

EFFECTS OF PARENTS' ECONOMIC STATUS ON STUDENTS' EDUCATION DURING COVID-19 PANDEMIC AT SECONDARY LEVEL

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KEYWORDS	ABSTRACT
COVID-19, Economic Status, Students' Education, Online Learning, Secondary Level	The current study investigated the effect of parents' economic status on the education of the secondary students in District Panjgur, Balochistan, during COVID-19. It was a quantitative study with a survey of 150 male and female students from the public and private schools. The respondents were selected through a random sampling technique. Keeping in view the objectives of
	the study, a self-developed questionnaire was used. As per findings of the study, the pandemic had a significant effect on economics, education, and
ARTICLE HISTORY	health sectors. Regression analysis approved significant relationship amid
Date of Submission: 16-07-2024 Date of Acceptance: 24-08-2024 Date of Publication: 26-08-2024	parent status & students education outcomes, helpful with parents financial status impacts students education over pandemic. The work environment also had a significant effect on educational outcomes. The study features the connected challenges of financial hardship, insufficient infrastructure for online learning & education. The recommendations include investment in digital setup, employing targeted financial support for concerned families, teacher training, creating community learning centers & supporting public health education. 2024 Journal of Social Sciences Development
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INTRODUCTION

The COVID-19 pandemic that emerged in late 2019 has had profound and far-reaching impacts on societies and economies worldwide. Beyond its immediate health consequences, the pandemic and associated containment measures have significantly disrupted the education systems globally, affecting hundreds of millions of students (Tadesse & Muluye, 2020). As schools closed & learning shifted online, stark inequalities in access to quality education have been exposed and worsened.

The significance of secondary education cannot be denied. It is a bridge between basic and higher education. It builds foundation skills that students learn from primary education and are prepared for further education towards vocational. In cognition development, the critical thinking skills have been the focus of several studies in different aspects of education policy documents (Jamil, Aslam & Ali, 2024; Jamil, Hafeez & Muhammad, 2024; Jamil, Muhammad & Aslam, 2024), the social sciences, and science textbooks (Jamil, Mehmood, & Noorani, 2024; Jamil, Mehmood, & Saleem, 2024; Jamil, Mehmood, & Shah, 2024; Naseer, Muhammad & Jamil, 2022), teachers' perspectives (Jamil, Anwar & Ali, 2024; Jamil, Muhammad & Qureshi, 2021a), and teachers' practices (Jamil & Muhammad, 2019).

Life skills integration has also been the focus of different textbooks in recent studies (Jamil, Arif & Shahzadi, 2024; Jamil, Chohan & Tabassum, 2024; Jamil, Hassan & Godil, 2024; Jamil, Jabeen & Moin, 2024; Jamil, Ain & Chohan, 2024). The COVID-19 pandemic has brought these pre-existing educational inequalities into sharp focus. As schools closed to contain the spread of virus, learning shifted to remote & online modes (Parker, Morris & Hofmeyr, 2020). Secondary education is most critical stage where students develop advanced cognitive skills, subject-related knowledge, and life skills. This sudden change exposed a stark digital divide, with students from lower-income families often lacking devices, internet connectivity, and conducive home environments needed for effective distance learning. Many students, particularly in developing countries, is completely cut off from formal education during school closures. Even where online learning was implemented, its quality and effectiveness have varied greatly depending on the schools' and families' resources (Conto, Akseer, Kamei, Mizunoya & Rigole, 2021). Pakistan, like many developing countries, has faced challenges in ensuring educational continuity during the pandemic (Akram, Aslam, Saleem & Parveen, 2021).

Even before COVID-19, the country struggled with low enrollment rates, high dropout rates, and poor learning outcomes, particularly at the secondary level. According to UNESCO, the secondary school enrollment rate in Pakistan was only 43% in 2019, well below the global average of 76%. The pandemic has strained an already fragile education system. When Pakistan implemented the nationwide school closures in March 2020, the government and educational institutions scrambled to implement distance learning solutions. All educational activities came to stop, strictly affecting students' careers and education (Zafar, Muhammad & Bokhari, 2022). However, limited digital infrastructure, low internet penetration, and lack of experience with online education posed major hurdles. A survey by Pakistan Telecommunications Authority found that only about 36% of the population has access to the Internet, with an urban-rural divide. This meant that a large proportion of students, especially in rural & low-income areas, were excluded from online learning initiatives. The adverse effects of the pandemic in Pakistan have been experienced by simulating every facet of country's economy, including GDP, has shrunk by 4% in 2020, that marks the first recession in the country for decades.

Loss of jobs and reduced income rates have today led to increased cases of poverty amongst millions of people. A survey conducted by the Pakistan Bureau of Statistics showed that it was 27. The final impact of COVID-19 highlighted the laid-off rate pegged at 3 percent, more so for Informal and

low-skilled employees. This solver has clearly impacted the ability of most households to provide for children's needs and has probably contributed to high dropout rates and other learning losses. Therefore, it is essential to assess and compare how parents' economic status has impacted students' learning during this outbreak to make the appropriate interventions and policies. One can look at Baluchistan, which is the largest province of Pakistan in terms of its geographical area but is almost the least developed province in terms of its economic progress. Education, too, has not been well developed, with the literacy rate of the province at 43% against the national literacy rate of 60%. The District Panjgur is situated in the southwestern Balochistan province, and this district reveals almost all the problems regarding education in the remote and poor areas of Pakistan. The present research specifically targets secondary education in the District Panjgur during the period of the COVID-19 outbreak.

This is a stage that may often experience a strong influence of socio-economic factors in dictating the learning processes of the learners. It is also a level where learners drop out because the costs of continuing with education are steep, and the economic burdens upon the families are very much present. Therefore, understanding how students' educational experiences and achievement have been affected by parents' economic status during this unprecedented disruption will contribute to highlighting how and why socio-economic inequality gains momentum during a crisis. Thus, the implications of this study are pertinent to the educational policy and practice as they concern the immediate crisis of the coronavirus pandemic and progressive construction of education systems that are equitable and less vulnerable in future crisis periods that how economic status affected students' ability to engage in online learning. Given that the present study maps out how economic marginalization does play out to mean educational marginalization during crises, the study can hint at which kind of assistance can better serve situated vulnerable students. In this regard, it may also amplify the weaknesses that require the structural changes to end generative injustices with polite acquisition and quality.

Research Objectives

- To examine the effect of parents' economic status and students' educational outcomes during COVID-19 pandemic at the secondary level.
- 2. To assess the challenges faced by secondary school students in accessing and engaging with online learning during COVID-19 pandemic.

LITERATURE REVIEW

The relationship between socio-economic status and educational outcomes has been extensively studied in educational research (Munix, Faiza, Jamal, Daud & Igbal, 2023). However, the COVID-19 pandemic has presented new dynamics and exacerbated existing inequalities in unprecedented ways. This literature review examines recent research on the impacts of COVID-19 on education, with the particular focus on how the parents' economic status has influenced students' educational experiences during the pandemic. There is much empirical research proving the close relationship between the family socio-economic status (SES) and educational achievement (Li, Xu & Xia, 2020; Munix et al., 2023). According to the meta-analysis conducted by Sirin (2005) on research from 1990-2000, the cross-sectional relationship between SES and academic achievement was moderate

and significant. Thus, this was the case with a school–level relationship that was stronger than the individual–level relationship, indicating that the effects of concentrated poverty or affluence were cumulative at the school level. Considering the above studies, Saifi and Mehmood (2011) looked at socio–economic status's influence on the achievement of students in the senior secondary schools in Lahore, Pakistan.

The study indicated that the level of education of the parents and their occupation earnings had a positive relationship with students' GPA. There was evidence that students from higher SES had better access to educational resources, higher parental involvement in their education, and higher academic expectations. Coronavirus forced schools to shut their doors in various parts of the world. In Pakistan, schools were closed all across the country in March 2020, and later, they reopened and closed repeatedly in year 2021. This unprecedented disruption threw education into an experience that was dominated by remote & online learning modalities (Zafar, Muhammad & Bokhari, 2022). Adnan and Anwar (2020) conducted a cross-sectional, self-administered online questionnaire on undergraduate and graduate students from Pakistan regarding their experience of learning during the COVID-19 pandemic. In their findings, authors observed that a majority of students had access to the internet but had to contend with very poor connections and ended up with so many technical problems affecting their learning process. Several students showed that they experienced problems in retrieving information from the online platform and interacting with other persons, including the diverse instructors.

The switch to online education truly demonstrated that digital gap exists and deepened according to students' socio-economic status. Igbal, Ashig, Rehman, Rashid and Tayyab (2022) conducted a study regarding students' perceptions and experiences of online education in higher educational institutions during COVID-19. Zafar et al. (2022) also got university students' perspectives in their qualitative study regarding online teaching practices during the COVID-19 pandemic. Another study on primary students' online learning was led by Sharjeel, Muhammad & Wagar (2022). In this qualitative study, mother's perspective was taken. They were of the view that online learning was not catering to their children's intellectual and social development needs. Elementary school teachers' lived skills with online teaching were explored during COVID-19 (Arshad, Muhammad & Wagar, 2022). A study was conducted with the vocational education practitioners during the COVID-19 (Pirzada, Muhammad & Ahmed, 2021). While much research has focused upon primary education or higher education, secondary education presents unique challenges. Azevedo, Hasan, Goldemberg, Geven and Igbal (2021), in the World Bank report, projected that learning-adjusted years of the schooling could fall by 0.3 to 0.9 years due to the pandemic, with losses concentrated at the secondary level.

They attributed this to higher opportunity costs for older students and increased dropout risks. The pandemic has highlighted and potentially widened gaps between public and private schools. Kuhfeld, Soland, Tarasawa, Johnson, Ruzek and Liu (2020), studying schools in the United States, found that students in high-poverty schools were less likely to have access to live video instruction and likely to receive lower-quality remote teaching compared to students in low-poverty schools.

In Pakistan, country already stressed with gender disparities in education, these issues are mainly relevant. Still, research specifically probing gendered effects of COVID-19 on secondary education in Pakistan remains limited to make sue differences in the academic outcomes based on economic disparities. Researchers have raised concerns about long-term consequences of pandemic-related education disruptions how economic challenges during pandemic affected students' mental health and motivation. Hanushek and Woessmann (2020) estimated that learning losses due to COVID-19 could result in 3% lower career earnings for the affected cohorts. They focus that these effects are likely to be more severe for students from the deprived backgrounds, potentially widening income inequality in future.

RESEARCH METHODOLOGY

This study employed a quantitative research design using a correlational approach to examine the effects of parents' economic status on secondary students' education during COVID-19 pandemic in District Panjgur, Balochistan. The target population comprised male and female students, teachers, and parents from secondary schools in the district. A technique of random sampling was adopted, and the investigator chose 10% of the entire population, totaling 150 secondary school students, 75 boys and 75 girls from both public and private secondary schools. The close-ended questionnaires developed by researchers were used and questionnaires were personally administered & retrieved. To facilitate the respondents, questionnaires were translated into Urdu language. For data analysis, Statistical Package for Social Sciences (SPSS) was used, where descriptive analyses, like frequency and table, were used, along with regression analysis and usage of ANOVA test. This methodology follows the lines of methodological decisions used in other works on the socio-economic impact on education (Adnan & Anwar, 2020) while adapting it to the situation in the Panjgur district during the pandemic.

FINDINGS OF STUDY

The data was fed, set, and tabulated in the SPSS software system. After feeding the date, it was calculated in crosstabs. The study aimed to find out "The effects of parents' economic status on the education of students during COVID-19 at the secondary level. To achieve this purpose, a total of 150 respondents were included in this study. This population (150 respondents) was comprised of secondary school students who were studying in the 9th and 10th grades. All the population was taken from government secondary schools and private secondary schools, including girls' and boys' schools. There were 75 female students and 75 male students. All the population and the schools that were included in this study were chosen randomly. Consequently, the responses were taken via a questionnaire.

Table 1 Responses of Respondents on Items

SN		Frequency	Percentage
1	Do you know how COVID-19 transfers fr	om an infected man to a heal	thy one?
	Through Mosquitoes	5	3.3
	Through polluted air	7	4.7
	By hand shake and gatherings	134	89.3
	Through insects	4	2.7

2	If you suffered from Covid–19, then how did yo	ou know that you were	affected by Covid-19?
	By Doctors/Tests	17	11.3
	By fever symptoms	8	5.3
	By Disease	10	6.7
	Not Suffered	115	76.7
3	Do you think Covid-19 is a curable disease?		
	Yes, its	81	54.0
	No, it's not	15	10.0
	To some extent	39	26.0
	Not sure	15	10.0

Table 1A Responses of Respondents on Items

4	Have you ever participated in any COV	ID-19 awareness Programs or	Seminars?
	Yes	3	2.0
	No	125	83.3
	Once	2	1.3
	Never	20	13.3
5	How can we become able to prevent Cov	id–19 disease by spreading it	?
	By Preventions	54	36.0
	By Treatment	9	6.0
	By Awareness	33	22.0
	By Vaccination	54	36.0
6	What is your opinion? What is/are the n	nain barriers to COVID-19 di	isease eradication?
	Lack of Health Services	2	1.3
	Lack of Awareness	98	65.3
	Lack of Cleanliness	3	2.0
	Weak Govt Policies & Planning	47	31.3

Table 1B Responses of Respondents on Items

7	What do you think about who's role is import	ant in Covid–19 eradica	tion?
	Role of Govt	70	46.7
	Role of NGOs	15	10.0
	Role of Public	65	43.3
8	Are you satisfied with the health care system	of district Panjgur?	
	Satisfied	10	6.7
	Not Satisfied	116	77.3
	To Some extent	16	10.7
	Not Sure	8	5.3
9	What type of health institutions do you have	access to?	
	Governmental Hospitals	125	83.3
	Private Hospitals	25	16.7
10	Did you borrow food or rely on help from frien	nds or relatives during C	COVID-19?
	Once	18	12.0
	Sometimes	7	4.7
	Never	125	83.3

Table 1C Responses of Respondents on Items

11	Do you agree that the lack of public health serv	rices create challenge	es for COVID-19 control?
	Agree	74	49.3
	Strongly Agree	61	40.7
	Disagree	6	4.0
	Not Sure	9	6.0
12	Do you agree that COVID-19 has made Social?	?	
	Agree	70	46.7
	Strongly Agree	41	27.3
	Disagree	26	17.3
	Not Sure	13	8.7
13	Do you agree Covid-19 has an economic impac	t?	
	Agree	87	58.0
	Strongly Agree	41	27.3
	Disagree	10	6.6
	Not Sure	12	8.0

Table 1D Responses of Respondents on Items

14	Do you agree Covid-19 creates many barrie	rs to economic developme	ent?
	Agree	65	43.3
	Strongly Agree	70	467
	Disagree	08	5.3
	Not Sure	07	4.7
15	Do you think the poverty ratio is increasing	due to Covid-19 disease?	1
	Agree	45	30.0
	Strongly Agree	92	61.3
	Disagree	10	6.7
	Not Sure	3	2.0
16	Do you agree Covid-19 causes a reduction in	n Labor forces and agricul	lture
	productivity?		
	Agree	62	41.3
	Strongly Agree	80	53.4
	Disagree	6	4.0
	Not Sure	2	1.3

Table 1E Responses of Respondents on Items

17	Do you agree that illiteracy is a great chall	lenge in the way of COVID	0-19 control?
	Agree	69	46.0
	Strongly Agree	57	38.0
	Disagree	11	7.3
	Not Sure	13	8.7
18	Do you think education plays any role in th	ne awareness of Covid-19 d	lisease?
	yes	84	56.0
	No	29	19.3
	To some extent	24	16.0

	Don't think so	13	8.7
19	Do you agree due to lack of education and		
20	Agree	70	46.7
	Strongly Agree	41	27.3
	Disagree	26	17.3
	Not Sure	13	8.7
able 1	1F Responses of Respondents on Items		
20	Do you agree that education was affected	badly during Covid-19?	
	Agree	66	44.0
	Strongly Agree	84	56.0
	Disagree	0	.0.0
	Not Sure	0	0.0
21	Were your studies disturbed during COV	TD-19?	
	Agree	72	48.0
	Strongly Agree	78	52.0
	Disagree	0	0.
	Not Sure	0	
22	Did COVID-19 cause any causality in yo	ur family?	
	Yes	15	10.0
	No	135	90.0
23	Did your family rely on less preferred δ le	ess expensive food during C	OVID-19?
	Yes	88	58.7
	No	62	41.3
able 1	1G Responses of Respondents on Items		
24	Did COVID-19 affect your family financi	ally?	
	Yes	112	74.7
	No	38	25.3
25	Did anyone from your family lose their job	during the lockdown	
	Yes	35	23.3
	No	115	76.7
26	Are you satisfied with online learning?		
	Yes	7	4.7
	No	143	95.3
27	Do you have the proper gadgets for online	e learning?	
	Yes	9	6.0
	No	141	94.0
28	Have you faced Internet Problems during	online learning?	
	Yes	135	90.0
	No	15	10.0

The above table provides significant information and describes the research issues under study over following below aspects in in order to better understand the descriptions of research issues under consideration in study.

1. COVID-19 Knowledge & Experience

- ✓ 89.3% of respondent correctly known that COVID-19 spreads over handshakes & gatherings.
- ✓ 76.7% of the respondents reported in current study as not having suffered from COVID-19.
- ✓ 54% respondents believe COVID-19 is curable, while 26% think it's curable to some extent.

2. Awareness & Prevention

- ✓ 83.3% of respondent have never participated in COVID-19 awareness programs/seminars.
- ✓ Prevention (36%) & vaccination (36%) were alike cited as ways to avert COVID-19 spread.
- √ 65.3% identified that a lack of awareness as the main barrier to the COVID-19 eradication.

3. Healthcare System

- ✓ 77.3% of the respondents are not satisfied with the healthcare system in the Panjgur district.
- ✓ 83.3% have access to government hospitals, while 16.7% have access to the private hospitals.
- ✓ 90% of respondents agree (49.3% agree, 40.7% strongly agree) that the lack of public health services creates challenges in COVID-19 control.

4. Economic & Social Impact

- \checkmark 85.3% agree (58% agree, 27.3% strongly agree) that the COVID-19 has an economic impact.
- \checkmark 90% agree (43.3% agree, 46.7% strongly agree) that COVID-19 creates barriers to economic development.
- ✓ 91.3% agree (30% agree, 61.3% strongly agree) that poverty is increasing due to COVID-19.
- √ 94.7% agree (41.3% agree, 53.4% strongly agree) that COVID-19 causes a reduction in labor forces and agricultural productivity.

5. Education Impact

- ✓ 100% of the respondents agree (44% agree, 56% strongly agree) that education was badly affected during COVID-19.
- \checkmark 100% agree (48% agree, 52% strongly agree) that their studies were disturbed during the COVID-19.
- √ 95.3% are not satisfied with online learning. 94% did not have proper gadgets for online learning. 90% faced internet problems during online learning.

6. Family Impact

√ 74.7% reported that COVID-19 affected their family financially. 58.7% relied on less preferred and less expensive food during COVID-19. 23.3% reported job loss in their family during lockdown.

The above results indicate significant impacts of COVID-19 on education, economic conditions, and healthcare in surveyed population, with particular challenges in implementing effective online learning and maintaining financial stability during the pandemic in order to cater to the situations more effectively.

Table 2 Regression Analysis (ANOVA)

Mod	el	SS	df	MS	F	Sig.
1	Regression	.700	1	.700	6.19	.014
	Residual	16.710	148	.113		
,	Total	17.410	149			

The regression results for the dependent variable (Student education) and independent variables are shown in table above. Calculated F-value indicates that the following was true when outcome was compared to F Tabulated: The fact that F(1/148) = 6.749, p0.005, indicates that the independent factors chosen were significant characteristics that influence the student education (the dependent variable) is clear.

Table 3 Regression Analysis (Coefficient)

		Coef	ficients		
Model	Unsta	ndardized	Standardized	t	Sig.
	Coe	fficients	Coefficients		
	В	Std. Error	Beta		
1 (Constant)	1.507	.191		7.898	.000
Parent Status	.350	.116	.264	3.028	.003

a. Predictor: Parent Status

Table shows the result of Regression, which confirms the result of ANOVA with Parent Status being significant, t (7.898) = 2.4 respectively, p<0.05. It offers evidence that parent status is a significant predictor of student education, with higher parent status linked with better educational outcomes for students. This finding supports that parents' economic status affects students' education, which is particularly relevant in the context of COVID-19 pandemic. The t-value of 3.028 and significance level of 0.003 (p < 0.01) indicate that the Work Environment is a statistically significant predictor of the dependent variable. It implies that the work environment has the meaningful and reliable impact on student education outcomes, with better work environments associated with improved educational result.

DISCUSSION

The results of this study provide significant insights into the impact of COVID-19 on secondary education in District Panjgur, Balochistan, particularly in relation to parents' economic status. This study shows that there are multiple crises involving education, economic circumstances, and health care in the area in question. The respondents' perception of the impact of COVID-19 disruption on their learning is supported by percentage of 100%, which indicates that their education was highly affected. Some of the challenges were even compounded by the move to online learning that was occasioned by the COVID-19 outbreak 95. Thus, study revealed that 3% of the student's expressed dissatisfaction. These concerns can primarily be blamed on the failure to acquire appropriate gadgets (94%) and recurrent internet issues (90%). The findings are in line with the literature, as Adnan and Anwar (2020) explained, regarding the implementation of online learning in Pakistan. Measures raised by the results underline critical role and growth of a digital divide due to COVID-19 and stress necessity of infrastructure improvements for distance learning in rural regions. Drug use became a major concern of the COVID-19 study since it minimized the economic impacts in the following manner: of the people sampled, 74%. Specifically, about the extent to which respondents

b. Dependent Variable: Student Education

were affected financially, 7% said that the impact was borne on their families, while the 23.3% experiencing job losses.

These findings support the World Bank's (2020) expectation of longer learning poverty due to economic effects. Less preferred and cheaper food (58.7%) shows poor quality and thus decreased standard of living that might lead to distractions in class among student population. This economic stress aligns with findings of (Garrison, Rampold, Vascruez, Gillen & Baker, 2022). The regression analysis confirming significant relationship between parent status & student education outcomes. This result is consistent with pre-pandemic research by Saifi and Mehmood (2011), who established strong links between parental socio-economic status and academic performance in Pakistan. The pandemic appears to have increased these pre-existing inequalities, families with higher economic status may have been better equipped to support their children's education during school closures. The emergence of the work environment as a significant predictor of educational outcomes (p < 0.01) is a notable finding. It suggests that conditions under which students' study at home play a crucial role in educational success, especially in context of remote learning. The high level of dissatisfaction with the healthcare system in Panjaur district (77.3%) and the limited access to private hospitals (16.7%) highlight the broader systemic challenges faced by community. The lack of participation in COVID-19 awareness programs (83.3% never participated) suggests a gap in the public health education, which could have implications for both health outcomes and educational continuity during the pandemic.

CONCLUSIONS

This study examined the effects of parents' economic status on students' education during COVID-19 pandemic at the secondary level in District Panjgur, Balochistan. The results reveal significant impacts of pandemic on education, economic conditions, and healthcare in surveyed population. Notably, 100% of respondents agreed that their education was negatively affected, with 95.3% dissatisfied with online learning due to lack of proper gadgets (94%) and internet problems (90%). The economic impact was substantial, with 74.7% reporting financial effects on their families and 23.3% experiencing job losses. The regression analysis confirmed significant relationship between parent status and student education outcomes that parents' economic status affects the students' education during the pandemic. Additionally, the work environment emerged as the significant predictor of educational outcomes (p<0.01). These findings highlight the interconnected challenges of economic hardship, inadequate infrastructure for the online learning, and disrupted education, underscoring the need for targeted interventions to support vulnerable students and families in the face of such crises.

Recommendations

- Prioritize the development of reliable internet connectivity and provide subsidized access to digital devices for students in Panjgur district to bridge the digital divide and improve the effectiveness of online learning.
- To establish emergency financial aid programs for families affected by job losses or income reductions due to COVID-19, with a focus on ensuring the continued access to education for their children.

- Develop comprehensive training programs for teachers to improve their skills in delivering effective online and blended learning, adapting curricula, and supporting students in the remote settings.
- 4. Establish safe, well-equipped community spaces where students can access digital resources, internet connectivity, and academic support, especially for those lacking adequate to study environments at home.
- 5. Implement widespread awareness campaigns about COVID-19 prevention & management, integrating health education into school curricula to improve community preparedness and resilience for future health crises.

REFERENCES

- Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. *Online Submission*, 2(1), 45–51.
- Akram, H., Aslam, S., Saleem, A., & Parveen, K. (2021). The challenges of online teaching in COVID-19 pandemic: A case study of public universities in Karachi, Pakistan. *Journal of Information Technology Education: Research*, 20, 263–282.
- Arshad, A., Muhammad, Y., & Wagar, Y. (2022). Elementary school teachers' lived experiences in online teaching during covid-19 pandemic. Asian Social Studies and Applied Research, 3(2), 223–233.
- Azevedo, J. P., Hasan, A., Goldemberg, D., Geven, K., & Igbal, S. A. (2021). Simulating the potential impacts of COVID-19 school closures on schooling and learning outcomes: A set of global estimates. The World Bank Research Observer, 36(1), 1-40.
- Conto, C. A., Akseer, S., Kamei, A., Mizunoya, S., & Rigole, A. (2021). Potential effects of COVID-19 school closures on foundational skills and Country responses for mitigating learning loss. *International Journal of Educational Development*, 87, 102434.
- Garrison, S. T., Rampold, S. D., Vasquez, K., Gillen, M., & Baker, L. M. (2022). Parents' employment, income, and finances before and during the COVID-19 pandemic. *Journal of Consumer Affairs*, 56(1), 276–291.
- Igbal, S. A., Ashig, M., Rehman, S. U., Rashid, S., & Tayyab, N. (2022). Students' perceptions and experiences of online education in Pakistani universities and higher education institutes during COVID-19. Education Sciences, 12(3), 166.
- Jamil, M., Anwar, M., & Ali, M. J. (2024). Developing critical thinking skills in English classrooms at the secondary level: Teachers' perspective. Journal of Social Sciences Development, 3(1), 76–85.
- Jamil, M., Arif, F., & Shahzadi, U. (2024). Integration of core life skills in Pakistan Studies textbook grade IX. International Journal of Social Science Archives, 7(2), 870–876.
- Jamil, M., Aslam, M., & Ali, S. (2024). Single National Curriculum (SNC) for Social Studies (2020): Document analysis for development of critical thinking skills at the primary level. Pakistan Journal of Law, Analysis and Wisdom, 3(2), 67–74.
- Jamil, M., Hafeez, F. A., & Muhammad, N. (2024). Critical thinking development for 21st century: Analysis of Physics curriculum. *Journal of Social & Organizational Matters*, 3(1), 1–10.

- Jamil, M., Hassan, M. A., & Godil, D. I. (2024). Life Skills Integration in English Textbook Grade 5: A Qualitative Content Analysis. *Research Journal for Societal Issues*, 6(3), 23–34.
- Jamil, M., Jabeen, M., & Moin, M. (2024). Life Skills in Biology textbook Grade IX: A Qualitative content analysis. *Journal of Policy Research*, 10(2), 429–434.
- Jamil, M., Mehmood, W., & Noorani, Z. (2024). An Analysis of Physics Textbook Grade X for Critical Thinking Skills Development. Pakistan Journal of Law, Analysis and Wisdom, 3(4), 39-47.
- Jamil, M., Mehmood, W., & Saleem, A. (2024). Biology textbook grade X (2020): Analysis for the development of higher order thinking skills among secondary school science students. Global Regional Review (GRR), 9(1), 29–35.
- Jamil, M., Mehmood, W., & Shah, F. u. H. (2024). Development of critical thinking skills among secondary school science students: An analysis of Chemistry textbook grade IX (2020). Global Educational Studies Review, 9(1), 13–20.
- Jamil, M., Muhammad, N., & Aslam, M. (2024). Critical thinking skills development: An analysis of mathematics curriculum 2006 (Grade-wise). Global Social Sciences Review, 9(1), 22-29.
- Jamil, M., & Muhammad, Y. (2019). Teaching science students to think critically: Understanding secondary school teachers' practices. *Journal of Research & Reflections in Education* (JRRE), 13(2), 256–272.
- Jamil, M., Muhammad, Y., & Qureshi, N. (2021a). Critical thinking skills development: Secondary school science teachers' perceptions and practices. Sir Syed Journal of Education & Social Research (SJESR), 4(2), 21–30.
- Jamil, M., Muhammad, Y., & Qureshi, N. (2021b). Secondary School Science Teachers' Practices for the Development of Critical Thinking Skills: An Observational Study. *Journal of Development and Social Sciences*, 2(4), 259–265.
- Jamil, M., ul Ain, Q., & Chohan, I. R. (2024). Integration of Core Life Skills in Physics Textbook Grade X: A Qualitative Content Analysis. Pakistan Journal of Law, Analysis and Wisdom, 3(6), 119–131.
- Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020). Projecting the potential impact of COVID-19 school closures on academic achievement. *Educational Researcher*, 49(8), 549–565.
- Li, S., Xu, Q., & Xia, R. (2020). Relationship between SES and academic achievement of junior high school students in China: The mediating effect of self-concept. Frontiers in Psychology, 10, 2513.
- Munir, J., Faiza, M., Jamal, B., Daud, S., & Igbal, K. (2023). The Impact of Socio-economic Status on Academic Achievement. *Journal of Social Sciences Review*, 3(2), 695–705.
- Naseer, H., Muhammad, Y., & Jamil, M. (2022). Critical thinking skills in Pakistan Studies textbook: Qualitative content analysis. *Pakistan Journal of Social Research*, 4(3), 744–755.
- Parker, R., Morris, K., & Hofmeyr, J. (2020). Education, inequality and innovation in the time of COVID-19. *JET Education Services*.
- Pirzada, G., Muhammad, Y., & Ahmed, F. (2021). Vocational education practitioners learning to write reflective journal through reflections on their experiences during the Covid-19 pandemic. *Pakistan Social Sciences Review*, 5(1), 701-717.

- Saifi, S., & Mehmood, T. (2011). Effects of socio-economic status on students' achievement. International Journal of Social Sciences and Education, 1(2), 119-128.
- Sharjeel, M., Muhammad, Y., & Wagar, Y. (2022). Primary students' online learning during COVID-19 pandemic: Perspective of mothers. Global Regional Review, 7(2), 200–210.
- Sirin, S. R. (2005). Socio-economic status and academic achievement: A meta-analytic review of research. Review of Educational Research, 75(3), 417-453.
- Tadesse, S., & Muluye, W. (2020). The impact of COVID-19 pandemic on education system in developing countries: a review. *Open Journal of Social Sciences*, 8(10), 159.
- Zafar, A. H., Muhammad, Y., & Bokhari, T. B. (2022). University students' perspectives on online teaching practices during the COVID-19 pandemic: A qualitative study. *Research Journal of Social Sciences and Economics Review*, 2(2), 83–91.