

PalArch's Journal of Archaeology of Egypt / Egyptology

EVALUATION OF THE IMPACT OF THE COVID-19 PANDEMIC ON THE TEACHING-LEARNING PROCESS

Kamran Naeem¹, Muhammad Ibrar², Misbah Haque³, Tahseen Anjum^{4}, Amjad Khan^{5*}*

¹Department of Management Sciences, Mir Chakar Khan Rind University, Sibi, Pakistan

²Department of Business Administration, Ilma University, Karachi, Pakistan

³Software College, Shenyang Normal University, Shenyang, China

⁴Department of Education, Mir Chakar Khan Rind University, Sibi, Pakistan

⁵Department of Economics, BUIITEMS (Balochistan University Information Technology
Engineering & Management Sciences

Corresponding Authors Email: [4tahseen.anjum34@gmail.com](mailto:tahseen.anjum34@gmail.com), [5amjadkk90@yahoo.com](mailto:amjadkk90@yahoo.com)

**Kamran Naeem, Muhammad Ibrar, Misbah Haque, Tahseen Anjum, Amjad Khan.
Evaluation of The Impact of The Covid-19 Pandemic on The Teaching-Learning
Process-- PalArch's Journal of Archaeology of Egypt/Egyptology 19(3), 1830-1840. ISSN
1567-214x**

**Keywords: COVID-19 Pandemic, Teacher Stress, Teaching Learning Process, Student
Assessment**

ABSTRACT

This study aimed to find the impact of the COVID-19 Pandemic on the teaching-learning process in District Sibi Balochistan. COVID-19 Pandemic disrupted academic activities all over the world. The main objectives of the study were to find the impact of the COVID-19 Pandemic on student and teacher mental health. It also aimed to determine the impact of the COVID-19 Pandemic teaching-learning process, the study also tried to find out the impact of the COVID-19 Pandemic student assessment process. Teachers in District Sibi comprised the population of the study. A total of 121 teachers were selected as the sample of this study through a random sampling technique. The questionnaire was used for data collection. It was found that the COVID-19 Pandemic has created stress for teachers and students. It was also determined that the COVID-19 Pandemic has severely affected the teaching-learning process as physical classes were closed. The COVID-19 Pandemic also disturbed the student assessment process as no physical examination was conducted. The result showed that seriously affected student and teacher interaction as physical classes were closed. It is recommended that guidance and counselling facilities may be provided to teachers and students. Besides, internet facilities may be provided on a priority basis to make sure online classes in the future as a result of the pandemic.

INTRODUCTION

As a result of the COVID-19 pandemic, the routine of every wake of life has been disturbed. The COVID-19 pandemic devastated not only the economy of the globe but harmed every field of life. The education system received a great setback due to this novel pandemic. Physical environment classes shifted to an online education system. This sudden shift from physical classes to online classes created severe problems both for teachers and students in Pakistan. There came a pedagogical shift in the teaching-learning process from traditional methods to online classes through different software applications. This created stress among teacher-learners as they weren't trained and mentally prepared for the same. At the beginning of this pandemic, educational activities in almost all educational institutions ceased due to the absence of an alternative system. At the higher level, some educational institutions started academic activities through online education.

A global health issue was prompted after the eruption of the COVID-19 pandemic in the last quarter of 2019. This pandemic affected nearly every field of life. It affected the economy of the globe and many people became jobless as a result of the closure of business activities. Along with other fields, the education sector also received a setback as a result of the eruption of COVID-19 (Ali, 2020). Many educational institutions were temporarily closed and the teaching-learning process was shifted to online education systems throughout the world.

In Pakistan, educational institutions were closed physically, whereas higher education institutions started online classes under the guidance of the Higher Education Commission. Although online classes were started they did not bore fruit due to various unavoidable problems. Students at the school level suffered greatly because there were no facilities at the school level to start online classes. Some private educational institutions at the school level started online classes for their students, but they were nominal. The online education program was set up in different higher educational institutions without giving any formal training to teachers. As a result of this sudden shift to online education, it created several problems for teachers and particularly for students. Teachers and students faced multiple problems in pursuing online education. Lack of awareness among teachers and students regarding online education, poor facility of internet access, and poor communication among teachers and students, were some major issues and problems that affect online education negatively (Saeed, 2020).

As a result of COVID-19, academic activities received setbacks and the teaching-learning process changed dramatically. Physical environment classes were halted and the online education system was started. Despite the benefits of online education, it also exposed problems that educational institutions faced in delivering online education. Most educational institutions were not prepared for the sudden shift from physical classes to online classes (Xie & Yang, 2020). Online education is in vogue in different developed countries but in developing countries including Pakistan, this was a new experience (Ali, 2020). The teachers were less technically trained compared to other countries of the world.

Educational institutions were not prepared for online classes and that is why there was a severe problem while taking online classes. There were many drastic problems like access to internet services, learning difficulties in pedagogy, and affordability. In Pakistan, universities also started online classes for students. At the beginning of starting online classes, students and teachers faced a lot of problems and they were more apprehensive about online classes (Chang & Yano, 2020).

The COVID-19 pandemic has resulted in the greatest disruption of academic activities in human history. It has affected nearly 1.6 billion students in almost all countries of the world. As a result of the pandemic, educational institutions at all levels remained closed, and physical academic activities ceased. Closure of educational intuitions and academic activities affected nearly 94% population of the students. This has brought tremendous changes in all aspects of our social and economic life. As a result of the COVID-19 pandemic, the masses observed social distance and movement were restricted. All these and some other restrictive measures and policies have significantly disturbed traditional ways of the education system and academic activities. Reopening of schools after the relaxation of restrictions is another challenge for the coming years. Students can learn in a better way as a result of the physical classroom environment. The student has direct interaction with the teacher and can ask the question directly in class. Both verbal and non-verbal communication plays a significant role in the teaching-learning process. The physical classroom environment not only increases student cognitive skills but it develops the overall personality of the students. It develops leadership qualities in students and also develops students' behavior.

Problem Statement

The COVID-19 pandemic devastated not only the economy of the globe but harmed every field of life. The education system received a great setback due to this novel pandemic. Physical environment classes shifted to an online education system. This sudden shift from physical classes to online classes created severe problems both for teachers and students in Pakistan. There came a pedagogical shift in the teaching-learning process from traditional methods to online classes through Zoom App and other such applications. This created stress among teachers and learners.

Pakistan is an underdeveloped country and has fewer facilities for shifting the traditional education system to an online education system as many developed and developed countries shifted from traditional classroom teaching to an online education system. The COVID-19 Pandemic not only created problems in academic activities but created many problems for teachers and students. Sibi has the second highest literacy rate (54%) in Balochistan after Quetta. This study aimed to find out the problems faced by students and teachers as a result of the COVID-19 pandemic. The COVID-19 pandemic has resulted in mental health issues in the whole population. It aimed to find whether the COVID-19 pandemic resulted in mental stress in teachers and students. As we know Sibi is not a developed district and the same situation prevails in educational institutions. This project aimed to find out the availability of the resource for online teaching in educational institutions. Online education is

strengthening its roots in the modern education system. Many educational institutions have started online classes for students. This project aimed to find possibilities for starting online classes. Keeping in view these problems, this research study was undertaken. The objectives of the manuscript include: examining teachers' stress due to online education in District Sibi, finding the impact of the COVID-19 Pandemic on the teaching-learning process in District Sibi, finding problems faced by teachers and students as a result of the COVID-19 Pandemic, investigating the impact of COVID-19 Pandemic on students' assessment process and find the impact of COVID-19 Pandemic on teacher and student interaction

LITERATURE REVIEW

Almost all countries and territories were affected as a result of the global outbreak of the COVID-19 pandemic outbreak. Different countries took strong measures and warned the public to take care. The public care strategies included wearing the mask, washing hands, avoiding gatherings, and keeping physical distance. All such measures were taken to control the spread of the disease. The impact of COVID-19 is far-reaching and has affected the teaching-learning process significantly (Wang, G., Zhang, Y., Zhao, J., Zhang, J., & Jiang, F. 2020). This pandemic has provided us with an opportunity to introduce new ways of digital learning. Research indicated certain weaknesses of the online education system such as a lack of online teaching infrastructure, untrained teachers, a lack of students' interest, a non-conducive environment at home, and an information gap. As a result of these issues, online education was not effective in developing countries during the COVID-19 pandemic (Slimi, 2020).

The COVID-19 pandemic has significantly affected all levels of the education system and suspended academic activities all over the world. The educational institution closed temporarily. Much higher education institutions postponed academic activities within campuses to reduce or stop transmission of the virus. These measures have significantly affected the teaching-learning process and it led to higher consequences and implications for students. A paradigm shift took place from traditional teaching to online teaching (Rehman, 2020).

After the eruption of the COVID-19 pandemic, the use of technology increased because physical environment classes were shifted to online classes. Students can share and participate in an internet-connected environment and they can share their views and ideas without any hesitation. The online education system has many advantages for students. Students can take admitted to any program according to their interests anywhere in the world. A student can fix class timing and it provides equal opportunities for all (Jazeel, & Saravanakumar, 2016).

Different research studies have shown the effectiveness of online education on the teaching-learning process. Online education bears more fruitful results where everyone has access to uninterrupted internet facilities. The result of a research study indicates that students can retain 25% to 60% of materials when they are exposed to the online education system. This study also indicated that the physical classroom environment is helpful in the retention of 8% to 10% of the material. It means that the online education system is more effective as compared to physical environment classes. In online education, students can

search for other sources and take benefits from them (Xie & Yang, 2020). In a research study, it was concluded that 40% to 60% of students can learn faster through online education as compared to the physical environment. Online education provides an easy way to students to learn according to their own pace and interest and they can read and learn when they want. The online environment offers various opportunities for students as well as a new paradigm for educators in which dynamic courses of the highest quality can be developed (Akyol, & Garrison, 2011)

Despite its advantages and effectiveness, online education is not free from shortcomings and weaknesses. First of all, students need to have an uninterrupted internet connection. Time management is another problem for taking physical classroom education because the student who is serving in some organization, finds it difficult to attend classes on regular basis. That is why such job holders stop getting further education due to a strict job schedule. In developed and many underdeveloped countries, traditional education is shifted to online learning in many universities. Online education has contributed greatly to the improvement of the teaching-learning process. Teachers and students do not restrict to the traditional methods of teaching but they are actively engaged in the teaching-learning process through technology (Mahalakshmi & Radha, 2020).

Online education has many advantages. With online education, one can take admitted to his dream program and can take classes at home through the internet. Online education is more beneficial for job holders who cannot continue higher education due to strict rules and regulations of the organization and a tough job schedule (Marc, 2009). The great variety of online programs and courses is a huge advantage of this type of education. It doesn't matter where one lives and what to study. Students can always find a suitable course or even a degree program from home. Online education is also comfortable because the student will not need to attend physical classes and sit in an uncomfortable chair in class. All lectures and other essential related materials are delivered through an online platform. Online education is less costly as compared to traditional physical classroom education (Mark, & Diane, 2006).

In a nutshell, online education has many advantages for students. This project is aimed to find opportunities and possibilities for Pakistani universities to adopt online education on regular basis.

METHODOLOGY

A quantitative research design was applied. The population of this study comprised both male and female teachers from different levels of educational institutions in district Sibi. A total of 121 teachers were selected randomly from the list of teachers.

The questionnaire was used as a research instrument for data collection. For developing the research instrument, investigators first developed an open-ended questionnaire, which was delivered to 18 teachers of different cadres. After receiving feedback from the respondents' major areas were teachers' stress, the teaching-learning process, student-teacher interaction, and the assessment process were major areas which are affected by the COVID-19

pandemic. After indicating major areas, a closed-ended questionnaire was developed. But before delivering the questionnaire for data collection, validity and reliability were necessary to check whether this questionnaire was valid and reliable. Face validity, construct validity, and content validity was checked through expert opinions

Initially, a total of 44 items were included in the questionnaire but after validating the questionnaire, some items were deleted that were not related to the major areas of the project were. Finally, a total of 32 items remained in the final version of the research tool. The general impact of the Covid-19 pandemic consists of 8 items, the teaching-learning process consists of 4 items, teacher stress is composed of 5 items, the assessment process consists of 6 items, student-teacher interaction consists of 5 items and learning resources consist of 4 items respectively.

Research Instrument Validation

Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
ASSM	0.933	0.934	0.749
GI	0.944	0.946	0.718
HI	0.903	0.911	0.723
INT	0.918	0.924	0.756
LE	0.875	0.884	0.731
LR	0.898	0.898	0.766

The values of Cronbach's alpha and composite reliability are higher than the recommended value of 0.70 indicating that the scale used in the present research has good reliability statistics. Similarly, the values of AVE above 0.50 confirm convergent validity as all values of AVE are much higher than the threshold value.

FINDINGS

Stress Faced by Teachers and Students as a result of the COVID-19 Pandemic

One-Sample Test Result		Test Value = 3		
t	df	Sig.	Mean Difference	
13.24	120	.00	.81	

The COVID-19 pandemic created many problems for teachers and students. Both teachers and students faced various problems as a result of the COVID-19 Pandemic. The main problem which teachers' and students faced was poor or no facility for internet. No internet facility was provided by the educational institution. Teachers and students faced problems in getting teaching and learning materials. In the above table, the t value is 13.24 which accounts for a significant p-value which is .00 which is less than .05 ($p < .05$). It declares that teachers faced different problems in the smooth teaching-learning process as a result of the COVID-19 pandemic.

Impact of COVID-19 Pandemic on Teaching Learning Process***Result*****Model summary**

Model	R	R ²	Ajd.R ²	F
1	.396	.157	.150	22.15

Coefficient

Model	Unstandardized coefficient		Standardized coefficient	t	Sig
	B	Std. Err	Beta		
1(Constant)	4.40	0.227		19.39	.00
COVID-19	-0.275	0.068	-0.396	4.70	0.00

Predictor Variable: COVID-19 Pandemic

Dependent Variable: Teaching Learning Process

The result indicates the significant impact of the COVID-19 pandemic on the teaching-learning process. It means that COVID-19 drastically affected the smooth teaching-learning process. It created learning problems not only in Pakistan but all over the globe educational institutions were closed for some periods and reopened periodically. Many countries shifted their education system from traditional classroom environments to online teaching. But here in Sibi, no such facilities are available and the smooth teaching-learning process was badly affected. Educational institutions were closed for a long time and students remained untouched by their studies. During the data collection process, many teachers believed that there is no or poor facility of internet. In the absence of an internet facility, the teaching-learning process was seriously affected.

The result indicates that the R-value is .396 and R² is .157. This R² indicates that our independent variable (COVID-Pandemic) explains 15% variations in our dependent variable. The F value is 22.15 which represent model fitness. Here t value is 19.39 which accounts for a significant value which is .00. As noted in the table, the P-value is .00 which is less than .05 ($p < .05$). This p-value indicates the significant impact of the COVID-19 Pandemic on teaching-learning process.

Impact of the COVID-19 Pandemic on the Assessment Process***Result*****Model summary**

Model	R	R ²	Ajd.R ²	F
1	.843	.711	.708	292.22

Coefficient

Model	Unstandardized coefficient		Standardized coefficient	t	Sig
	B	Std. Err	Beta		
1(Constant)	.252	.207		12.49	.00
COVID-19	.909	.053	.843	17.74	.00

- a. Predictor Variable: COVID-19 Pandemic
 b. Dependent Variable: Assessment Process

Like other aspects of the education system, the COVID-19 pandemic also affected students' assessment processes. In the first wave of COVID-19, no test or exam was conducted. The free promotion was granted to metric and intermediate-level students. Students of the 10th class and 12th classes were promoted based on the previous class result. Many students, teachers, and particularly parents had apprehension about free promotion but there was no other way. Although universities started an online exam/test system it was not effective as a classroom environment examination. BBISE (Balochistan Board of Intermediate and Secondary Education) conducted the examination of limited subjects and the result of all subjects will be drawn based on these subjects.

The result indicates that the assessment process of students at different levels of educational institutions is significantly affected. In the above table R value is .843 and R² value is .711. This R² indicates that our independent variable (COVID-19 Pandemic) explains 71% of variations or changes in our dependent variable (assessment process). F value is 292.22 which indicate model fitness. It is also observed that T value is 12.49 which accounts for a significant value which is 0.00. As shown in the table, P value is 0.00 which is less than .05 ($p < .05$). This result indicates that the COVID-19 Pandemic has a significant effect on students' assessment process.

*Impact of COVID-19 Pandemic on Student-Teacher Interaction**Result***Model summary**

Model	R	R ²	Ajd.R ²	F
1	.677	.459	.453	100.45

Coefficient

Model	Unstandardized coefficient		Standardized coefficient	t	Sig
	B	Std. Err	Beta		
(Constant)	1.23	.268		4.61	.00
COVID-19	.691	.069	.677	10.42	.00

- a. Predictor Variable: COVID-19 Pandemic
- b. Dependent Variable: Students –Teacher Interaction

Student-teacher interaction plays a pivotal role in the smooth teaching-learning process. It is the backbone of the better performance of students. Those students who are in continuous interaction with teachers perform better. Student-teacher interaction help teacher in finding students' academic, social and behavioural problems.

The result shows that the COVID-19 pandemic has also significantly affected student interaction. As a result of the pandemic, there were no physical classes, and students were deprived of physical interaction and communication with teachers. There were no proper internet facilities to interact and communicate with teachers. That is why students suffered a great setback in academic performance. Difference researchers believe that physical interaction and communication between teacher and student are necessary for effective learning.

It is shown in the table that R value is .677 and R^2 value is .459. R^2 value indicates a 45.9% change in the dependent variable (student-teacher interaction) as a result of the dependent variable (COVID-19 Pandemic). F value is 100.45 which show model fitness. In the table t value is 4.61 which accounts for p significant value which is .00. It is indicated that P value is .00 which is less than .05 ($p < .05$). Hence it is concluded that the COVID-19 Pandemic has a significant effect on student-teacher interaction.

CONCLUSION

The covid-19 pandemic created radical and abrupt changes in daily life causing psychological problems in society. As a result of the Covid-19 pandemic, teachers were anxious and exhibited depressive emotions. This research was undertaken to investigate teachers' mental stress as a result of the Covid-19 pandemic. It was found that the Covid-19 pandemic created mental stress in teachers. Both male and female teachers agreed regarding teachers' stress.

Another important finding was that the Covid-19 pandemic has had a significant impact on the teaching-learning process. All educational institutions were closed as a result of the Covid-19 pandemic and physical classes were taking place. Universities started online classes but due to a lack of resources and facilities, online classes were not possible. Both male and

female teachers had the same opinion about the severe impact of Covid-19 on the teaching-learning process.

Covid-19 also affected student-teacher interaction to great extent. Student-teacher interaction plays a pivotal role in the effective teaching-learning process. The covid-19 pandemic closed educational institutions and there was no physical classroom teaching and no student-teacher interaction. It was found that male and female teachers had no difference in their responses regarding the impact of Covid-19 on the teaching-learning process.

The assessment process also is an essential part of the effective teaching-learning process. Without proper assessment, we cannot predict student performance and accomplishment of our educational goals. Assessment tells us the weakness and strengths of the teaching-learning process. In this research project, it was found that the Covid-19 pandemic has significantly affected the student assessment process. There was no physical examination and students were promoted without examination. This created disturbance and anxiety among students and particularly among parents.

RECOMMENDATION

The covid-19 pandemic resulted in teachers' mental stress. It is recommended that guidance and counselling facilities may be provided to teachers. For this purpose seminars and workshops may be arranged periodically to alleviate or lessen teachers' mental stress. Motivational speakers may be invited to deliver the motivational speech in educational institutions.

It was found that the Covid-19 pandemic has significantly affected the teaching-learning process. We know that educational institutions were closed and there were no physical academic activities in educational institutions. Online classes were not possible due to a lack of internet facilities. It is recommended that high authorities should take serious action in providing internet facilities in educational institutions. It is also recommended that mobile companies should install more towers in the areas and make their services better than before.

It was determined that student-teacher interaction was seriously affected as a result of the Covid-19 pandemic. It is recommended that a special session with an expert person may be arranged at least once a week to alleviate students' academic problems. Regular closer of academic institution triggered many issues relating to students' academic, social and behavioural problems

It was determined that students' assessment process also received setback as a result of Covid-19 pandemic. It is recommended that some special mechanism may be adopted for promoting students in such situations. Free promotion of students should be discouraged at all levels. Facilities for online classes should be provided both to teachers and students.

FUNDING

Ilma University, Karachi, Pakistan.

REFERENCES

- Ali, N. (2020). Students disappointed with online teaching system amid COVID-19. Retrieved from <https://dailytimes.com.pk/587446/students-disappointed-with-online-teaching-system-amid-covid-19/>
- Akyol, Z., & Garrison, D. R. 2011, "Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning", *British Journal of Educational Technology*, 42(2): 233-250.
- Bonk, C. J. & Graham, C. R. (2005). "Handbook of blended learning: Global Perspectives", local designs. San Francisco, CA: Pfeiffer Publishing
- Chang, G. C., & Yano, S. (2020). How are countries addressing the Covid-19 challenges in education? A snapshot of policy measures.
- Gunawan, G., Suranti, N. M. Y., & Fathoroni, F. (2020). Variations of Models and Learning Platforms for Prospective Teachers During the COVID-19 Pandemic Period. *Indonesian Journal of Teacher Education*, 1(2), 61-70.
- Jazeel. A. M & Saravanakumar. A. R. (2016). Role of ICT in transforming Sri Lankan Higher Education, *International Journal of Advanced Research Trends in Engineering and Technology*
- Mahalakshmi, K & Radha, R (2020). COVID 19: A massive exposure towards web based learning. *Journal of Xidian University*, 14(4),
- Marc. J. R. (2009). "E-Learning: Strategies for delivering Knowledge in the Digital age", New York, McGraw-Hill Education.
- Mark. B. & Diane P. J. (2006). *Making the Transition to E-Learning: Strategies and Issues*: New York. Idea Group Inc.
- Rehman. A. (2020). Challenges to Online Education in Pakistan During COVID-19 & the Way Forward. *AJIR Preprints*, 241
- Saeed, A. (2020). The impact of COVID-19 on education in Pakistan. Retrieved from <https://www.matrixmag.com/the-impact-of-covid-19-on-education-in-pakistan/>
- Slimi. Z. (2020). Online Learning and Teaching During COVID-19. A case Study. *International journal of Technologies and Language Study*, Vol, 4, Issu, 2.
- Wang, G., Zhang, Y., Zhao, J., Zhang, J., & Jiang, F. (2020). Mitigate the effects of home confinement on children during the COVID-19 outbreak. *The Lancet*, 395(10228), 945-947
- Xie, Z., & Yang, J. (2020). Autonomous learning of elementary students at home during the COVID-19 epidemic: A case study of the second elementary school in Daxie, Ningbo, Zhejiang Province, China. *Best Evidence in Chinese Education*, 4(2), 535-541.