IMPACT OF COVID-19 ON GIRLS EDUCATION IN INDIA: AN EMPIRICAL RESEARCH

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Abstract

The COVID-19 pandemic has caused a destructive impact in almost every sector of society. The educational system of India has been majorly affected and the most vulnerable segment has been identified to be girls' education. The following study has been aimed to evaluate the impact of the COVID-19 pandemic on girls' education in India. Regarding this, a Literature Review has been conducted by exploring existing data and it has been observed that the pandemic has developed a destructive crisis for girls' education in India. The sudden school closure and lockdowns have introduced new issues and challenges for girls' education and have thoroughly exacerbated the context of women's education in the country. The economic impacts of the pandemic have affected digital learning for girls and gender inequality in Indian society has been observed to be another reason behind these issues. Apart from this, the condition of girls' education in rural and urban areas has been identified to be much different. Most of the students from rural areas are dependent on mid-day-meal programs and the pandemic crisis forced them to stop these activities. Several initiatives and actions taken by the Indian government have been discussed, however, it has been identified that the programs and actions taken by the government were inadequate.

A positivism research philosophy has been used for ensuring effective observation of the research phenomenon, while an inductive research approach has been used for gathering required data. A descriptive research design has been used for describing the research subject and all potential research ethics have been followed. Along with that, a secondary quantitative data collection method has been followed and IBM SPSS software and Microsoft Excel have been used for analysing and interpreting the gathered data. The findings of this suggest that the COVID-19 pandemic has crucially affected girls' education and their participation in learning opportunities. Along with that, the pandemic crisis has also impacted the social condition of women in the country.

1. Introduction

1.1 Background of the study

The recent COVID-19 pandemic has posed a crucial and destructive impact on the education system of India. It has been observed that around half of the total children who were out of school before the pandemic, were girls. This indicates that girls' participation in the

education system of India was primarily low and the pandemic crisis has worsened this situation. Among the students, who have been affected due to the pandemic, around 10 million girls were studying in secondary schools (Indiatoday, 2021). The Indian government has taken various efficient initiatives to eliminate gender discrimination in education, which has been highly affected due to the pandemic.
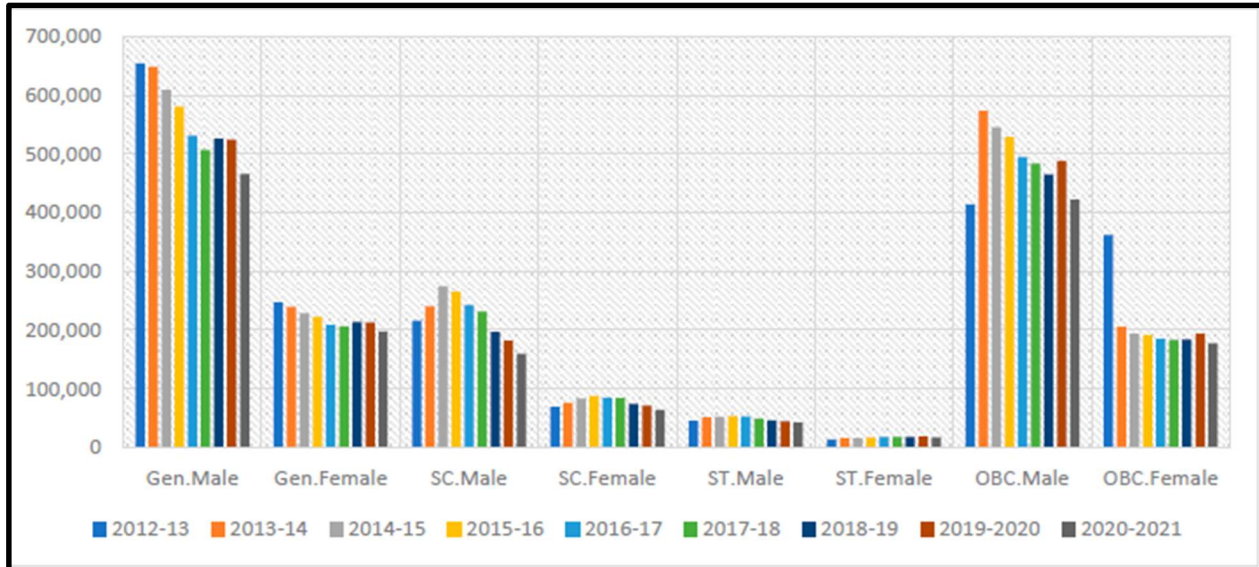

Figure 1.1: Caste-wise gender differences in Engineering education in India
(Source: Singh, 2022)

India ranks among the developing countries of the world with a stereotyped society and the pandemic has worsened the situation of girls in the country. It has been observed that the pandemic has pushed girls to left schools due to the school closures which eventually pushed them to child marriages (Unwomen, 2021). On the other hand, the pandemic has posed a major impact on the economic situation which affected the education of students from middle and low-income groups. However, the Indian government and several national and international organisations such as Mala Fund, and Un women have taken intervention to ensure education for girls to prevent the impact. Being a stereotyped country, the cast differences have also affected girls' education during the pandemic, however, it has been identified that there is always discrimination in education regarding gender (Singh, 2022). Thus, it can be stated that the demographic, economic and educational challenges created by the pandemic crisis have impacted girls' education in India.

1.2 Aim and objectives

The purpose of this study is to assess and evaluate the impact of the COVID-19 pandemic on girls' education in India.

Objectives

- To illustrate the impact of the COVID-19 pandemic on the educational context of India
- To identify the potential impact of the pandemic on girls' education in India
- To develop strategic recommendations for improving girls' education in India and preventing the negative impacts of the COVID-19 pandemic

2. Literature review

2.1 Potential educational challenges for girls' in India during pandemic

According to "Article 21A" of "The Indian constitution", education is a fundamental right for every human being. Education growth is a crucial indicator for the development of a country. Education helps girls to participate in economic and political decision-making at the community level as well as in their homes. However, the education system suffered a lot due to the outbreak of Covid-19 and created many negative impacts on girls' education in India (Dar & Lone, 2021).

Educational activity hampered

Due to the countrywide lockdown classes of school colleges were stopped, and examinations and new admissions were also suspended. Different boards from different states have postponed the annual examination and entrance tests also, which affects the girls' education badly. Due to the countrywide lockdown many universities and schools implemented online classes to continue the teaching procedure, but in India due to economic breakdown and unemployment rate families are not supporting their girls to participate in online classes (Khan et al. 2021). Girls from rural India are not getting enough support from their families to continue their education as a consequence they failed to participate in online courses.

Additional household works

Indian homes are not gender-neutral, girls need to do various household work as compared to boys for that reason girls and women failed to join the class during the pandemic. Situations were more critical for the girls living in a joint family. It is also a major cause behind girls not participated in online classes during the lockdown, which increases the dropout rate among rural girls.

School closure is the reason for the loss of nutrition

The mid-day meal programme is a meal programme in government schools in India, and a huge number of girls are dependent on that in rural India (Gupta &Jawanda, 2020). Due to the closure of schools, rural girls face difficulties getting proper nutrition, for this reason, they become weak and get serious health issues during the pandemic, which affects girls' education badly.

2.2 Effects of COVID-19 on girls of rural and urban India

Girls from rural India always face more difficulties for getting equal opportunities for education; however, in the time of pandemic, girls from rural as well as urban areas of India faced lots of issues. A huge number of people in India are living under the poverty line, due to the countrywide lockdown; the rural people lost their source of income. As a consequence, school dropout among rural girls increased, which increased the domestic violence among girls and women as well. Due to school dropouts during the pandemic girls from rural India failed to get social support and programs such as reproductive and sexual health. This is the main reason behind the global spike in sexual and domestic violence in rural India. Reduced income and low food security during the pandemic affect the mental health of girls in rural India, there is around a 38% increase in depression as compared to pre-covid period among girls (MISHRA, 2022).

Child marriage in rural areas of India also increased during this period. "The Union

Ministry of Women and Child Development" revealed that between June and October 2020 there is around 33% increase in the number of child marriages as compared to last year (Thomas, 2021). This indicates that there is a surge in child marriage due to the country-wide lockdown in India. Due to the high rate of unemployment and decrease in per capita income during the lockdown, girl child trafficking increased in rural areas of India. The "Supply chain" of menstrual products was affected due to the pandemic, and as a consequence, girls from rural and urban areas faced difficulties during the pandemic. It increases health-related issues among rural and urban girls. Therefore, the pandemic has emerged as one of the most crucial aspects for hampering overall life of rural as well as urban girls in India.

2.3 Governmental initiatives for girls' education in India during the pandemic

During the COVID-19 pandemic, around 158 million female students have enrolled "from pre-primary to tertiary levels". The pandemic has not only affected education, but it has also impacted the economy, demographics, health and social aspects in India. "The Indian Committee on Women Empowerment" has provided a report to take urgent initiatives for providing support to access digital education to girls from poor families (Economictimes, 2022). The Indian government has organised several committees for collecting accurate data on girls' education and has implemented new initiatives through the existing program of the "BetiBachao-BetiPadhao Scheme". In addition, the government has taken several initiatives to enable access to digital education for all students regardless of gender and caste.

The Indian government developed "*Diksha*" with the aim to ensure access to digital education through this virtual platform. Apart from this, another initiative "*Manodarpan*" has been arranged for providing mental support to the students and families who have been affected due to the pandemic (Pib, 2021). In addition, the government has also invested in enabling access to digital education for all students as very few students had access to the internet before the pandemic. Several NGOs and organisations have also worked for ensuring no loss of education for girls during the pandemic. However, it has been observed that the Indian government has taken no initiative for only girls though girls have been proven to have less access to smart phones and other digital devices than boys in the country. Hence, it can be stated that the government has to arrange more innovative programs and schemes for ensuring access to education for girls who have been affected due to the pandemic crisis.

2.4 Literature gap

The Literature Review section has been conducted by exploring previous data through secondary sources. This section has illustrated several relevant aspects, though the condition of women's education after the pandemic has not been demonstrated. Additionally, fewer data associated with government interventions for ensuring girls' education during the pandemic have been acquired. Hence, a primary data collection method has been conducted for gathering data on these aspects in order to develop potential recommendations for improving girls' educational access that has been affected due to the pandemic.
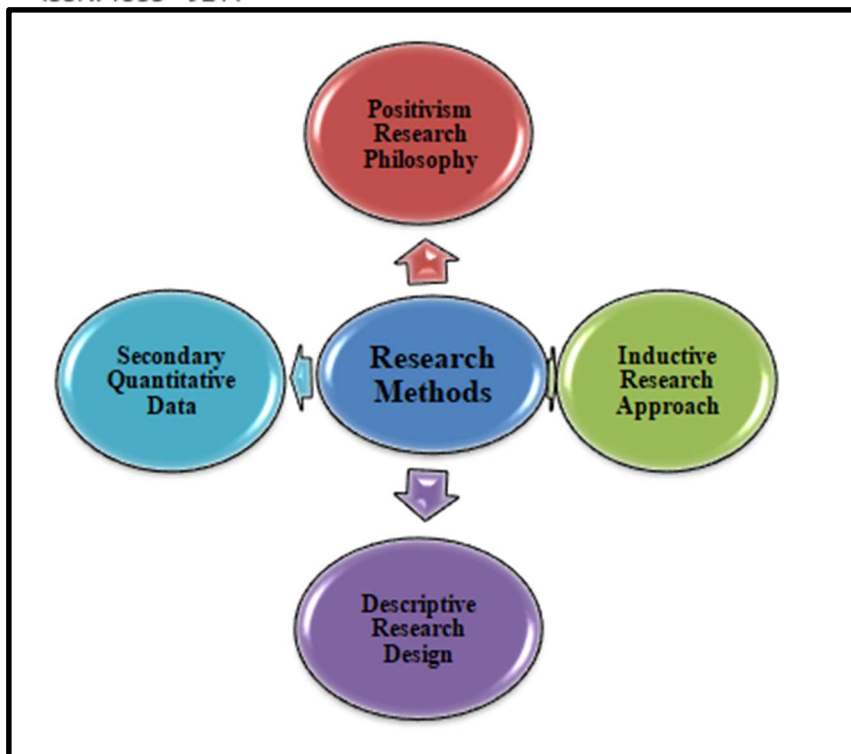
3. Methods

Figure 3: Methods used in this research

(Source: Self-developed)

3.1 Research philosophy

Research philosophy involves the philosophical and ethical beliefs that guide the methods and procedures of research. This assumption can be divided into interpretivism, positivism, realism and pragmatism. The positivism research philosophy involves conducting scientific investigations for testing hypotheses (Ryan, 2018). In the following study, *a positivism philosophy* has been chosen for observing the research phenomenon and building factual knowledge.

3.2 Research design

Research design can be defined as the structure of the methods for conducting the data collection procedure. It can be further divided into several types and a *descriptive research design* has been chosen for the study. According to Atmowardoyo (2018), descriptive research involves describing the research phenomenon in order to provide in-depth details associated with the phenomenon. Hence, this research design has been selected for describing the outcomes and developing answers for the research objectives.

3.3 Research approach

The research approach consists of detailed procedures and steps of the data collection procedure. An *inductive research approach* has been selected to follow to collect relevant data associated with girls' education in India. Inductive research involves exploring case studies and provides detailed insights for explaining the phenomenon (Woiceshyn&Daellenbach, 2018). Considering these advantages, this research approach has been identified as most suitable for the present study.

3.4 Data collection method

The data collection method is among the most essential procedures of research that involves gathering relevant information by exploring the research phenomenon. This procedure can be conducted by following a primary or a secondary data collection method. The secondary data collection method involves reusing existing data that has been primarily collected for different purposes (Martins, da Cunha & Serra, 2018). In this research, a secondary quantitative data collection method has been selected to follow for collecting accurate numerical data regarding girls' education during the pandemic.

3.5 Data Analysis

The data analysis procedure for this research has been conducted by using the IBM SPSS software and Microsoft Excel. Secondary data has been collected through reliable sources and 7 variables have been identified. As per the opinions of Kafle (2019), the IBM SPSS software is extremely popular and useful for conducting quantitative research. The gathered data has been statistically analysed using the IBM SPSS software and Microsoft Excel as these are widely used due to accuracy and convenience.

3.6 Ethical consideration

The present research has been conducted by following suitable and appropriate methods. In addition, no natural elements have been harmed during the data collection process and all relevant research ethics have been followed. Research ethics are essential for maintaining scientific integrity and human interests in the study and during the data collection process of this study, no data has been manipulated.

4. Findings and analysis

4.1 Findings

		Correlations					
		Enrollment in secondary education (crore)	Girls' dropout rate in primary education (%)	Girls' dropout rate in secondary education (%)	Schools having computer facility (%)	Schools having internet facility (%)	Unemployment rate in India (%)
Enrollment in secondary education (crore)	Pearson Correlation	1	-.561	-.749	.937	.955*	.229
	Sig. (2-tailed)		.439	.251	.063	.045	.771
	N	4	4	4	4	4	4
Girls' dropout rate in primary education (%)	Pearson Correlation	-.561	1	.893	-.773	-.654	.465
	Sig. (2-tailed)	.439		.107	.227	.346	.535
	N	4	4	4	4	4	4
Girls' dropout rate in secondary education (%)	Pearson Correlation	-.749	.893	1	-.934	-.884	.459
	Sig. (2-tailed)	.251	.107		.066	.116	.541
	N	4	4	4	4	4	4
Schools having computer facility (%)	Pearson Correlation	.937	-.773	-.934	1	.985*	-.121
	Sig. (2-tailed)	.063	.227	.066		.015	.879
	N	4	4	4	4	4	4
Schools having internet facility (%)	Pearson Correlation	.955*	-.654	-.884	.985*	1	-.054
	Sig. (2-tailed)	.045	.346	.116	.015		.946
	N	4	4	4	4	4	4
Unemployment rate in India (%)	Pearson Correlation	.229	.465	.459	-.121	-.054	1
	Sig. (2-tailed)	.771	.535	.541	.879	.946	
	N	4	4	4	4	4	4

*. Correlation is significant at the 0.05 level (2-tailed).

Figure 4.1: Correlation statistics

(Source: SPSS)

Correlations statistics is used for evaluating the relationship between the specific variables by using the significance values (Obilor and Amadi, 2018). It is important to identify whether the significance values of the variables are lower than 0.05 which indicates positive relationship or greater than 0.05 which indicates negative relationship. Significance values of all the variables are different which are 0.439, 0.439, 0.251, 0.063, 0.045 and 0.771. All the values are identified as lower than 0.05 which indicates that there is a positive relationship among the variables.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Enrollment in primary education (crore)	4	6	6	5.80	.000
Enrollment in secondary education (crore)	4	1	1	1.30	.082
Girls' dropout rate in primary education (%)	4	1	5	2.89	2.072
Girls' dropout rate in secondary education (%)	4	13	18	15.58	2.446
Schools having computer facility (%)	4	35	48	40.10	5.658
Schools having internet facility (%)	4	19	34	24.86	6.483
Unemployment rate in India (%)	4	5	8	6.32	1.160
Valid N (listwise)	4				

Figure 4.2: Descriptive statistics

(Source: SPSS)

Descriptive statistics is an important part of statistical analysis which is used for interpreting mean values of variables to identify the average of the findings (Amrhein et al. 2019). Mean values of all the variables in this particular study are 5.80, 1.30, 2.89, 15.58, 40.10, 24.86 and 6.32. all the values of mean statistics are larger than 1 which signifies that the average findings state that there is a negative impact of the covid-19 pandemic on girls' education across India. Apart from that the standard deviation values of all the variables are 0, 0.082, 2.072, 2.446, 5.658, 6.483 and 1.160.
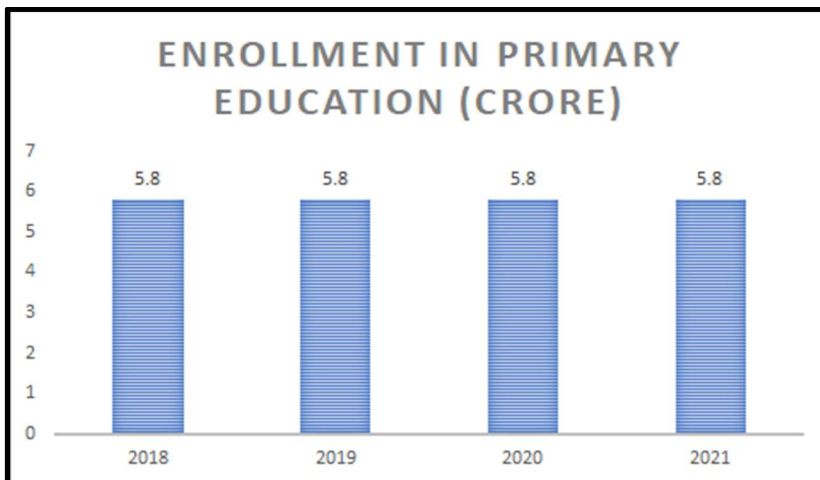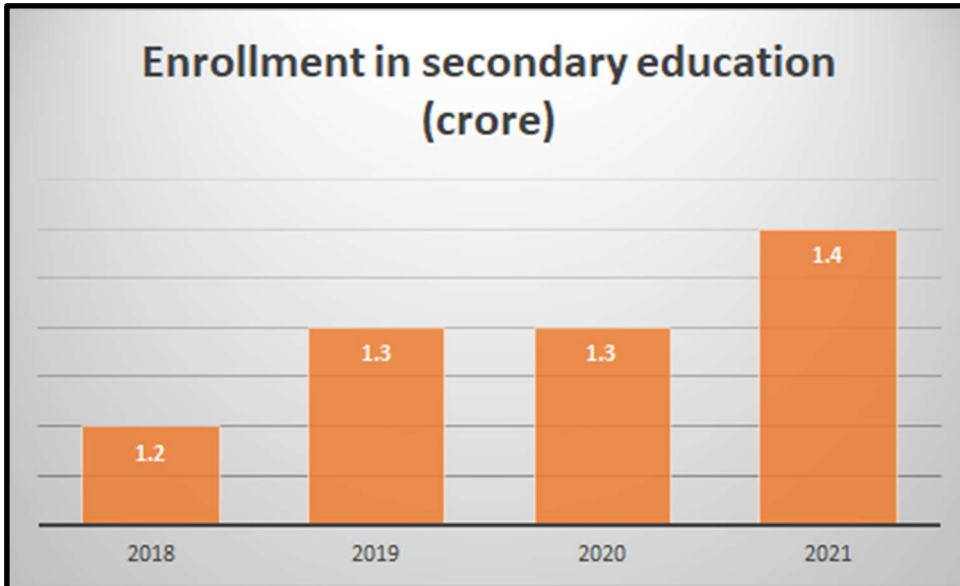
Figure 4.3: Girls' enrolment in primary education across India in the last four years
(Source: Excel)

The figure above represents the number of girl's enrolment in primary education across India in the last 4 years. It can be identified that the number of girls enrolled in primary education remained the same, *about 5.8 crore*, in 2018, 2019, 2020 and 2021. There is no increase in the number of girls enrolled in primary education throughout these years which indicates the negative impact of the pandemic crisis on girl's education across India.

Figure 4.4: Girls' enrolment in secondary education across India in the last four years
(Source: Excel)

The above figure represents the number of girls enrolled in secondary Education across India in the last 4 years. In 2018 *about 1.2 crore* girls enrolled in secondary Education which became *1.3 crore* in 2019 and 2020 as well as *about 1.4 crore* girls enrolled in secondary Education in 2021. A growth in the percentage of enrollment is identified in 2019 in comparison with 2018 but the percentage remained the same in 2019 and 2020 which signifies the negative impact of COVID-19 in on girls' secondary Education in India.
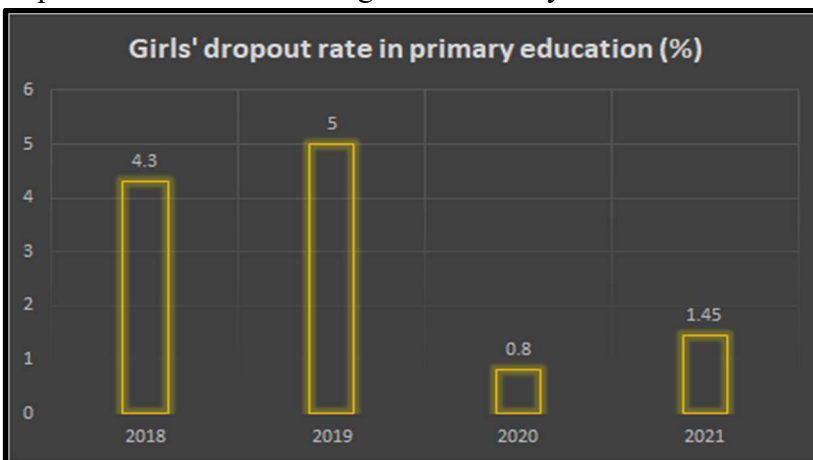

Figure 4.5: Girls' dropout rate in primary education across India in the last four years
(Source: Excel)

The above figure represents the dropout rate of girls enrolled in primary education across India in the last four years. Girl's dropout rate in primary education was *4.3% in 2018*, *5% in 2019*, *0.8% in 2020* and *1.45% in 2021*. It can be identified that in 2019 the rate of girls dropping out in primary education has increased which signifies a negative impact of the pandemic crisis on girl's education across India. A decline is identified in girl's dropout rate in 2020 but it again increased in 2021.
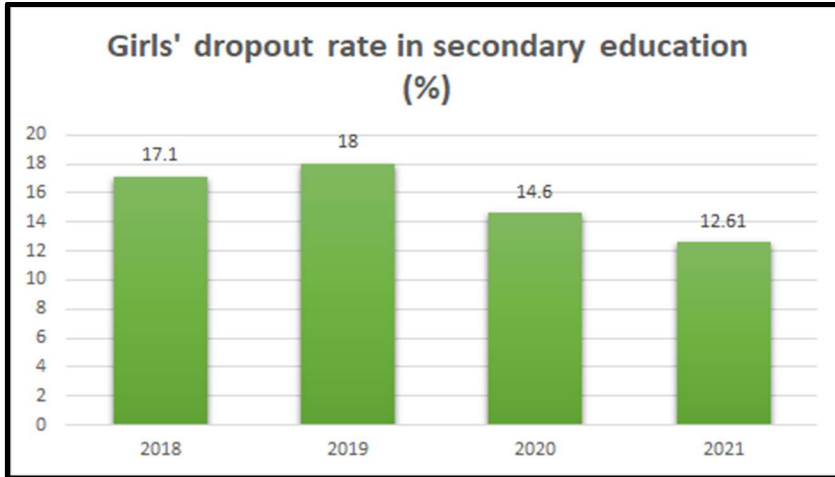

Figure 4.6: Girls' dropout rate in secondary education across India in the last four years
(Source: Excel)

The above figure represents the dropout rate of girls enrolled in secondary education across India in the last four years. Girl's dropout rate in secondary education was *17.1% in 2018*, *18% in 2019*, *14.6% in 2020* and *12.61% in 2021*. It can be identified that in 2019 the rate of girls dropping out in secondary education has highly increased which signifies a negative impact of the pandemic crisis on girl's education across India. Besides, the percentage of girls' dropout in secondary education is higher in each year than primary education.
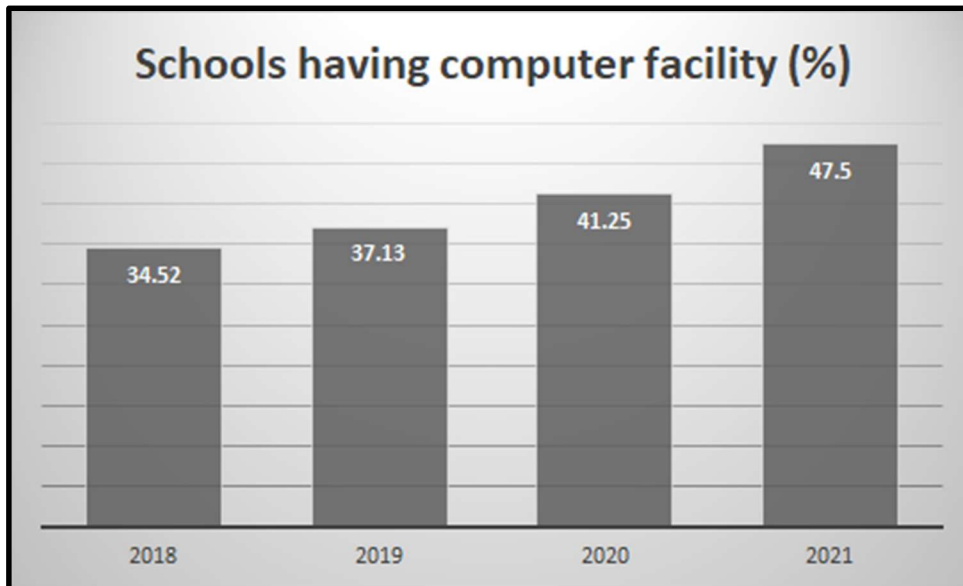

Figure 4.7: Schools having computer facility across India in the last four years
(Source: Excel)

The figure above represents the percentage of primary and secondary schools having computer facilities across India in the last 4 years. Nearly *34.52% schools* in India were having computer facilities in 2018 which changed to *37.3% in 2019*, *41.25% in 2020* and *47.5% in 2021*. Computer facility in schools is a basic requirement nowadays as the need for computer skills among students has increased due to the expansion of online education across India. It can be noticed that computer facilities in primary and secondary schools including private and government schools have increased throughout these four years.
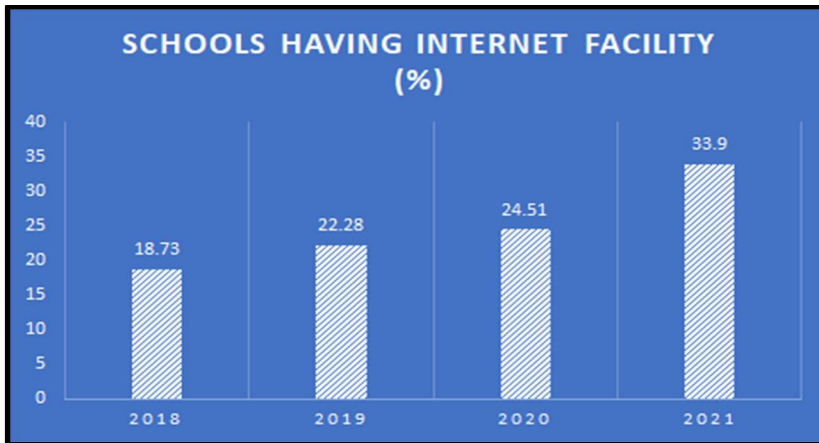

Figure 4.8: Schools having internet facility across India in the last four years

(Source: Excel)

Internet facility is another requirement in schools nowadays therefore the figure represents the percentage of schools across India having internet facility in the last 4 years. In 2018 *about 18.73% schools* were having internet facilities in India which turned to *22.28% in 2019*, *24.51% in 2020* and *33.9% in 2021*. There has been a good growth in the number of schools having internet facilities across India throughout these four years. The requirement of online education has increased during the pandemic crisis which led to the increase of the number of schools having internet facilities.
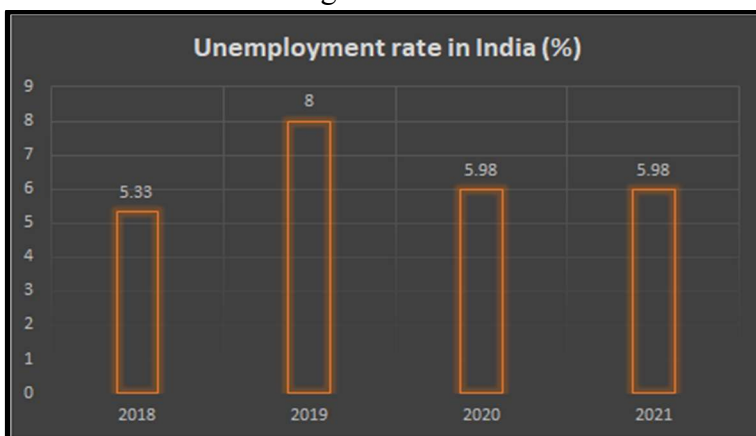

Figure 4.9: Unemployment rate of India in the last four years

(Source: Excel)

The figure above represents the unemployment rate of India in the last 4 years which signifies the economic condition of people on which education is based. In 2018 the unemployment rate of India was *5.33%* and then unemployment rate was *8% in 2019*, *5.98%*

in 2020 and 2021. A huge growth in the unemployment rate of India is identified in 2019 in comparison with 2018 which signifies the negative impact of the panoramic crisis on employment of India. Apart from that the unemployment rate remained the same in 2020 and 2021 which indicates that employment did not have a good growth in India in these years.

4.2 Analysis

It is identified from the findings that the number of girls enrolled in primary education and secondary education did not have any growth in the last 4 years. The number of enrolments in primary education was 5.8 crore throughout the 4 years and enrolment in secondary Education was 1.3 crore in 2019 and 2020 (UDISE, 2019). In addition to that girl's dropout rate is another significant variable that helps to identify the impacts of covid-19 on girls' education. It is identified that the rate of girls dropping out is higher in secondary Education than primary education which is because of early marriage (UDISE, 2020). In India, early marriage of girls has increased during the pandemic situation and most of the girls in secondary Education were dropping out for their marriage. Apart from early marriage poor economic conditions was another major reason for the increase of girl's dropout rate in secondary and primary education across India.

It is identified that the unemployment rate of India has increased to 8% in 2019 and due to unemployment; the economic condition of people was also unstable to invest in education (Macrotrends.net, 2022). On the other hand, the expansion of online education during the pandemic crisis brought some new challenges in girls' education. A small number of primary and secondary schools were having computer facilities in India before the pandemic (UDISE, 2021). Although a few girls of secondary Education had the ability of using computers and the internet for online education, girls of primary education were unable to use these infrastructures. Only 34.52% schools including primary and secondary schools were having computer facilities and 18.73% schools across India were having internet facilities before the pandemic (UDISE, 2022). Therefore, the findings suggest that there has been a negative impact of the pandemic crisis on girl's education in India and different initiatives are important for improving the growth of girl's education.

5. Conclusion and recommendations

It can be concluded that the pandemic crisis has negatively impacted girls' education in India. Education of rural girls has been majorly impacted due to lower access to computer skills and the internet. Online education through computers, mobile, tablets, laptops and the internet became the only way to continue learning and education at that time. Different challenges arose during the pandemic crisis for the girls of primary education as they were unable to properly use computers and the internet for online education. Apart from that poor economic condition due to increasing unemployment rate in India became another major reason for the increase of the number of girls dropping out from education.

Most of the people were unable to invest in education and that resulted in the increased number of girls dropping out from primary and secondary education in India during the pandemic crisis. Some initiatives are taken by the Indian government for improving girl's education but it is recommended to ensure proper computer and internet accessibility in primary

and secondary schools for making them able for the infrastructures of online education.

References

Amrhein, V., Trafimow, D., & Greenland, S. (2019). Inferential statistics as descriptive statistics: There is no replication crisis if we don't expect replication. *The American Statistician*, *73*(sup1), 262-270.https://www.tandfonline.com/doi/pdf/10.1080/00031305.2018.1543137

Atmowardoyo, H. (2018). Research methods in TEFL studies: Descriptive research, case study, error analysis, and R & D. *Journal of Language Teaching and Research*, *9*(1), 197-204. Retrieved from: http://academypublication.com/issues2/jltr/vol09/01/25.pdf

Dar, S. A., & Lone, N. A. (2021). Impact of COVID 19 on education in India. In *The journal of Indian art history congress* (Vol. 26, No. 2, pp. 46-55).Retrieved on: 23rd November, 2022,From: https://www.researchgate.net/profile/Naseer-Lone/publication/350382831_IMPACT_OF_COVID_19_ON_EDUCATION_IN_IN DIA/links/60815113907dcf667bb63e45/IMPACT-OF-COVID-19-ON-EDUCATION-IN-INDIA.pdf

Economictimes. (2022). *Lack of digital access hit hard girls in education during pandemic: Parliamentary committee* Retrieved on: 23rd November, 2022 From: https://government.economictimes.indiatimes.com/news/governance/lack-of-digital-access-hit-hard-girls-in-education-during-pandemic-parliamentary-committee/89149746

Gupta, S., &Jawanda, M. K. (2020). The impacts of COVID-19 on children. *Acta Paediatr*, *109*(11), 2181-2183. Retrieved on: 23rd November, 2022,From: DOI: 10.1111/apa.15484

Indiatoday. (2021). *How Covid-19 pandemic disrupted female education* Retrieved on: 23rd November, 2022 From: https://www.indiatoday.in/education-today/featurephilia/story/how-covid-19-pandemic-disrupted-female-education-1881212-2021-11-26

Kafle, S. C. (2019). Correlation and regression analysis using SPSS. *OCEM J Manag Tech Soc Sci*, *1*(1), 126-132. Retrieved on: 23rd November, 2022; Retrieved from: https://www.academia.edu/download/63995099/OCEM_Journal20200722-6638-3gpb1x.pdf#page=126

Khan, M. A., Kamal, T., Illiyan, A., & Asif, M. (2021). School students' perception and challenges towards online classes during COVID-19 pandemic in India: An econometric analysis. *Sustainability*, *13*(9), 4786. . Retrieved on: 23rd November, 2022, From:https://www.mdpi.com/2071-1050/13/9/4786

Macrotrends.net, (2022). *India Unemployment Rate 1991-2022*. Retrieved on: 23rd November 2022; Retrieved from: https://www.macrotrends.net/countries/IND/india/unemployment-rate

Martins, F. S., da Cunha, J. A. C., & Serra, F. A. R. (2018). Secondary data in research–uses and opportunities. *PODIUM sport, leisure and tourism review*, *7*(3). Retrieved from: https://periodicos.uninove.br/podium/article/download/12908/6363

MISHRA,I,2022, *Covid-19 pandemic badly hit female mental health in rural india,*. Retrieved on: 23rd November, 2022,From: https://timesofindia.indiatimes.com/city/meerut/covid-19-pandemic-badly-hit-female-mental-health-in-rural-india-study/articleshow/91533669.cms

Obilor, E. I., &Amadi, E. C. (2018). Test for significance of Pearson's correlation coefficient. *International Journal of Innovative Mathematics, Statistics & Energy Policies*, *6*(1), 11-23.https://seahipaj.org/journals-ci/mar-2018/IJIMSEP/full/IJIMSEP-M-2-2018.pdf

Pib. (2021). *Steps taken by the Government to ensure no loss of education during Covid* Retrieved on: 23rd November, 2022 From: https://pib.gov.in/PressReleasePage.aspx?PRID=1744059

Ryan, G. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse researcher*, *25*(4), 41-49. Retrieved from: https://oro.open.ac.uk/49591/17/49591ORO.pdf

Singh, S. (2022). Investigating the Status of Women Engineers in Education and Employment during the COVID-19 Pandemic. *Challenges*, *13*(1), 27. Retrieved from: https://www.mdpi.com/2078-1547/13/1/27/pdf

Thomas, M,2021,*Rise in Child Marriages in the Lockdown: How the Centre Ignored Data of Its Own Nodal Agency,* Retrieved on: 23rd November, 2022,From:https://thewire.in/rights/rise-in-child-marriages-in-the-lockdown-how-the-centre-ignored-data-of-its-own-nodal-agency

UDISE, (2019). *UNIFIED DISTRICT INFORMATION SYSTEM FOR EDUCATION PLUS (UDISE+) 2018-19*; FLASH STATISTICS. Retrieved on: 23rd November 2022; Retrieved from: https://udiseplus.gov.in/assets/img/dcf2021/UDISE+2018-19-REPORT.pdf

UDISE, (2020). *UNIFIED DISTRICT INFORMATION SYSTEM FOR EDUCATION PLUS (UDISE+) 2019-20*; FLASH STATISTICS. Retrieved on: 23rd November 2022; Retrieved from: https://udiseplus.gov.in/assets/img/dcf2021/UDISE+2019_20_Booklet_English.pdf

UDISE, (2021). *UNIFIED DISTRICT INFORMATION SYSTEM FOR EDUCATION PLUS (UDISE+) 2020-21*; FLASH STATISTICS. Retrieved on: 23rd November 2022;

Retrieved from: https://udiseplus.gov.in/assets/img/dcf2021/UDISE+2020_21_Booklet_English.pdf

UDISE, (2022). *UNIFIED DISTRICT INFORMATION SYSTEM FOR EDUCATION PLUS (UDISE+) 2021-22*; FLASH STATISTICS. Retrieved on: 23rd November 2022; Retrieved from: https://udiseplus.gov.in/assets/img/dcf2021/UDISE_Report_2021_22.pdf

Unwomen. (2021). *Your questions answered: Women and COVID-19 in India* Retrieved on: 23rd November, 2022 From: https://www.unwomen.org/en/news/stories/2021/7/faq-women-and-covid-19-in-india

Woiceshyn, J., &Daellenbach, U. (2018). Evaluating inductive vs deductive research in management studies: Implications for authors, editors, and reviewers. *Qualitative research in organizations and management: An International Journal*, *13*(2), 183-195. Retrieved from: https://www.researchgate.net/profile/Jaana-Woiceshyn-2/publication/324596659_Evaluating_Inductive_versus_Deductive_Research_in_Management_Studies_Implications_for_Authors_Editors_and_Reviewers/links/5b78d9aa9 2851c1e121f7477/Evaluating-Inductive-versus-Deductive-Research-in-Management-Studies-Implications-for-Authors-Editors-and-Reviewers.pdf