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Socioeconomic and Technological Factors of Academic Performance during Pandemic in South Punjab

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Abstract

The study aims to analyze the effect of socioeconomic and technological factors on academic performance. Education is a fundamental driver of national development across the globe, but education system is currently experiencing a severe crisis as a result of the pandemic. The study has applied stratified random sampling technique and data was collected through questionnaire from the undergraduate students of the South Punjab. The sample of 400 students was selected by using the stratified random sampling. The results show that mother education, family type, gender, feeling hungry in class, possession of laptop or computer and time flexibility have significant impact on academic performance. This study suggests that educated mothers are key source of effective learning for children. They are better able to help children in studies

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Introduction

Education is a major component of human capital formation of any country. It plays a crucial role in human capital development of any country. (Asif, et al., 2020). Education is considered to play a vital role in the development of any country. (Yousuf, et al., 2021). It contributes to the country socio-economic development (Muhammad, et al., 2020; Rimsha, et al., 2018; Oladebinu, et al., 2018). Due to the pandemic, the global education system faces a severe crisis. The closure of education institution has worrying consequences for the academic achievement. The education system of developing countries of the world also become challenging. (UNESO,2020). The pandemic has forced the educational institution to shift to distance, hybrid and online learning mode. (Minhaj, et al., 2021; Marie, 2020; Junhui, et al., 2021; Muhammad and Kainat, 2020; Gulam, et al., 2020; Uchenna, et al., 2021; Kesayan, et al., 2020; Mohammad, et al., 2020; Ram, et al., 2021; Eric, 2021; Muhammad, et al., 2021). The lack of access to internet, unfamiliarity with the information technology platform, lack of process to online learning outcomes, smart phone and laptop has the major challenges that the students face during pandemic period. (Muhammad, et al., 2021; Nabil, et al., 2021; Uchenna, et al., 2021).

According to the Bureau of statistics 2019-20 the total educational institution in Punjab is 50,000. (Bureau of statistics, 2019-20). According to the census of 2017, total population of Punjab is 73 million. The 50 million population live in rural area and 23 million live in urban area. The rural areas of Punjab have intensely less access to adequate sanitation, health facilities, education, internet, communication technology, social safety and public infrastructure. (UNICEF, 2021). The major problem for rural area student is the low-quality internet service. (Fatima, et al., 2020). Universities in the southern Punjab (Pakistan), which are remote from the central Punjab and have a low profile and limited resources, attempted to find special measures during the Corona period (Rehman, Zhang et al. 2021).

Following are the objectives of the study:

- To find out the socioeconomic factors that affects academic performance during pandemic.
- To find out the technological factors that affects academic performance during pandemic.

Literature Review

Students performed better academically when their parents are more supportive than the students whose parents are less supportive. Parental support has been more considerable during the pandemic period, in assisting as students are more resilient during that online learning period. (Nabil, et al.,2021; Shahida, et.al., 2020). It was found that family financial support was positively affect academic performance of the students. (Marie, 2020). Oladebinu, et al. (2018) mentioned that parental background was significantly influence academic performance of the students. Arnel, (2019) found in descriptive statistics there was significant relation between parental support and academic performance. Rimsha, et al., (2018) have shown that parents assistance in homework plays a dynamic role as majority of perform better than these students who does not get an assistance.

Parents education significantly related with students' academic performance (Ermisch and Francesconi, 2001; Amel and Sulima, 2017; Krashen, 2013; Rimsha, et al., 2018 and Muhammad, et al., 2020). Students with educated parents outperformed than those whose parents are illiterate. Durden and Ellis, (1995). In their study, Agus and Makhbul,

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(2002) discovered that mother's education have a significantly influence on their children academic performance.

Socioeconomic factors such as family income, parents' education, race and gender of student, all the factors influence the quality and availability of education. The research found that socioeconomic status was a significant predictor of parent involvement in formal and informal activities during pandemic. (Ernesto, et al., 2021). The results shows that the majority of the student's studies affected due to the covid-19. The students contradict that online classes have affected due to lack of resources, time issues, and no internet facility (Minhaj, et al., 2021; Mohammad, et al., 2021; Uchenna, et al., 2021; Minhaj, et al., 2021).

Place of the residence of the students play an important part on the academic performance. The student belongs to urban areas perform better in curricular and cocurricular activities than the students whose belong to rural areas. (Washburne, 1959; Kahsay, et al., 2020). Amel and Sulima, (2017) mentioned that long distance between home and campus affect student's educational standard. Online learning also affects by the place of residence of students due to the access to other associated devices required for learning. (Aitka, et al., 2020: Uchenna, et al., 2021). Financial problems in college life were a common phenomenon and most of the students face problem resulting a bad academic performance. The results show that due to financial problems, the students face problems of inability to cope with the high standards of education, trouble in paying fees and having access to basic needs. (Asif, et. al., 2020).

The results revealed that a significant difference in the quality of online learning between male and female students, level of course, satisfaction and motivation. Gender and different course levels comparing under graduate and post graduate study revealed that significant difference between gender as well as course levels and quality of e-learning. (Kesavan, et al., 2020). Another important factor of online classes was promoted feedback. The proper feedback was significantly affected the student academic performance. (Ram, et al., 2021). Suryaman, et al. (2020) scrutinized the ways in which education took place at home during the pandemic. Their findings demonstrated that students encountered numerous challenges when learning at home, including a lack of technological proficiency, high Internet costs, and little student interaction and socialization. Another technological factor access to learning resources was negative relationship between online classes. (Marie, 2020). One of the technical issues of the students those internet connections problems. The problems were largely influenced student academic performance. (Minhaj, et al., 2021; Uchenna, et al., 2021).

Methodology

After gathering the information, data was organized, summarized and transformed to clarify the objectives of the study. The most dominant factors were hired while others were eliminated. In order to explain and interpret data, descriptive and econometric analysis was executed. The statistical package for social science (SPSS) will be used to analyze the statistical work. For categorical and binary variables of socioeconomic frequency distribution has been performed. For continuous variables of socioeconomic descriptive like minimum, maximum, mean, standard deviation, skewness and kurtosis has been measured. In general, there are p independent variables in the multiple regression model.

$$Y= \beta_0+\beta_1 Xi_1+\beta_2 Xi_2+\ldots\ldots\ldots\ldots +BpXip \qquad (1)$$

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The questionnaire was categorized in three sections. In the first section's basic introduction about student is taken, the second sections give details of student's academic performance items. The third section socioeconomic factors.

Table 1: ***Measurement of Variables***

Variable Name and Lables	Measurement
Dependent Variable	
Cumulative Grade Point(CGPA)	Continuous
Independent Variables	
Social Factors	
Education of Mother(EDUM)	Continuous
Family System(FSYS)	Joint family system= 0 Nuclear=1
Social media used during pandemic(SMEU)	Binary.0= No, 1=Yes
Age of the Respondent(ARES)	Continuous
Hours daily study(HSTU)	Continuous.
Place of residence (PRES)	Binary .0=Rural, 1=urban
Economic Factors	
Family financial crisis During pandemic (FFPA)	1= loss of job, 2 = reduced salaries and 3 = Reduced working hours
Parents working status better(PWSP) Then pandemic	Binary. 0= no ,1=yes.
Parents get money during pandemic(PGPA	1=workplace2 =government,3= self- Employment, 4= borrowing for Other and 5 for others.
Technological Factors	
Time Flexibility of online class (TFLX)	Binary. 0= no ,1=yes.
Acessbility of internet(ABIN)	Binary. 0= no ,1=yes.
Possession of laptopor computer (PLAP)	0= No and 1= yes.
Access to internet connection(AICN)	Binary. 0= no ,1=yes.
Type of Internet Connections(TIRN)	1= ptcl, 2=fiber and 3 = mobile data.
Internet connection issues (ICIS)	Binary. 0= no ,1=yes..

Academic performance was measured through the proxy of CGPA of the undergraduate enrolled student's pandemic in spring 2020.

The method of computee the CGPA:

$$\frac{\text{Total Sum of (GPA * Credits)}}{\text{Total Number of credits}} = \text{Current GPA}$$

The minimum and maximum GPA scores are respectively 0 (Grade F) and 4.0 (Grade A). The higher CGPA means higher the students' academic performance. A lot of previous studies used CGPA as a proxy of academic performance (Asif, et al., (2020); Amel and Sulima, (2017); Harb, et al., (2006); Oladebinu, et al., (2018); Arshad, et al., (2015); Arif, et al., (2018); Eric, (2021).

This study used various socioeconomic and technological factors. All of these factors discussed as follows: The mothers are educated then they can contribute to improving student performance as mother is very closely attached with her kids. The education of mother is a continuous variable. The minimum education is 0 and maximum

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education is 18 years. It follows from the previous studies like (Khan, et al., (2020); Arif, et al., (2018); Harb, et al. (2006)).

The family system was divided into two parts. The one is joint family system and other is nuclear family system. Family system was measured as 0 for joint family system and 1 for nuclear family system. This variable is selected from the earlier study like Asif, et al (2020). The social media was used as binary variable for the period of pandemic. It represents 0 for no use of social media during pandemic and 1 for use of social media during pandemic. It follows from the previous studies like (Ali and Alina, (2020); Eric, (2021)). The variable gender is a binary variable. It represents 0 for female and 1 for male. It follows from previous studies like (Khan, et al. (2020); Butnaru, et al. (2021); Afzal and Israr, (2011); Nabil, et al. (2021); Oladebinu, et al. (2018); Naz, et al., (2020); Jayanthi, et al., (2014); Qazi, et al., (2020); Safdar, et al., (2020).Age is a network pattern that represents being a certain number of years old. The variable age in this study is continuous variable. The minimum age of the students is 17 and maximum is 27as used by studies like (Khan, et al., (2020); Jaya Tenny, (2011); Butnaru, et al., (2021); Afzal and Israr, (2011); Nabil, et al., (2021); Oladebinu, et al., (2018); Jaynathi, et al., (2014). The variable employment status is a binary variable. It represents 0 for no and 1 for yes. The variable is follows from the previous studies like (Jayanthi, et al. (2014); Harb et al. (2006). Study hours are the number of hours a student spends studying after attending a college class. It demonstrates how serious the student is about his or her studies. It follows from the previous studies like (Asif, et al. (2020); Khan et al., (2020); Harb, et al., (2006). Attending class on a regular basis represents how many classes a student attends in a week, which demonstrates seriousness and attitude toward studies. The variable attend class regularly is a binary variable. It represents 0 for no and 1 for yes. It follows from the previous studies like (Norhidayah, et al. (2009); Tahir and Raza (2006); Asif, et al., (2020). The variable region is a binary variable in this study. It measures 0 for rural areas and 1 for urban areas, as used by former studies like Shoukat and Zubair, (2013); Amel and Sulima, (2017); Kahsy, et al., (2020); Qazi, et al., (2020); Oladebinu, et al., (2018). The variable hungry in class is also binary variable in this study. It measures 0 for no and 1 for yes. It follows from the previous study like Oladebinu, et al. (2018). The variable family financial crisis is divided into three options. It measures 1 for loss a job. 2 for reduced salaries and 3 for reduced working hours. It follows from the previous studies like Asif, et al., (2020). The variable parents get money during pandemic are categorized into 5 categorizes. It represents 1 for workplace, 2 for government, 3 for self-employment, 4 for borrowing other and 5 for others.

Results and Discussion

For empirical analysis, we use multiple regression analysis.

Table 2: ***Descriptive Statistics of Socioeconomic Factors***

Variable Name	Min	Max	Mean	S. D
CGPA	2.00	4.00	3.376	.37624
Mother Education	0	18	9.91	4.824
No. of Siblings	0	11	4.04	2.005
Sleeping hours	5	9	7.83	.995
Age of Respondent	17	22	20.36	1.318
Father Education	0	18	10.69	4.833
Father Income	0	2,000000	44395.75	1386.380
Family responsibility	0	8	2.83	1.963

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hours				
Mother Income	0	1,20000	4330.00	713.372

Table 3: ***Frequency Analysis of Socioeconomic and Technological Factors***

	Frequency	Percent	Cumulative Percent
Family system			
Joint	150	37.5	37.5
Nuclear	250	62.5	100.0
Social Media Usage During Pandemic			
No	55	13.8	13.8
Yes	345	86.3	100.0
Gender			
Female	282	70.5	70.5
Male	118	29.5	100.0
Attending Class Regularly			
No	146	36.5	36.5
Yes	254	63.8	100.0
Place of Residence			
Rural	133	33.3	33.3
Urban	267	66.8	100.0
Feeling Hungry in Class			
No	168	42.0	42.0
Yes	232	58.0	100.0
Economic Condition of Parents Compared with Pandemic			
Better	220	55.0	55.0
Same	107	26.8	81.8
Worst	73	18.3	100.0
Family Affected economically in Pandemic			
No	72	18.0	18.0
Yes	328	82.0	100.0
Family Financial Crisis of parents During Pandemic			
Loss of job	34	8.5	10.4
Reduced Salaries	171	42.8	62.5
Reduced Working hours	123	30.8	100.0
Parents working Status Better than pandemic			
No	92	23.0	23.0
Yes	308	77.0	100.0
Time Flexibility in online class			
No	157	39.3	39.3
Yes	243	60.8	100.0
Ability to Browse Internet			
No	61	15.3	15.3
Yes	339	84.8	100.0
Possession of Laptop or Computer			
No	111	27.8	27.8
Yes	289	72.3	100.0

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Access Internet Connections			
No	64	16.0	16.0
Yes	336	84.0	100.0

The frequency analysis of socioeconomic and technological factors is presented in table 3. Family system is used as a binary variable. 37.5 percent of the students belongs to joint family, while the 62.5 percent belongs from nuclear family system. Social media used during pandemic is a defined a binary variable. The students who cannot used social media during pandemic percent is 13.8 while the student who used social media during pandemic percent is 86.3.

Gender defined as a male and a female. 70.5 percent of the students is female, while the remaining 29.5 percent is male students. Attend class regularly is defined a yes or no. 36.5 percent students cannot attend class regularly while the 63.5 percent student attend class regularly. Place of residence is defined a binary variable. 33.3 percent of the students lived in rural areas, while the remaining 66.8 percent of the students belong to urban areas. Feeling hungry in class is also defined yes or no. 42.0 percent of the students do not feel hungry in class while 58.0 percent students feel hungry during class. Economic condition compared with pandemic is a categorical variable. The variable categorizes into three categorize: better, same and worst. 55.0 percent of the students is better, the 26.8 percent is same and worst percent is 18.3.

Parents working status better after than pandemic is defined no or yes. 23.0 percent of the students have not better parents working status while the remaining 77.0 percent parents working status better after pandemic. Family affected economically during pandemic is defined yes or no. 18.0 percent of the students' families do not have affect economically while the remaining 82.0 percent of the students' families affected economically in pandemic. Family financial crisis is defined as a categorical variable. 8.5 percent of the students' parents' loss jobs, 42.8 percent of the students' parents reduced salaries while the remaining 30.8 percent of the students' parents reduced working hours during pandemic.

Time flexibility is defined as a binary variable. 39.3 percent of the student's response to no time flexibility in during online classes while the remaining 60.8 percent of the student's response that time flexibility in online classes during pandemic. Ability to browse internet is a binary variable. 15.3 percent of the students do not have the ability to browse internet in online classes while the remaining 84.4 percent of the students have ability to browse internet online classes during pandemic.

The variable possession of laptop or computer is a binary variable. 27.8 percent of the students who do not have any type of possession of laptop or computer while the remaining 72.3 percent of the students have possession of laptop or computer.

Accessed internet connections defined as a no or yes. 16.0 percent of the student who do not have accessed internet connections while the remaining 84.0 percent of the students accessed internet connection during the online classes.

Table 4: ***Results of Regression Model***

Explanatory Variables	Coefficient	t-statistics	P-value	VIF
Constant	2.859	9.807	(.000)	
Education of Mother (EDUM)	.016	3.191	(.002) *	1.186
Family System (FSYS)	.110	2.427	(.016) *	1.068
Gender (GEND)	.089	1.801	(.073) ***	1.132

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Employment Status (ESTA)	.053	.912	(.362)	1.110
Place of Residence (PRES)	-.025	-.533	(.594)	1.086
Hours Study (HSTU)	-.007	-.634	(.527)	1.094
Age of Respondent (ARES)	-.003	-.277	(.782)	1.044
Attend Class Regularly (ACLR)	.046	.985	.325	1.132
Feeling Hungry in Class (FHNC)	-.088	1.972	(.049) **	1.082
Social Media Usage During Online class Pandemic (USME)	-.073	-.997	(.320)	1.318
Financial Crisis Parents Face During Pandemic (FFPA)	.047	1.396	(.164)	1.038
Comparison of Parent's Economic Condition before and after pandemic (CPEC)	.105	3.672	(.000) *	1.224
Parents get Money During Pandemic (PGMP)	-.039	-1.882	(.061) ***	1.071
Accessibility of Internet in Online Class During Pandemic (ABIN)	.056	.873	(.383)	1.237
Possession of Laptop or Computer in Online Class During Pandemic (PLAP)	.094	1.821	(.070) ***	1.275
Time Flexibility in Online Class During Pandemic (TFLX)	.103	2.272	(.024) **	1.101
R-Square	.154			
Adjusted R square	.111			
S.E of Estimate	.38179			

Results and Discussion

The R-square for the above output is 0.154, indicating that the explanatory variables can explain 54% of the total variation in the students' cumulative grade point. The remaining 44% can be explained by factors not included in the model. R =0.154 indicated that there is a strong positive correlation between the academic performance and the explanatory variables. The adjusted R^2 indicates that the independent variables account for (adj r-square=.111) of the variation in academic performance.

The slope of coefficient of mother education is .016. Ceteris paribus, if complete year of mother education increase by one year, it will be increasing academic performance on average by .016. The mother education has a significant impact on academic performance. The previous studies with these results, (Rana, et al., 2015; Amel and Sulima, 2017; Rimsha, et al., 2018; Agus and Makhbul 2002) found that parent's education significantly relates with students' academic performance.

Family system of the student was highly significant at 1% and positively related with academic performance. The estimated coefficient of family system is found to be 110. Ceteris paribus, if the family system increased by one percent, it will increase academic performance on average by.110. The p-value of the slope of coefficient is .016 and absolute t-

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value is 2.427. So, the family system has a significant impact on academic performance. In the previous study (Asif, et al., Khan, et al., (2013) finding shows that students who live nuclear families become higher marks compare than the students who live joint families. The coefficient of gender was significant at the level of 10%. The value of estimated slope of coefficient of gender is .089, holding all other factors are constant. The coefficient of gender shows that a unit increased in gender the cause of increased the academic performance by .089. The p-value of estimated slope of coefficient is .073 and absolute t-value is 1.80.

The value of estimated slope of coefficient of feeling hungry in class is-. 088. The coefficient feeling hungry in class shows that a unit increased in hungry in class caused of decreased academic performance .088, holding all others factors are constant. The p-value of slope of coefficient is 0. 49 and absolute t-value is 1. 97. This coefficient is significant at the level of 5%. The previous results are also consistent, for instance, (Oladebinu, et al., 2018) found in the research that majority of the students feel hunger in class.

The coefficient value of comparison of parent's economic condition before and after pandemic is. 105. The coefficient comparison of parent's economic condition before and after pandemic shows that a unit increased comparison of parent's economic condition before and after pandemic of increased academic performance .072. The p-value is .00 and absolute t-value is3. 672. This coefficient is statistically significant at the level of 1%. The relationship is significant is that reason because during pandemic the parents' economic condition is low due to lockdown, the most of the parents will lose jobs, deducted the salaries and they affect the student academic performance. The pandemic had worsened the financial situation of the minority students. They have no proper internet access for online class. The difficult financial situation is more likely to have a lower academic performance.

The value of estimated slope of coefficient of time flexibility is .103. The coefficient time flexibility shows that a unit increased in time flexibility the coefficient of academic performance increased by. 103.The p-value is .024 and absolute t-value is 2. 272. This coefficient is significant at the level of 5 %. In the previous findings, (Doo, H ,2014; Lubana, et al.,2018) also shows consistency that there is a significant relationship between time flexibility in online class during pandemic and academic performance. The value of estimated slope of coefficient of possession of laptop or computer is. 094. The coefficient of possession of laptop or computer shows that a unit increased in possession of laptop or computer caused of increased academic performance .094. The p-value is 070 and absolute t-value is 1.821. This coefficient is significant at the level of 10%. The previous finding also agrees the results like Kapasia, et al. (2020) mention in their study that most of the students used android mobile for attend the class. The variable possession of laptop or computer or a similar equipment in online classes during a pandemic period of good quality granting them to access to online classes as more effective as compare to those students who have not this equipment. The Gina, et al. (2021) study also mentioned in the research that good quality equipment has good effect on student's online learning.

Conclusion

The objective of the study finds the factors that affect student academic performance during pandemic. The sample was collected by using stratified random sampling technique. The total 400 sample collected from South Punjab. After gathering the information, empirical analysis was used. We have found that factors (mother' education, family system,

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social media usage during pandemic, feeling hungry in class and economic condition compared with pandemic, and possession of laptop or computer) is significantly affect the student academic performance.

Policy Recommendations

Educated mothers are key source of effective learning for children in South Punjab. They may be able to develop better skills in children and also better able to help their children in studies. The study suggests that the one way to improve the women education if the government should encourage and provide funding for education.

References

Adnan, M., & Anwar, K. (2020). Online Learning amid the COVID-19 Pandemic: Students' Perspectives. *Online Submission*, *2*(1), 45-51.

Afzal, A., Ali, I., Khan, A, M., Hamid, K. (2010). A Study of University Students Motivation and its Relationship with their Academic Performance. *International Journal of Business and Management*. Vol .5(4).

Al Kurdi, B., Alshurideh, M., & Salloum, S. A. (2020). Investigating a theoretical framework for e-learning technology acceptance. *International Journal of Electrical and Computer Engineering (IJECE)*, *10*(6), 6484-6496.

Al Shehry, A., Awad Youssif, M, S. (2017). Factors Affecting Academic Performance of Undergraduate Students at Najran Preparatory Year for Girls-Najran University 2015-2016. *International Journal of Asian Social Science*. Vol.7(1). pp:1-18.

Alawamleh, M., Al-Twait, L. M., & Al-Saht, G. R. (2020). The effect of online learning on communication between instructors and students during Covid-19 pandemic. *Asian Education and Development Studies*.

Ali, A., Ahmad, I. (2011). Key Factors for Determining Students Satisfaction in Distance Learning Courses: A study of Allama Iqbal Open University. *Contemporary Educational Technology*. Vol.2(2).

Ali, N., Jusoff, K., Ali, S., Mokhtar, N., Salamat, A, S, A. (2009). The Factors Influencing Students Performance at Universiti Teknologi MARA Kedah, Malaysia. *Canadian Research and Development Center of Sciences and Cultures*. Vo.3(4).

Ali, S., Haider, Z., Munir, F., Khan, H., Ahmed, A. (2013). Factors Contributing to the Students' Academic Performance: A Case study of Islamia University Sub-Campus. *American Journal of Educational Research*. Vol.1(8). pp;283-289.

Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the E-learning system usage during COVID-19 pandemic. *Education and information technologies*, *25*(6), 5261-5280.

Andrew, A., Cattan, S., Costa-Dias, M., Farquharson, C., Kraftman, L., Krutikova, S., ... & Sevilla, A. (2020). Learning during the lockdown: real-time data on children's experiences during home learning.

Arif, R., Arif, S., Noreen, H. (2018). Factors Affecting Academic Performance of Middle School Children in Public and Private Sector Schools of South Punjab. *Journal of Medicine, Physiology and Biophysics*.Vol.45.

Arulampalam, W., Naylor, R. A., & Smith, J. (2012). Am I missing something? The effects of absence from class on student performance. *Economics of Education review*, *31*(4), 363-375.

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

Balayar, B. B., & Langlais, M. R. (2022). Parental Support, Learning Performance, and Socioemotional Development of Children and Teenagers During the COVID-19 Pandemic. *The Family Journal*, *30*(2), 174-183.

Becker, G. S. (2009). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago press.

Butnaru, G. I., Niță, V., Anichiti, A., & Brînză, G. (2021). The effectiveness of online education during covid 19 pandemic—a comparative analysis between the perceptions of academic students and high school students from Romania. *Sustainability*, *13*(9), 5311.

Carolan, C., Davies, C. L., Crookes, P., Mcghee, S., & Roxburgh, M. (2020). Nurse Education in Practice Guest Editorial education. *Nurse Education in Practice*, *46*, 102807.

Cuisia-Villanueva, M. C., & Núñez, J. L. (2021). A Study on the Impact of Socioeconomic Status on Emergency Electronic Learning during the Coronavirus Lockdown. *FDLA Journal*, *6*(1), 6.

Durden, G. C., & Ellis, L. V. (1995). The effects of attendance on student learning in principles of economics. *The American Economic Review*, *85*(2), 343-346.

Elumalai, K. V., Sankar, J. P., Kalaichelvi, R., John, J. A., Menon, N., Alqahtani, M. S. M., & Abumelha, M. A. (2021). Factors affecting the quality of e-learning during the COVID-19 pandemic from the perspective of higher education students. *COVID-19 and Education: Learning and Teaching in a Pandemic-Constrained Environment*, *189*.

Ermisch, J., & Francesconi, M. (2001). Family matters: Impacts of family background on educational attainments. *Economica*, *68*(270), 137-156.

Eze, S. C., Chinedu-Eze, V. C., Okike, C. K., & Bello, A. O. (2020). Factors influencing the use of e-learning facilities by students in a private Higher Education Institution (HEI) in a developing economy. *Humanities and social sciences communications*, *7*(1), 1-15.

Gopal, R., Singh, V., & Aggarwal, A. (2021). Impact of online classes on the satisfaction and performance of students during the pandemic period of COVID 19. *Education and Information Technologies*, *26*(6), 6923-6947.

Guest, A., & Schneider, B. (2003). Adolescents' extracurricular participation in context: The mediating effects of schools, communities, and identity. *Sociology of education*, 89-109.

Hijazi, S. T., & Naqvi, S. M. M. (2006). Factor affecting academic performance. *Bangladesh e-journal of Sociology*, *3*(1).

Jang, S., & Lee, H. (2021). Changes in core competencies among Korean university students due to remote learning during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, *18*(14), 7476.

Jayanthi, S. V., Balakrishnan, S., Ching, A. L. S., Latiff, N. A. A., & Nasirudeen, A. M. A. (2014). Factors contributing to academic performance of students in a tertiary institution in Singapore. *American Journal of Educational Research*, *2*(9), 752-758.

Khan, M. A., Asif, M., Khan, A. S., & Azeem, M. (2020). Factors Affecting the Academic Performance of Students at Higher Secondary School Level in Malakand District. *Pakistan Journal of Society, Education and Language (PJSEL)*, *6*(2), 197-207.

Khan., Ather, M, H., Chandio, Hassaan, J., Sindhar., Hussain, R., Hussian., Nazakat. (2013). Factors Affecting Academic Achievements of High Achiever's in Saraiki Area. *Pakistan Journal of Commerce and Social Sciences*.Vol.7(3). pp: 463-471.

Khanna, L., Singh, S. N., & Alam, M. (2018). Multidimensional Analysis of Psychological Factors affecting Students Academic Performance. *arXiv preprint arXiv:1806.03242*.

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

Krashen, S. (2005). The Hard Work Hypothesis: Is Doing Your Homework Enough to Overcome the Effects of Poverty. *Multicultural education*, *12*(4), 16.

Lakhan, R., Summers, L., Tataw, D., Hackbert, P., & Sharma, M. (2021). Correlates of COVID-19 Pandemic on Anxiety among Adults in Appalachia, USA. *Journal of Research in Health Sciences*, *21*(4), e00531.

Lal, K. (2014). Academic stress among adolescent in relation to intelligence and demographic factors. *American International Journal of Research in Humanities, Arts and Social Sciences*, *5*(1), 123-129.

Mahmud, A., Chanda Antor, S., & Al Zabir, A. (2020). Factor Affecting the Academic Performance of University Students: Evidence from Sylhet.

Mushtaq, I., & Khan, S. N. (2012). Factors affecting students' academic performance. *Global journal of management and business research*, *12*(9), 17-22.

Naz, S., Nawaz, S., Liaqat, S., Rasheed, T., & Fatima, S. (2021). Effect of Social and Psychological Factors on Student Learning achievement in English at Intermediate level in Pakistan. *PalArch's Journal of Archaeology of Egypt/Egyptology*, *18*(4), 443-462.

Omran, A., & Saleh, M. S. H. (2019). Factors affecting the academic performance of students at academic institution. *Int J Res Rev Appl Sci*, *40*(1).

Patra, I., Hashim Alghazali, T. A., Sokolova, E. G., Prasad, K. D. V., Pallathadka, H., Hussein, R. A., ... & Ghaneiarani, S. (2022). Scrutinizing the effects of e-learning on enhancing EFL learners' reading comprehension and reading motivation. *Education Research International*, *2022*.

Peytcheva-Forsyth, R., Yovkova, B., & Aleksieva, L. (2018, December). Factors affecting students' attitudes towards online learning-The case of Sofia University. In *AIP conference proceedings* (Vol. 2048, No. 1, p. 020025). AIP Publishing LLC.

Qazi, A., Naseer, K., Qazi, J., AlSalman, H., Naseem, U., Yang, S., ... & Gumaei, A. (2020). Conventional to online education during COVID-19 pandemic: Do develop and underdeveloped nations cope alike. *Children and Youth Services Review*, *119*, 105582.

Safdar, G., Rauf, A., Ullah, R., & Rehman, A. U. (2020). Exploring factors leading to quality online learning in the era of Covid-19: A correlation model study. *Universal Journal of Educational Research*, *8*(12A), 7324-7329.

Salamat, L., Ahmad, G., Bakht, M. I., & Saifi, I. L. (2018). Effects of e-learning on students' academic learning at university level. *Asian Innovative Journal of Social Sciences and Humanities*, *2*(2), 1-12.

Sharjeel. Y, M., Ellahi, E, K., Marghoob, S. (2021). Analysis of Undergraduate Students Performance During Covid-19: Evidence from a Public University in Karachi. Pakistan Social Sciences Review. Vol.5(4). pp:160-172.

Sustainable Development Reports, 2022 United Nations.

Sustainable Development Goals, United Nations in Pakistan. (https://pakistan.un.org/en/sdgs)

Sparkes, L. (2004). Academic achievement and academic motivation and its relationship to extra-curricular activities and parental involvement in high school students. *San Anselm College*.

Stanca, L. (2006). The effects of attendance on academic performance: Panel data evidence for introductory microeconomics. *The Journal of Economic Education*, *37*(3), 251-266.

Journal of Social Signs Review

Online ISSN 3006-4651

Print ISSN 3006-466X

Suryaman, M., Cahyono, Y., Muliansyah, D., Bustani, O., Suryani, P., Fahlevi, M., & Munthe, A. P. (2020). COVID-19 pandemic and home online learning system: Does it affect the quality of pharmacy school learning. *Systematic Reviews in Pharmacy*, *11*(8), 524-530.

Thawabieh, A, M. (2016). Factors Affecting University Students Achievement. *British Journal of Education, Society and Behavioral Sciences.*Vol.14(4):1-11.

Trevino, E., Miranda, C., Hernnandez, M., Villalobos, C. (2021). Socioeconomic Status, Parental Involvement and Implications for Subjective Well-Being During the Global Pandemic of COVID-19. *Journal Frontiers in Education*. Vol.6.

Ullah, M., Khan, S., Hamid, B., Khattak, A, A. (2021). COVID-19 Pandemic Impact on the Performance of Educational Process: From Khyber Pakhtunkhwa Student. *Review of Education, Administration and Law (REAL)*. Vol.4(3).

Washburne, N.F., 1959. Socioeconomic status, urbanism and academic performance in colleges. Journal of Educational Research, 53(4): 130-137.

Zenebe, K., Worku, T., Berta, M. (2020). Factors Affecting the Academic Performance of Midwifery Students in Gondar University, North West Ethiopia. *African Journal of Midwifery and Women Health.*