficulty in breathing. Corona virus originate from china in December 2019. First patient of corona virus was declared in 26 February 2020 in Pakistan (Kuhfeld and Tarasawa, 2020). Its enormous and comparatively wide spread effects made the people afraid. The government provide awareness about the dangerous effects of corona virus disease. The federal government enforced lockdown in the mid of March 2020. All government and private sectors were closed in lockdown, including educational institutions like schools, colleges and universities. All educational activities were stop in the lockdown. The government allowed the universities to conduct online classes and exams to facilitate the students and continue the educational activities to overcome the problems of students.

The effects of Covid-19 are now considered by the education sector. UNESCO reported that Corona virus pandemic greatly effects the educational zone. Probably 30 crore learners disturbed their educational events over the world and frightened about their future (Handoyo, 2020).

The COVID-19 infection spreads essentially through drops of spit or release from the nose when a contaminated individual hacks or wheezes, so it's significant that you additionally practice respiratory manners (for instance, by hacking into a flexed elbow). The most ideal approach to forestall and hinder transmission is being very much educated about the COVID-19 infection, the sickness it causes and how it spreads. Shield yourself as well as other people from contamination by washing your hands or

utilizing a liquor-based rub as often as possible and not contacting your face (Sexton et al., 2020).

Before the lockdown in Pakistan thirteen countries including china, Italy and Japan had closed their educational institutions over the country is an effort to break the chain of spreading Covid-19. The virus effects the Chinese students first whose ranges from 29 crores probably (Palu, 2020).

In the Pakistan, the government adopt indecisive policy to stop the spread of corona virus in the country. The Sindh government declare lockdown first in the province and close their educational institutes to secure the students from the virus. The federal government, then decided to declare lockdown in the country and close the educational institutes for an un decided period. During the closure of educational institutes, the universities announced online classes for the continuation of educational activities in the country. Online exams were conducted by some universities in the country (Alradhawi et al., 2020).

In Malaysia some educational institutions provisionally closed and admission process had been adjourned to stop the spread of virus (Edge, 2020). The Chinese ministry of education prolonged the spring holidays to educational institutes. New session of classes was adjourned for undecided time period. South Korean government also exceeded their holidays at secondary school level (Kim and Denyer, 2020).

A large range of people contaminated with the COVID-19 infection had encounter gentle to direct respiratory disease and recuperate without requiring extraordinary treatment. More established individuals and those with hidden clinical issues like cardiovascular infection, diabetes, persistent respiratory sickness and disease are bound to create genuine ailment. As of now,

there are no particular immunizations or medicines for COVID-19. Nonetheless, there are numerous continuous clinical preliminaries assessing expected medicines. WHO keeps on giving refreshed data when clinical discoveries become accessible (Board, 2020).

There is a lot of limitation in their social life and vulnerability about when this confinement interaction will end. Consequently, youngsters are thought to have mental results like dejection, sadness, outrage, negativity, and misery. Another gathering influenced by Coronavirus is moderately aged and old individuals. At the point when we take a gander at the Coronavirus Casualty Rate by AGE, age level of individuals who passed on as a result of Coronavirus is viewed as "80+ years old 21.9%, 70-79 years of age 8.0%, 60-69 years of age 3.6" (Worldometers, 2020).

During the detention of corona virus pandemic, the appearance of students in the institutions and their learning events were almost closed. Teachers and students were advised to acclimatize self-isolation. The period of self-

isolation and closure of educational institutions was undecided. Multiple approaches were used to facilitate the students to overcome the gap of education. The Canadian government allowed the students to study at home with the help of distant subjects and online examination system. The teachers were responsible for grading their students (Emami, 2020).

METHODOLOGY

The present study was conducted in Punjab, Pakistan. Three collages were selected randomly. The sample of 187 respondents was selected for data collection. Questionnaire was used for data collection. The data were collected from University of Agriculture Faisalabad, Quaid-e-Azam Medical College/Bahawal Victoria Hospital Bahawalpur and GC University for women Madina Town, Faisalabad. The collected data were analyzed by using computer software i.e Statistical Package for Social Sciences (SPSS).

RESULTS AND DISCUSSION

Table 1: Distribution of the respondents regarding the negative effects on educational activities of Covid-19

Statements about online classes during Covid-19 have Negative effects on educational activities	Mean	Std. Deviation	Weighted score	Rank order
Extra curriculum activities effected by online learning	3.973	.8193	743.0	1
Zero socialization	3.930	.6644	735.0	2
Load shading effect the online classes and exams	3.904	.9283	730.0	3
Technology issues	3.834	.9556	717.0	4
Remote learning is the lack of personal interaction between student and teacher	3.797	.8807	710.0	5
Shortage of time	3.791	.9751	709.0	6
Require self-motivation	3.599	1.0649	673.0	7
Online learning shatter the academic dreams of students	3.337	1.1909	624.0	8
Inability to focus on screens	3.316	1.1832	620.0	9
Online learning increase the rate of dropouts due to loss of interest	3.283	1.2615	614.0	10
Increase the cases of cheating	3.241	1.2229	606.0	11
Students felt dissatisfied form the syllabus covered through online classes	3.199	1.2684	595.0	12
Virtual environments allow students to create a world that encompasses anything they can dream up	3.182	1.2439	595.0	13

Scale: 1= Strongly disagree, 2= Disagree, 3= Average, 4= Agree, 5= Strongly agree

Table 1 pointed out the ranking of respondents regarding online classes during Covid-19 has negative effects on educational activities according to their mean value, weighted score, standard deviation and rank order, in which top ranking was given to the highest mean value (3.973) which shows that respondents were agreed that extra-curricular activities negatively affected by online learning. The 2nd ranking was given to the mean value (3.930) which shows that respondents were agreed that online classes during Covid-19 has zero socialization. The 3rd ranking was given to the mean value (3.904) which shows that respondents were agreed that load shading negatively affect the online classes and exams during Covid-19. The 4th ranking was given to the mean value (3.834) which shows that respondents were agreed that technology issues were also there in online classes during Covid-19. The 5th ranking was given to the mean value (3.797) which shows that respondents were agreed that remote learning during Covid-19 has lack of personal interaction between student and teacher. The 6th ranking was given to the mean value (3.791) which shows that

respondents were agreed that shortage of time still an issue in online classes. The 7th ranking was given to the mean value (3.599) which shows that respondents lie between the scale from neutral to agreed that online classes during Covid-19 has negative effects on developing self-motivation. The 8th ranking was given to the mean value (3.337) which shows that respondents showed their trend between the scale from neutral to agreed that online classes during Covid-19 shattered academic dreams of students. The 9th ranking was given to the mean value (3.316) which shows that respondents were neutral about the students has inability to focus on screens during online classes. The 10th ranking was given to the mean value (3.283) which shows that respondents were neutral about online classes during Covid-19 increased the rate of dropouts due to loss of interest. The 11th ranking was given to the mean value (3.241) which shows that respondents were neutral about online classes during Covid-19 increased the cases of cheating. The 12th ranking was given to the mean value (3.199) which shows that respondents were neutral about students felt dissatisfied form the syllabus covered through online classes during Covid-19 and last ranking was given to the mean value

(3.182) which shows that respondents were neutral about virtual environments allow students to create a world that encompasses anything they can dream up.

UNESCO (2020) reported that the episode of Coronavirus adversely influenced instructive exercises around the world. The Covid-19 pandemic influenced instructive frameworks around the world, prompting the inescapable terminations of schools. It made genuine interruptions in scholastic exercises, just as in vocation plans. As a feature of the worldwide endeavors to battle Coronavirus, numerous nations across the world shut down schools trying to contain the Covid-19 pandemic. As per the United Nations Educational, Scientific and Cultural Organization (UNESCO) checking, more than 100 nations carried out cross country terminations, affecting over portion of the world's understudy populace. Indeed, even

Britain, where Prime Minister Boris Johnson - one of the people who prior gone against the move, later conceded that "shutting down schools could put further descending tension on the vertical bend of the Coronavirus outbreak"(ABC News, 2020). A portion of the nations that shut down schools due to Coronavirus incorporate, Nigeria, Ghana, Senegal, South Africa, China, Kazakhstan, Ethiopia, Honduras, India, Japan, Iran, USA, France, Spain, Italy, North and South Korea, Lebanon, Vietnam, Thailand, Germany, and South Korea just to make reference to yet a couple. School terminations convey high friendly, instructive and monetary expenses, and the disturbances they cause contact individuals across networks, yet their effect is especially extreme for impeded people and their families.

Table 2: Distribution of respondents regarding positive effects of Covid-19 on students learning regarding these areas of study

Statements regarding Covid-19 has positive effects on students learning regarding these areas of study	Mean	Std. Deviation	Weighted score	Rank order
Syllabus coverage problem	3.936	.8205	736.0	1
Non-availability of electricity creates problem during online exams	3.898	.9477	729.0	2
Shortage of time to complete paper	3.866	.8540	723.0	3
Achieve high grades	3.706	.9005	693.0	4
Diversity of timetables effects student learning routines	3.604	1.0593	674.0	5
Less competition among students	3.567	1.1021	667.0	6
Enable children to learn continuously both in university and at home	3.519	1.0693	658.0	7
Universities introduce courses through online portals which help students to learn new concepts	3.449	1.0882	645.0	8
Students were well prepared to use technology appropriately	3.427	1.1211	634.0	9
Provide online quizzes to increase the interest of learning	3.385	1.0883	633.0	10

Scale: 1= Strongly disagree, 2= Disagree, 3= Average, 4= Agree, 5= Strongly agree

The information given in Table 2 shows the ranking of respondents regarding Covid-19 has positive effects on students learning regarding these areas of study according to their mean value, weighted score, standard deviation and rank order, in which top ranking was given to the highest mean value (3.936) which shows that respondents were agreed that syllabus coverage problem were also there in online classes. The 2nd ranking was given to the mean value (3.898) which shows that respondents were agreed that non-availability of electricity creates problem during online exams. The 3rd ranking was given to the mean value (3.866) which shows that respondents were agreed that during online examination shortage of time to complete paper creates problems for students. The 4th ranking was given to the mean value (3.706) which shows that respondents showed their trend towards agreed that students achieve high grades during online examination. The 5th ranking was given to the mean value (3.604) which shows that respondents showed their trend towards agreed that diversity of timetables effects student learning routines. The 6th ranking was given to the mean value (3.567) which shows that respondents were agreed that online classes during Covid-19 develop less competition among students. The 7th ranking was given to the mean value (3.519) which shows that respondents were agreed that online classes during Covid-19 enable students to learn continuously both in university and at home. The 8th ranking was given to the mean value (3.449) which shows that respondents were lied between neutral to agree that universities introduce

courses through online portals which help students to learn new concepts. The 9th ranking was given to the mean value (3.427) which shows that respondents fall between the scales from neutral to agreed that students were well prepared to use technology appropriately, and last ranking was given to the mean value (3.385) which shows that respondents fall between the scales from neutral to agreed that online classes during Covid-19 provide online quizzes to increase the interest of learning.

CONCLUSIONS

It was concluded from the present study that Covid-19 had badly affected the educational activities of the students. The students were not getting effective education due to poor availability of internet services and lack of trainings regarding online learning. The educational institutions should train the students to with such pandemic situations with the help of ICTs institutions.

REFERENCES

1. Adams, D., B., Sumintono, A., Mohamed, N.S.M. and Noor. 2018. E-learning readiness among students of diverse backgrounds in a leading Malaysian higher education institution. *Mal. J. Learn. and Inst.* 15:227-256.
2. Alexander, K., S. Pitcock, and M. C. Boulay. 2016. *The Summer Slide: What We Know and Can Do About Summer Learning Loss*. Teachers College Press.
3. Aljawarneh, S.A. 2020. Reviewing and exploring innovative ubiquitous learning tools in higher education. *J. Com. Higher Edu.* 32: 57-73.
4. Al-Rabiaah, A., M. H. Tamsah, A. A. Al-Eyadhy, G. M. Hasan, F. Al-Zamil, S. Al-Subaie, F. Alsohime, A. Jamal, A.

- Alhaboob, B. Al-Saadi, A. M. Somily. 2020. Middle East Respiratory Syndrome-Corona Virus (MERS-CoV) associated stress among medical students at a university teaching hospital in Saudi Arabia. *J. Inf. and Public Heal.* 11: 52-57.
5. Alradhawi, M., N. Shubber, J. Sheppard, and Y. Ali. 2020. Effects of the COVID-19 pandemic on mental well-being amongst individuals in society- A letter to the editor on "The socio-economic implications of the coronavirus and COVID-19 pandemic: A review." *Int. J. of Surgery.* 78:147-148.
6. Andrabi, T., B. Daniels, and J. Das. 2020. Human Capital Accumulation and Disasters: Evidence from the Pakistan Earthquake of 2005. *RISE Working Paper Series.* 20/039.
7. Andrew, Alison, Sarah Cattán, Monica Costa Dias, Christine Farquharson, Lucy Kraftman, Sonya Krutikova, Angus Phimister and Almudena Sevilla. 2020. Learning during the lockdown: real-time data on children's experiences during home learning. *Eco. Edu. Rev.* 28: 308-317.
8. Artman, L., S. Cahan, and D. Anvi-Babed. 2006. Age, schooling and conditional reasoning. *J. Cogn. Dev.* 21:133-145.
9. Azhari, F.A. and L.C. Ming. 2015. Review of E-learning practice at the tertiary education level in Malaysia. *Ind. J. Pharmaceutical Edu. Res.* 49: 248-257.
10. Babic, B., S. Gerke, T. Evgeniou, and I. G. Cohen. 2019. Algorithms on regulatory lockdown in medicine. *J. Clin. Sci.* 10: 11-26.
11. Bao, W. 2020. COVID-19 and online teaching in higher education: A case study of Peking University. *Hum. Behav. and Emerg. Tech.* 1-3.
12. Beheshti, H.M., and C.M. Beheshti. 2010. Improving productivity and firm performance with enterprise resource planning. *Enterprise Inf. Sys.* 4: 445-472.
13. Bettinger, E. 2020. Does edtech substitute for traditional learning? experimental estimates of the educational production function. *Nat. Bur. Eco. Res.* 2: 59-67.
14. Board, T. E. 2020. Is the World Ready for the Coronavirus? Distrust in science and institutions could be a major problem if the outbreak worsens. *The New York Times.*
15. Buabeng-Andoh, C. 2012. Factors Influencing Teachers' Adoption and Integration of Information and Communication Technology into Teaching: A Review of the Literature. *Int. J. Edu. Dev. Using ICT.* 8: 79-105.