Impact of Covid-19 Pandemic on Teaching-Learning Process in District Mandi Bahauddin Punjab, Pakistan

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ABSTRACT:

This research was conducted to find out the impact of Covid-19 pandemic had on teachers and students at District Mandi Bahauddin Punjab, Pakistan. The research was descriptive in nature and data were collected by using questionnaire survey. Data were analyzed on SPSS version 20 and results revealed that COVID-19 disaster had created radical and abrupt changes in daily life causing psychological problems in the society. Findings showed that as a result of Covid-19 pandemic teachers were anxious and exhibited depressive emotion. This research was undertaken to investigate teachers' mental stress as a result of Covid-19 pandemic. It was found that Covid-19 pandemic created mental stress in teachers. Both male and female teachers were of the same opinion regarding teachers' stress. Another important finding was that Covid-19 pandemic has significant impact on teaching learning process. All educational institutions were closed as a result of Covid-19 pandemic and physical classes were taking place. Universities started online classes but due to lack of resources and facilities, online classes were not possible. Both male and female teachers had same opinion about the sever impact of Covid-19 on teaching learning process. Covid-19 also affected student-teacher interaction to great extent. Student-teacher interaction plays pivotal role in effective teaching learning process. Covid-19 pandemic closed educational institution 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 impact of Covid-19 on teaching learning process.

Keywords: COVID-19, teachers, students, assessment, mental stress

Introduction

As a result of COVID-19 pandemic, the routine of every wake of life has been disturbed. COVID-19 pandemic devastated not only economy of the globe but it had adverse effect on every filed of life. Education system received great setback due to this novel pandemic. Physical environment classes shifted to online education system. This sudden shift from physical classes to online classes created severe problem both for teachers and students in Pakistan. There came a pedagogical shift in teaching learning process form traditional method to online classes through Zoom App etc.

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This created stress among teachers learners. In the beginning of this pandemic, educational activities in almost all educational institutions were ceased due to absence of alternative system. At higher level, some educational institution started academic activities through online education.

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

In Pakistan, educational institutions were closed and higher education institutions started online classes in the light of the guidance of the Higher Education Commission. Although, online classes were started but it did not bore the fruit due to various unavoidable problems. Students at school level suffered greatly because there were no facilities at school level to start online classes. Some private educational institutions at school level started online classes for their students, but it were nominal. 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 perusing online education. Lack of awareness among teachers and student regarding online education, poor facility of internet access, poor communication among teachers and students, were some major issues and problems that affect online education negatively (Saeed, 2020).

As a result of the COVID-19, academic activities received setback and teaching learning process changed dramatically. Physical environment classes were halted and online education system was started. Despite benefits of online education, it also exposed problems which educational institutions faced in delivering online education. Most of the educational institutions were not prepared for the sudden shift of 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).

Educational institutional were not prepared for online classes and that is why there were 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. In the beginning of starting online classes, students and teachers faced lot of problem and they were more apprehensive about online classes (Chang & Yano, 2020).

COVID-19 pandemic has resulted 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 level remained close and physical academic activities were 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 COVID-19 pandemic, masses observed social distance and

movement was restricted. All these and some other restrict measures and policies have significantly disturbed traditional ways of education system and academic activities. Reopening of schools after relaxation of restriction is another challenge for coming years. Student can learn in better way as a result of physical classroom environment. Student has direct interaction with teacher and can ask question directly in class. Both verbal and non-verbal communication plays significant role in teaching learning process. Physical classroom environment not only increase student cognitive skills but it develop the overall personality of the students. It develops leadership qualities in students and also develops student's behavior.

Problem statement

COVID-19 pandemic devastated not only economy of the globe but it had adverse effect on every filed of life. Education system received great setback due to this novel pandemic. Physical environment classes shifted to online education system. This sudden shift from physical classes to online classes created severe problem both for teachers and students in Pakistan. There came a pedagogical shift in teaching learning process form traditional method to online classes through Zoom App etc. This created stress among teachers learners.

Pakistan is underdeveloped country and has less facilities of shifting traditional education system to online education system as many developed and developed countries shifted from traditional classroom teaching to online education system. COVID-19 Pandemic not only created problems in academic activities but it created many problems for teachers and students. Mandi Bahauddin has the second highest literacy rate (80%) in Punjab after Rahim yar khan. This research was aimed to undertaken in District Mandi Bahauddin Punjab. Through this research, the researcher aimed to find out problems faced by students and teachers as a result of COVID-19 pandemic. COVID-19 pandemic has resulted in mental health issues in the whole population. It was aimed to find whether COVID-19 pandemic resulted in mental stress in teachers and students? As we know Mandi Bahauddin is not a developed district and the same situation prevail in educational institutions. This research aimed to find out availability of resource for online teaching in educational institutions. Online education is strengthening its roots in modern education system. Many educational institutions have started online classes for students. This research was aimed to find possibilities at Mandi Bahauddin of starting online classes. Keeping in view these problems, this research study was undertaken.

Scope of the study

This research is of immense importance for all stake holders related to education sector in Mandi Bahauddin district. This study would find at Mandi Bahaudd the possibilities and opportunities whether adoption of online education system is possible in future. Online learning has immense importance in modern digitized world because online education saves time and resources. One can get admission in the subject of his interest anywhere in the world.

Findings of this study could help high authorities to make policies how to tackle such situation in future. It will help policy makers to think about Mandi Bahauddin possibilities of online education in future. This research is also of immense importance in connection

with student-teacher interaction in future. Findings of this study will make high authorities to ponder over making how to make student-teacher communication possible as a result of such emergency situation in future. It would help policy makers to think about teaching and learning methodologies.

As a result of COVID-19 pandemic, students were given free promotion to next classes without appearing in examination. This created unrest in many students and particularly in parents. Findings of this research research can help high authorities to devise policy and specific rules on permanent basis regarding examination and student promotion in such situation in future. This research research helps teachers of using different methodologies of teaching students.

This research also helps in finding learning resources availability for teachers and students. It can help policy makers to initiate policies of providing internet facilities to teachers and students for smooth and effective teaching learning process in future in relation with such pandemic situation.

Objectives

- To investigate the impact of COVID-19 pandemic on teaching learning process in District Mandi Bahauddin
- To find out the issues faced by teachers and students as a result of COVID-19 pandemic
- To compare impact of COVID-19 Pandemic on students' and teachers' assessment process
- To examine the COVID-19 pandemic impact on teacher and student interaction

Sustainable Development Goals (SDGs) Achieved

UNO has established 17 SDGs in 2015. SDG 4 is about Quality Education. The full title of this SDG 4 is to ensure inclusive and equitable education and promote lifelong opportunities for all. An important aim of the SDG 4 is provide high quality education to all children and young in order to improve their living standard and make safe their future. SDG 4 aim is to provide quality and easily accessible education to all children and young students at door step. Its focus is on achieving universal literacy and numeracy. Learning environment plays vital role in acquiring knowledge and valuable skills. It is the need of the time to establish more educational institution and also upgrade the existing educational institution for effective and inclusive learning environment. SDG 4 has numerous targets and this research research has addressed following targets.

- SDG 4 aims to provide inclusive and quality education to all children and young at door steps. Findings of this research research have found out an important hurdle in shifting from traditional to online education. Online education is the easiest and less expensive of getting education at door step. It was found that due to lack of facilities and internet service, online classes were not possible during COVID-19 pandemic and students were deprived of quality education at door step.
- An important target of SDG 4 is to provide affordable technical and vocational education. It was found that many teachers had difficulty in using ICT in teaching learning process. This research research found that teachers are eager in learning technical education.

- SDGs 4 aim to increase number of people with relevant skills for financial success. If teachers and students are trained in using information technology, then they can get relevant and valuable skills which can help in boosting their financial success.
- Education without any discrimination as the slogan of the day. SDG 4 also aims to eliminate all type discrimination in education. Its target is to provide quality education at door step irrespective of gender differences. This research research was conducted using survey questionnaire for data collection. Data was collected from both male and female teachers. There was no gender discrimination in collecting data and all teachers responded well. Recommendations are given in general to provide ICT facilities and internet facilities both in male and female educational institutions
- This research research met SDG 4 target of bringing gender parity in getting higher education. Findings of this research indicate that both male and female teachers face same problem during COVID-19 pandemic. Teachers responded that teaching learning process was highly affected by this novel pandemic and it is essential to provide facilities to get higher education.
- SDG 4 also targets in boosting quality education for sustainable development. As we know that online education system is the easiest way of getting education at door step. This research research finding will help in boosting quality education because through online education, one can get education anywhere, in any educational institution according to his own interest.
- An important target of SDG 4 is getting universal literacy. This objectives was also achieved through this research research by focusing different sectors of educational institution.

METHODLOGY

This research was conducted under Punjab Government Research Grant. Quantitative research design was used. This research was conducted in two phases. This research was conducted taking respondents from public and private sector educational institutions. For conducting this research research, quantitative research design was applied. To collect data from respondents, survey questionnaire was used as a research tool. The researcher developed research instrument covering different aspects of teaching learning process.

For developing research instrument, researcher first developed an open ended questionnaire and were delivered to 18 teachers of different cadres. After receiving feedback from the respondents major areas were teachers' stress, teaching learning process, student-teacher interaction and assessment process were major areas which are affected by COVID-19 pandemic. After indicating major areas, closed ended questionnaire was developed. But before delivering questionnaire for data collection, validity and reliability was necessary to check whether this questionnaire was valid and reliable? Face validity, construct validity and content validity was checked through expert opinions

Initially total 44 items were included in the questionnaire but after validating the questionnaire, some items were deleted which were not related to the major areas of research. Finally total 32 items were remained in the final version of the research tool. General impact of COVID-19 disaster consist of 8 items, teaching learning process consist of 4 items, teacher

stress composed of 5 items, assessment process consist of 6 items, student-teacher interaction consist 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	0.833	0.834	0.847	0.749
GI	0.844	0.846	0.853	0.718
HI	0.803	0.811	0.829	0.723
INT	0.818	0.724	0.839	0.756
LE	0.875	0.784	0.815	0.731
LR	0.898	0.798	0.829	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 are above 0.50 confirm convergent validity as all values of AVE are much higher than the threshold value.

Discriminant Validity

|	ASSM	GI	HI	INT	LE	LR
ASSM	**0.865**					
GI	0.918	**0.848**				
HI	0.742	0.828	**0.851**			
INT	0.735	0.835	0.773	**0.769**		
LE	0.755	0.812	0.778	0.862	**0.955**	
LR	0.788	0.818	0.820	0.828	0.778	**0.775**

The values reported in bold in the diagonal is the square root of AVE and should be higher than the values reported below to them. As depicted, all diagonal values are higher than the values reported below to them represent that the current study ensured discriminant validity.

Collanearity statistics

Variable VIF	VIF	Variable	VIF	Variable
ASSM1 2.04	1.92	HI1	2.11	LR1
ASSM2 2.16	1.73	HI2	2.05	LR2
ASSM3 1.74	2.06	HI3	1.88	LR3
ASSM4 1.91	2.12	HI4	1.13	LR4
ASSM5	1.16	HI5	2.21	
ASSM6	2.04	INT1	1.92	
GI1	2.28	INT2	1.98	
GI2	2.27	INT3	2.19	
GI3	2.17	INT4	2.14	
GI4	2.08	INT5	2.23	
GI5	2.18	LE1	1.65	
GI6	2.23	LE2	2.13	
GI7	1.97	LE3	2.05	
GI8	1.83	LE4	1.94	

For running regression analysis test, it is essential to find whether there is multicollinearity among variables or not. For this purpose the values of Variance inflation factor (VIF) for all variables items were calculated through SMART-PLS-III and were found that values of all items were in the range and were not higher than 2.5. It indicates that there was no issue of multicollinearity among the variables.

Direct Impact Model
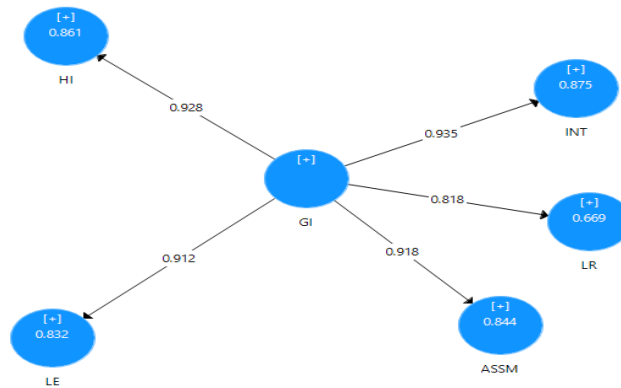
Data Collection

After calculating validity and reliability, process of data collection was started. Problems were faced in the collection of data because teachers were reluctant of giving information and filling questionnaire. They were apprehensive of that this data may be collected which will be used against them in future. But when they were convinced that this is a research research which aims at finding impact of Covid-19 on teaching learning process in District Mandi Bahauddin. Then some teachers were agreed and for cooperation. Total 97 questionnaire were returned. Data from female teachers was collected with the help of female teachers of Govt High School Lakha.

Results and findings

After collecting data, it was put into SPSS Software and was analysed using cross tabulation, one-sample t-test, independent sample t-test and regression analysis.

Frequency institution wise teachers distribution

| Institution	Frequency	Percentage
School	81	63.8
College	23	18.2
University	18	14.0
Total	112	100

Institution wise teachers' frequency distribution is shown in the table. Maximum teachers were selected from schools. Table shows that 82 teachers were selected from schools, 22 teachers were selected from college section and 17 teachers were selected from university.

Frequency of teachers' distribution according to age

Teacher Age	School	College	University	Total
21-30 year	39	4	5	48
31-40 year	21	7	9	37
41-50 year	7	6	2	15
51-60 year	15	5	1	21
Total	82	22	17	121

Above table shows teachers' frequency according to their age. It is revealed that maximum teachers are young (21-40 year) who teaching in different educational institutions.

Graphical presentation
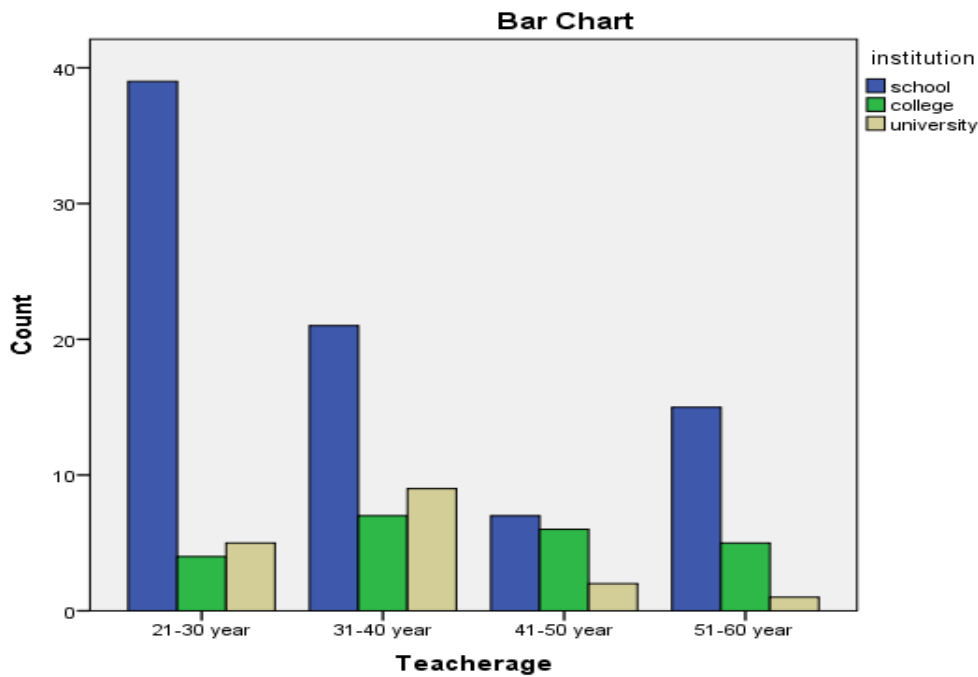
Frequency of teachers' distribution according to their qualification

Qualification	School	College	University	Total
Bachelor	15	0	0	15
Master	62	17	3	82
MS/MPhil	5	5	7	17
PhD	0	0	7	7
Total	82	22	17	121

Above table indicates teacher frequency distribution according to their qualification. Result indicates that maximum teachers had Master Degree qualifications which are total 82. It is also revealed that 17 teachers had MS/Phil qualification and 7 teachers had PhD qualification.

Graphical Presentation
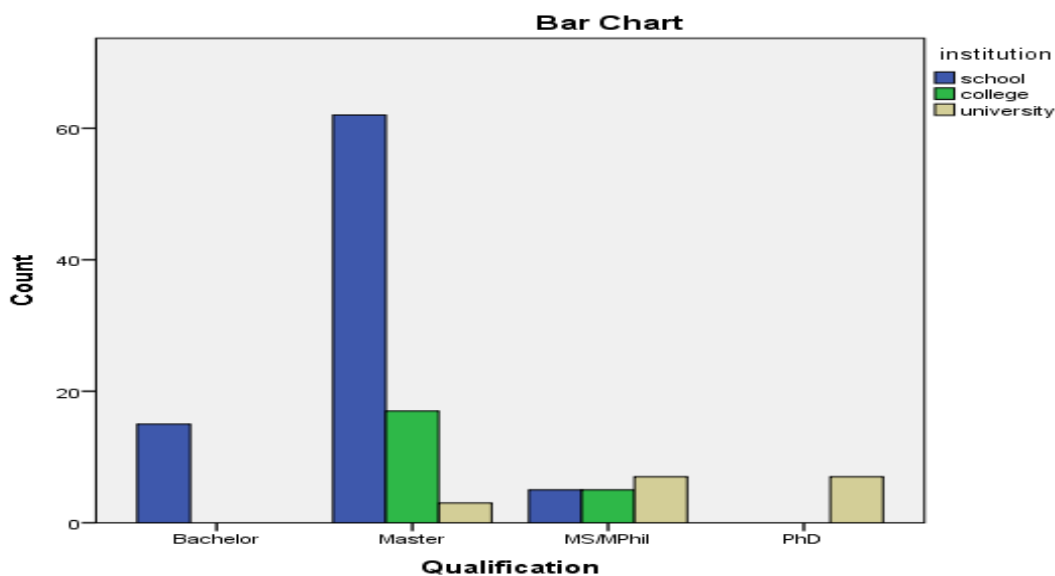
Teachers' frequency distribution according to their experience

Experience	School	College	University	Total
1-5 years	21	5	11	37
6-10 year	30	3	3	36
11-15 year	20	10	1	31
16 and above	11	4	2	17
Total	82	22	17	121

Teacher frequency distribution according to their experience is shown in the above table. Table represents mix result of teachers' experience. Only 23 teachers had more than ten years teaching experience
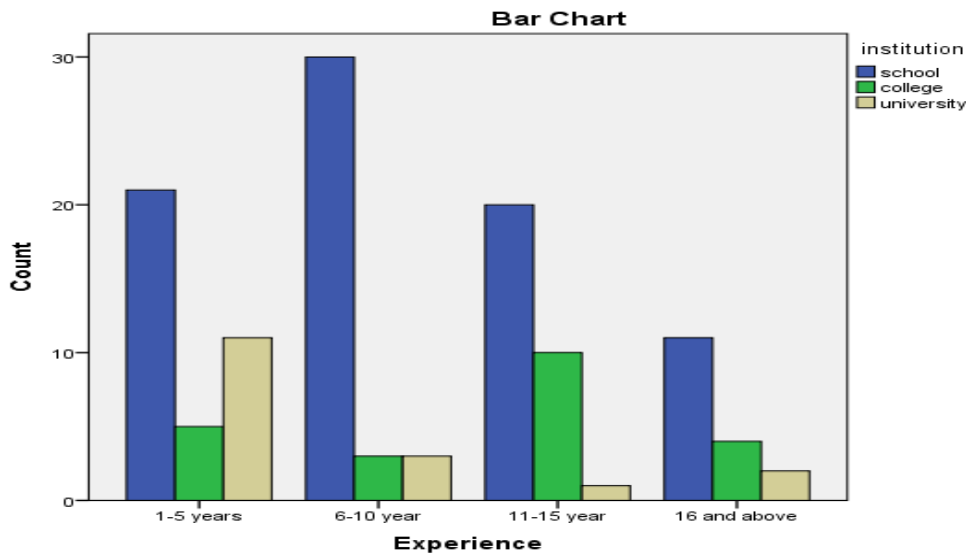
Gender wise teachers' frequency distribution

Gender	School	College	University	Total
Male	54	15	14	83
Female	28	7	3	38
Total	82	22	17	121

Table shows teachers distribution according to their age. Result shows that maximum teachers were male. It is revealed that 83 teachers were male and 38 teachers were female.

Graphical Presentation of Teachers' According to Gender
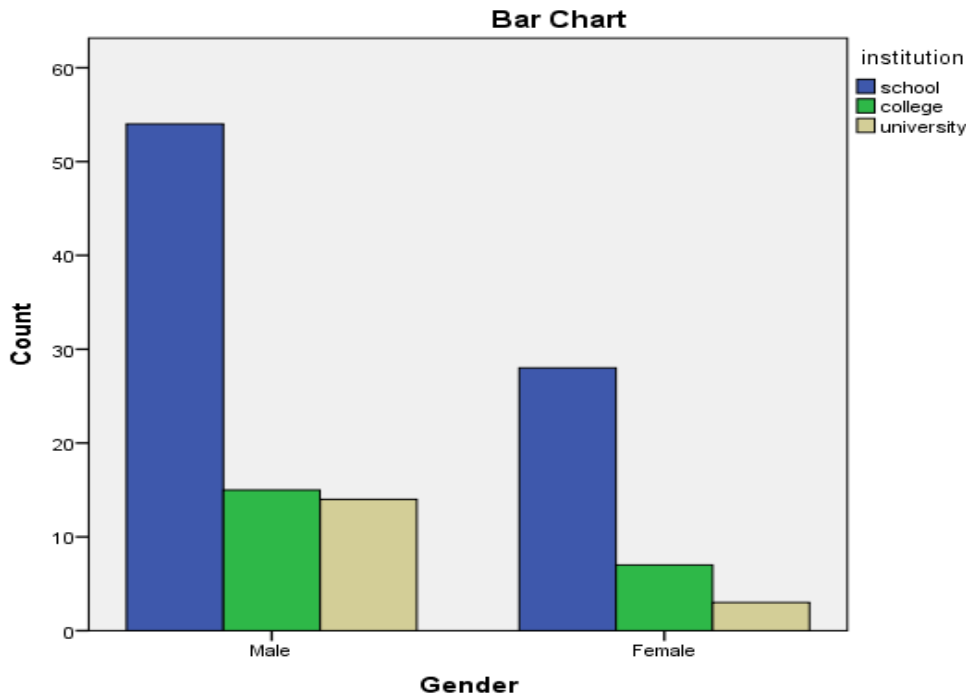
Result and Findings

Teachers' Stress due to COVID-19 disaster

One-Sample Test Result

	Test Value = 3		
t	df	Sig.	Mean Difference
11.5	120	.000	.809

Above table shows result for teachers' stress as result of COVID-19 disaster. It is found that COVID-19 disaster created stress among teachers in educational institutions in District Mandi Bahauddin. This stress may be about the novelty of the disease and stoppage of teaching learning process. In the table, t value is 11.5 which result in p value significant. Here p value is .00 which is less than .05 ($p < .05$). It indicates that COVID-19 disaster resulted in teachers' stress.

Stress faced by teachers and students as a result of COVID-19 disaster

One-Sample Test Result

	Test Value = 3		
t	df	Sig.	Mean Difference
13.24	120	.00	.81

COVID-19 disaster created many problems for teachers and students. Both teachers and students faced various problems as a result of COVID-19 disaster. Main problem which teachers' and students' faced was poor or no facility of the internet. No internet facility was provided by educational institution. Teachers and students faced problems in getting teaching and learning materials. In the above table, t value is 13.24 which accounts for significant p value which is .00 which is less than .05 ($p < .05$). It declares that teachers faced different problem in smooth teaching learning process as a result of 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	0 .00
COVID-19	-0.275	0.068	-0.396	-4.70	0.00

    a.   Predictor Variable: COVID-19 disaster
    b.   Dependent Variable: Teaching Learning Process

Results indicate significant impact of COVID-19   disaster on teaching learning process. It means that COVID-19   drastically affected 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 its education system from traditional classroom environment to online teaching. But, in Pakistan particularly at Mandi Bahauddin, no such facilities are available and smooth teaching learning process was badly affected. Educational institutions were closed for long time and students remained untouched with their study. During data collection process, many teachers were of the opinion that there is no or poor facility of internet. In the absence of internet facility, teaching learning process was seriously affected

Results indicate that   R value is .396 and R^2 is .157. This R^2 indicates that our independent variable (COVID-19 disaster) explains 15% variations in our dependent variable. F value is 22.15 which represent model fitness. Here t value is 19.39 which accounts for significant value which is .00. As noted in the table, p value is .00 which is less than .05 ($p < .05$). This p value indicates significant impact of COVID-19 disaster on teaching learning process.

Impact of COVID-19 Pandemic on 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 disaster
    b. Dependent Variable: Assessment Process

Like other aspects of education system, COVID-19 disaster also affected students' assessment process. In the first wave of COVID-19 , no test or exam was conducted. Free promotion was granted to metric and intermediate level students. Students of 10th class and 12th class were promoted on the basis of previous class result. Many students, teachers and particularly parents had apprehension about free promotion but there was no other way.

Although universities started online exam/test system but it was no effective as like classroom environment examination. Now BISE Board examination of Metric and Intermediate is conducted in limited subject and the result of all subjects will be drawn on the basis of these subjects

Result indicates that assessment process of students' at different level of educational institutions is significantly affected. In the above table R value is .843 and R^2 value is .711. This R^2 indicates that our independent variable (COVID-19 disaster) explains 71% variations or change 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 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 clearly indicates that COVID-19 disaster has significant effect on students' assessment process.

 Impact of covid-19 pandemic on student-teacher interaction

Model summary

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

Coefficient

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

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

Student-teacher interaction plays pivotal role in smooth teaching learning process. It is back bone in 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 behavioral problems.

Result shows that COVID-19 disaster 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 student suffered great set back in

academic performance. Difference researchers are of the opinion that physical interaction and communication between teacher and student is 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 45.9% change in dependent variable (student-teacher interaction) as a result of dependent variable (COVID-19 disaster). 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 COVID-19 disaster has significant effect on student teacher interaction.

Difference in male and female teachers responses

For conducting this research study, both male and female teachers were selected as respondents. It was necessary to find difference in male female teachers perceptions regarding impact of COVID-19 disaster on teaching learning process and other related problems. Main aim of concluding significant difference was to find whether male teachers and female teachers have same perceptions or there exist some significant difference. For this purpose independent sample t-test was applied to determine significant difference in male and female teachers' responses regarding different aspects of COVID-19 pandemic

Independent sample t-test result regarding teachers' stress

Gender	N	Mean	Mean. Diff	F	t	df	Sig
Male	83	3.80	-0.05	8.0	-.415	119	0.67
Female	38	3.85					

Independent sample t-test was applied to find significant difference in male and female teachers' responses. Mean score of male teachers is 3.85 and female teachers mean score is 3.85. Mean score difference is -0.05. Here t value is -415 which is below critical value. As a result of low value of t, p vale is insignificant (0.67) which is greater than .05 ($p > .05$). It is clear from this result that there is insignificant difference in male and female teachers' responses regarding teachers' stress as a result of COVID-19 pandemic. Both male and female teachers considered that COVID-19 pandemic created stress among teachers and students.

Independent sample t-test result regarding teaching-learning process

Gender	N	Mean	Mean. Diff	F	t	df	Sig
Male	83	3.64	-0.11	1.26	-.452	119	0.62
Female	38	3.75					

To find significant difference in male and female teachers' responses regarding COVID-19 impact on teaching learning process. Mean score value of male teachers' is 3.64 and female teachers' mean score value is 3.75. In this table t value is -0.452 and p value is 0.62. It is concluded from this table that p value is 0.62 which is greater than .05 ($p > .05$). It means that there is no difference in male and female teachers' responses regarding COVID-19 disaster on teaching learning process in District Mandi Bahauddin. Both male and female teachers were of the same opinion regarding impact of COVID-19 disaster on teaching learning process.

Independent sample t-test result regarding student assessment process

Gender	N	Mean	Mean. Diff	F	t	df	Sig
Male	83	3.72	-0.17	.289	-1.81	119	0.07
Female	38	3.89					

As a result of COVID-19 disaster, nearly all aspect of educational system was affected. It was aimed to find significant difference in male and female teachers' regarding impact of COVID-19 on students' assessment process. Table value indicates that there was no significant difference in male and female teachers' responses regarding impact of COVID-19 disaster on assessment process. Male teachers' mean score value is 3.72 and female teachers' mean score value is 3.89. Mean difference value is -0.17 and t value is -1.81. This value counts for insignificant value which is 0.07. In this table p value is 0.07 which is greater than .0.05 (p > .05). This value determines that there was insignificant difference in male and female teachers' responses. Both male and female teachers' considered that COVID-19 pandemic had significant effect on assessment process.

Independent sample t-test result regarding student-teacher interaction

Gender	N	Mean	Mean. Diff	F	t	df	Sig
Male	83	3.81	-.13	1.47	-1.18	119	0.24
Female	38	3.94					

COVID-19 pandemic also affected student-teacher interaction. It was observed that both male and female teachers' had same perception. Table shows that mean score value of male teachers' responses is 3.81 and female teachers' mean score value is 3.94. Mean score difference value is -0.13. It is noted that t value -1.18 which accounts for insignificant p value which is 0.24. This value indicates that p value 0.24 which is greater than .05 (p > .05). It was determined that there was insignificant difference in male and female teachers' responses regarding COVID-19 pandemic impact on student-teacher interaction.

Independent sample t-test result regarding learning facilities

Gender	N	Mean	Mean. Diff	F	t	df	Sig
Male	83	3.90	-.12	.551	-.856	119	0.394
Female	38	4.02					

Covid-19 pandemic affected learning facilities for students. Both male and female teachers had same opinions about the availability of learning resources during Covid-19 pandemic. There was no arrangement for online classes due to no internet resources. That is why no leaning facilities were available. As already discussed, there was complete closer of physical classes. No physical classroom interaction was possible during Covid-19 pandemic. As a result students remained untouched with their study and it seriously affected their academic performance.

If look at table result it also testifies that learning facilities were not available during Covid-19 pandemic. Mean score value of male teachers is 3.90 and mean score value of female teachers

is 4.02. Mean difference is -.12 which indicates less difference between male teachers responses and female teachers responses regarding learning facilities. It is observed that t value is -.856 which is below critical value and it accounts for insignificant value which is 0.24 and is greater than .00 (p > 0.05). It is concluded that Covid-19 pandemic has significant impact on learning facilities.

Discussion

This research was conducted under Punjab Government Research Grant. It was conducted in District Mandi Bahauddin to investigate impact of COVID-19 pandemic on teaching learning process in District Mandi Bahauddin. As we all know COVID-19 Pandemic affected every field of life globally. Many countries receive set back in its economic development. Pakistan is also affected greatly as a result of different waves of the COVID-19 disaster. Along wither other sectors education sector also received great set back. Educational institutions remained closed and academic activities were stopped for long time.

This research was conducted taking respondents from public and private sector educational institutions. For conducting this research research, quantitative research design was applied. To collect data from respondents, survey questionnaire was used as a research tool. The researcher developed research instrument which covers different aspect of teaching learning process. For developing research instrument, researcher first developed an open ended questionnaire and were delivered to 18 teachers of different cadres. After receiving feedback from the respondents major areas were teachers' stress, teaching learning process, student-teacher interaction and assessment process were major areas which are affected by COVID-19 disaster. After indicating major areas, closed ended questionnaire was developed. But before delivering for data collection validity and reliability was necessary to check whether this questionnaire is valid and reliable or not. Face validity, construct validity and content validity was checked through expert opinions. Initially total 44 items were included in the questionnaire but after validating the questionnaire, some items were deleted which were not related to the major areas of the research. Finally total 32 items were remained in the final version of the research tool. General impact of COVID-19 disaster consist of 8 items, teaching learning process consist of 4 items, teacher stress composed of 5 items, assessment process consist of 6 items, student-teacher interaction consist of 5 items and learning resources consist of 4 items respectively. Reliability of the questionnaire was checked through SPSS using Cronbach Alpha Coefficient and was found .87 which is beyond acceptable range.

Data was collected through personal visit of schools, college and university. We found great difficulty in collecting data from schools and colleges because teachers were reluctant of filling the questionnaire. But when they were convinced that this data collection is only for research purpose and their responses and information will be kept top secret, than some teaches were ready to fill research instrument. Total 97 questionnaires were received back. Data was analysed through SPSS and PLS-III and result was drawn using regression analysis and one-sample t-test.

Conclusion

■ Covid-19 pandemic created radical and abrupt changes in daily life causing psychological problems in the society. As a result of Covid-19 pandemic teachers were anxious and exhibited depressive emotion. This research was undertaken to investigate teachers' mental stress as a result of Covid-19 pandemic. It was found that Covid-19 pandemic

created mental stress in teachers. Both male and female teachers were of the same opinion regarding teachers' stress.

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

- Covid-19 also affected student-teacher interaction to great extent. Student-teacher interaction plays pivotal role in effective teaching learning process. Covid-19 pandemic closed educational institution 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 impact of Covid-19 on teaching learning process.

- Assessment process also is an essential part of effective teaching learning process. Without proper assessment, we cannot predict student performance and accomplishment of our educational goals. Assessment tells us weakness and strength of the teaching learning process. In this research research, it was found that Covid-19 pandemic has significantly affected 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.

- Some other general findings were that maximum teachers had master qualification. Only seven teachers had PhD qualification and 16 teachers had MS/MPhil qualification among the selected teachers.

- Maximum teachers had teaching experience between 1-10 years. Only 12 teachers had more than 15 years of teaching experience.

- Maximum teachers were young having age between 21-40 years. 39 teachers were of 21-30 year age and 29 teachers were of 31-40 years of age. Only 13 teachers were of 41-50 years of age and 16 teachers were of 51-60 year of age.

Recommendation

Following are some recommendations which can make situation better

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

- It was found that Covid-19 pandemic has significantly affected 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 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 its services better than before.

- It was determined that student-teacher interaction was seriously affected as result of Covid-19 pandemic. It is recommended that special session of an expert person may be arranged at least once in a week to alleviate students' academic problems. Regular closer

of academic institution triggered many issues relating to students' academic, social and behavioral 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 level. facilities for online classes should be provided both to teachers and students

REFERENCES

1. 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/

2. 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.

3. Bonk, C. J. & Graham, C. R. (2005). "Handbook of blended learning: Global Perspectives", local designs. San Francisco, CA: Pfeiffer Publishing

4. Chang, G. C., & Yano, S. (2020). *How are countries addressing the Covid-19 challenges in education? A snapshot of policy measures*.

5. 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.

6. 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

7. Mahalakshmi, K & Radha, R (2020). COVID 19: A massive exposure towards web

8. based learning. Journal of Xidian University, 14(4),

9. Marc. J. R. (2009). "E-Learning: Strategies for delivering Knowledge in the Digital age", New York, McGraw-Hill Education.

10. Mark. B. & Diane P. J. (2006). Making the Transition to E-Learning: Strategies and Issues: . New York. Idea Group Inc.

11. Rehman. A. (2020). Challenges to Online Education in Pakistan During COVID-19 & the Way Forward. AIJR Preprints, 241

12. 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/

13. Slimi. Z. (2020). Online Learning and Teaching During COVID-19. A case Study. *International journal of Technologies and Language Study,* Vol, 4, Issu, 2.

14. 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.

15. 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.