

# A Study on Covid-19 Pandemic: An Impact on High School Education in Jharkhand

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## Abstract

Education is the pillar of any nation; it builds the skills, knowledge and human resources of a nation. Health and education are a major concern for any nation and keeping its countrymen healthy and educated is the responsibility of the nation's. The outbreak of the coronavirus (COVID-19) has declared by WHO a public health emergency of international concern (PHEIC). In this paper, we are discussing about covid-19 and its impact on high school education in the Jharkhand context. A high school is a secondary school, where teenagers are educated before starting college or getting jobs. It is an empirical paper where a literature review is done to understand the concept of Jharkhand schools in the context of online education, the importance of education and COVID 19 impacts on education from the perspective of parents, teachers and students. For this purpose, a total of 30 respondents were selected from public sector schools of Ranchi. Data collection is done using questionnaires and independent sample test. Results of the study disclosed that online classes are the best solution in a pandemic and the tool is embraced by both the gender stakeholders equally. However, a few critical aspects that need a solution in this context are identified as trained teachers.

**Keywords:** Covid-19, Human Resources, High School, Education, Online Classes.

## 1. Introduction

Education is essential to build a strong foundation for the country's progress and growth. For example, education equips citizens with knowledge and skills that enable them to become productive and active members of their society. We all know that "health is wealth." So it's important to prioritize physical and mental well-being for a better quality of life.

But both health and education were affected during the COVID 19 pandemic. Coronavirus disease is also known as COVID-19 because CO stands for Corona, VI stands for virus, and 19 shows that this infection was introduced in 2019. It originated in China in December 2019. As the global outbreak of COVID-19 has proven, it is essential for everyone to take proactive measures to protect themselves and others from the virus. When this epidemic was transformed in mostly all countries WHO announced COVID-19 as pandemic on 12 March 2020. On 24 March 2020, the Government of India ordered a nationwide lockdown for long time. This lockdown was aimed at halting the spread of the novel coronavirus and protecting India's citizens.

The governments of nations have decided to temporarily close all schools, colleges and universities to reduce the spread of COVID 19. As a result, there has been an increase in the use of online learning techniques to ensure the continuity of education. Sometimes some hurdles also come along with online learning. Like internet connection failure, disturbances in the home environment, so many students are

unable to study online. This can prevent students from getting the full benefit of online learning, making it difficult to stay on top of their studies. Online platforms include WebEx, Zoom, and Microsoft Live Conference.

In conclusion, this crisis is not only teaching us how to fight this pandemic, but also how to create our future. SWAYAM, DIKSHA PORTAL, EPATHSHALA, SMILE, STEM-based portals and many others have been launched by the government of India to assist students. By leveraging these e-portals, we can equip future generations with technology-enabled knowledge, which could open up countless opportunities.

## **2. Covid-19 And Education**

A child's first school is at home, and his or her first teacher is the mother. But we know that if we want to develop our child's social life and productivity so we need to send them to school. Sending them to school is essential for not only their development, but also for providing them with the tools they need to succeed. Our child can learn better when interacting with teachers and peers in a physical classroom. In a physical classroom, the child can interact with teachers and peers, stimulating their learning and development. Due to this COVID-19 pandemic, most countries have closed schools, colleges and universities. This interruption in the educational process could have long-term impacts on the development of young minds, with lasting consequences for the future of our societies. But due to our government's awareness, students are getting their education online. In this way, their learning becomes an ongoing process without interruption. This is allowing them to develop skills that they can apply in their future, preparing them for the digital world.

There are some advantages and disadvantages in India for digital learning in the COVID-19 period.

### **2.1 Advantages of digital learning during COVID19**

- It is cost-effective.
- No geographical boundaries for learning.
- No time restriction for learning.

### **2.2 Disadvantages of digital learning in the COVID-19**

- In rural areas students have no proper resources.
- No conducive environment for studying at home.
- Students are sometimes distracted by games, social media etc.
- No written work provided.

## **3. Objectives Of The Study**

- Analyze the advantages and disadvantages of online study during the pandemic. Taking online classes during the pandemic has both pros and cons, and it is important to weigh them carefully before making a decision.
- Analyze COVID-19's impact on education.
- To analyze male and female respondents' perception of online study during COVID-19.

#### 4. Research Methodology

For this research, data was collected from students, teachers and parents of public high school institutes in Ranchi, Jharkhand. A total of 30 respondents were selected by the convenience sampling procedure. To ensure the results were as representative as possible, the respondents were chosen from a variety of backgrounds. The study has used only primary data for the objectives of the study. Online questionnaire generated and sent via SMS to all respondents. The questionnaire was completed quickly and effectively due to the convenience of receiving it via SMS.

The researcher used a structured questionnaire using a Likert scale. The researcher prepared the questionnaire using a WhatsApp poll and sent links to students and faculty via WhatsApp. Participants were asked to rate their level of agreement or disagreement with the questions on a five-point scale, ranging from excellent to very poor. The data was collected and analyzed using IBM SPSS 29 software. Through the analysis, insights were gained which can help inform future decisions.

Data is collected from a total of 30 respondents. This data was gathered to assess the attitudes of the sample population towards a specific research topic.

**Group Statistics**

	GENDER	N	Mean	Std. Deviation	Std. Error Mean
How much do you satisfied with "online teaching" concept in this covid19 situation?	MALE	15	3.33	1.543	.398
	FEMALE	15	3.20	1.082	.279
Do you feel that you have to study more in online teaching?	MALE	15	3.60	1.056	.273
	FEMALE	15	3.73	1.163	.300
Are you able to study in a peaceful environment at home?	MALE	15	2.60	1.242	.321
	FEMALE	15	3.07	.961	.248
Do you think that you have contributed towards prevention of spreading covid19?	MALE	15	3.93	.961	.248
	FEMALE	15	3.53	1.187	.307
Do you think that the online education will continue after this crisis?	MALE	15	3.80	1.424	.368
	FEMALE	15	3.87	.640	.165
Do you need physical documents or equipment to study at home?	MALE	15	3.53	1.302	.336
	FEMALE	15	3.80	.862	.223
Do you feel like isolated during online learning?	MALE	15	3.13	1.302	.336
	FEMALE	15	3.20	1.146	.296
Are you comfortable studying at home compared to school?	MALE	15	2.67	1.345	.347
	FEMALE	15	2.67	1.175	.303
Do you feel that all ICT'S tools you use are sufficient to study online?	MALE	15	2.47	.990	.256
	FEMALE	15	3.07	1.033	.267
Do you realize that most students don't have access to online education?	MALE	15	3.87	1.302	.336
	FEMALE	15	3.20	.941	.243
Do you agree that the online learning concept is suitable for all kinds of students?	MALE	15	3.20	1.082	.279
	FEMALE	15	2.80	1.146	.296
Do you feel that online teaching requires difficult monitoring?	MALE	15	3.73	.799	.206
	FEMALE	15	3.73	.961	.248
While studying at home, are you experiencing some health issues?	MALE	15	3.20	1.014	.262
	FEMALE	15	3.40	.986	.254
Do you feel that your family responsibilities increase while studying from home?	MALE	15	3.33	.976	.252
	FEMALE	15	3.20	1.014	.262

In the Group Statistics table, the number of respondents (N), mean, standard deviation and standard error is represented for all the variables related to online teaching. Also from the table it is clear that the highest

value is recorded for the variable "Do you think that you have contributed towards prevention of spreading covid19?" for the male group (3.93). This suggests that the male and female groups are almost equally represented in the survey population. This indicates that the sample size was equal for both genders.

### Independent Samples Test

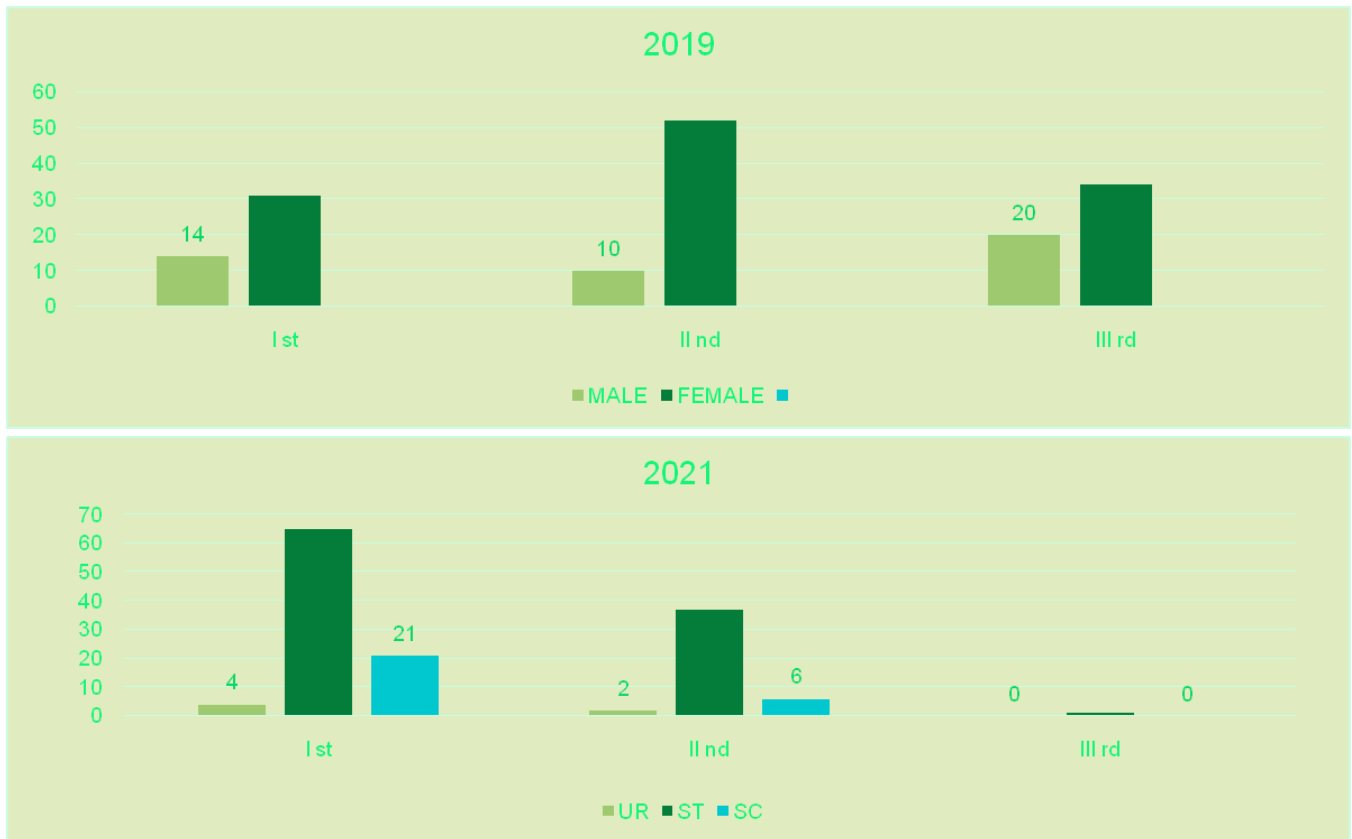
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
How much do you satisfied with "online teaching" concept in this covid19 situation?	Equal variances assumed	3.769	.062	.274	28	.393	.786	.133	.487	-.864	1.130
	Equal variances not assumed			.274	25.091	.393	.786	.133	.487	-.869	1.135
Do you feel that you have to study more in online teaching?	Equal variances assumed	.708	.407	-.329	28	.372	.745	-.133	.406	-.964	.697
	Equal variances not assumed			-.329	27.742	.372	.745	-.133	.406	-.964	.698
Are you able to study in a peaceful environment at home?	Equal variances assumed	.865	.360	-1.151	28	.130	.260	-.467	.406	-1.297	.364
	Equal variances not assumed			-1.151	26.341	.130	.260	-.467	.406	-1.300	.366
Do you think that you have contributed towards prevention of spreading covid19?	Equal variances assumed	.854	.363	1.014	28	.160	.319	.400	.394	-.408	1.208
	Equal variances not assumed			1.014	26.837	.160	.320	.400	.394	-.409	1.209
Do you think that the online education will continue after this crisis?	Equal variances assumed	6.435	.017	-1.165	28	.435	.870	-.067	.403	-.893	.759
	Equal variances not assumed			-1.165	19.431	.435	.870	-.067	.403	-.909	.776
Do you need physical documents or equipment to study at home?	Equal variances assumed	4.883	.035	-.661	28	.257	.514	-.267	.403	-1.093	.559
	Equal variances not assumed			-.661	24.293	.257	.515	-.267	.403	-1.098	.565
Do you feel like isolated during online learning?	Equal variances assumed	.249	.622	-1.149	28	.441	.883	-.067	.448	-.984	.851
	Equal variances not assumed			-1.149	27.558	.441	.883	-.067	.448	-.985	.852
Are you comfortable studying at home compared to school?	Equal variances assumed	.645	.429	.000	28	.500	1.000	.000	.461	-.945	.945
	Equal variances not assumed			.000	27.504	.500	1.000	.000	.461	-.945	.945
Do you feel that all ICT'S tools you use are sufficient to study online?	Equal variances assumed	.088	.769	-1.624	28	.058	.116	-.600	.369	-1.357	.157
	Equal variances not assumed			-1.624	27.951	.058	.116	-.600	.369	-1.357	.157
Do you realize that most students dont have access to online education?	Equal variances assumed	.411	.527	1.607	28	.060	.119	.667	.415	-.183	1.516
	Equal variances not assumed			1.607	25.492	.060	.120	.667	.415	-.187	1.520
Do you agree that the online learning concept is suitable for all kinds of students?	Equal variances assumed	.000	1.000	.983	28	.167	.334	.400	.407	-.434	1.234
	Equal variances not assumed			.983	27.908	.167	.334	.400	.407	-.434	1.234
Do you feel that online teaching requires difficult monitoring?	Equal variances assumed	.660	.423	.000	28	.500	1.000	.000	.323	-.661	.661
	Equal variances not assumed			.000	27.093	.500	1.000	.000	.323	-.662	.662
While studying at home, are you experiencing some health issues?	Equal variances assumed	.198	.660	-.548	28	.294	.588	-.200	.365	-.948	.548
	Equal variances not assumed			-.548	27.977	.294	.588	-.200	.365	-.948	.548
Do you feel that your family responsibilities increase while studying from home?	Equal variances assumed	.049	.826	.367	28	.358	.716	.133	.363	-.611	.878
	Equal variances not assumed			.367	27.959	.358	.716	.133	.363	-.611	.878

represented in the survey population. This indicates that the sample size was equal for both genders.

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means							
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The Sig. (2-Tailed) value in the above table is greater than 0.05 for all variables. Because of this, it can be concluded that there is no significant difference between gender perceptions about online teaching during the covid-19 pandemic. The Group of Statistics box revealed that the mean for the male group is greater than the mean for the female group; we can conclude that the male group was more concerned about online teaching during COVID-19 than female group respondents.



According to high school results, we see positive progress in all data. This indicates that our students are continually working hard and improving their academic performance. This indicates that our efforts to switch to online teaching have been successful, as it has enabled students to continue to receive quality education even during this unprecedented time.

### 5. Results And Discussion:

The results also showed that when students, teachers and parents were interviewed to find out their The pandemic has challenged the education system and accelerated the adoption of online learning, changing the way we learn forever. It was established that both gender groups hold similar perceptions about the online learning process and its impact on student education. Thus, it can be concluded that the perceptions about online learning are largely similar among both genders. In most parts of the country, 4G connectivity is available at low cost. As a result, mobile data has become more accessible and affordable for the majority of Indians. Due to powerful network connections, students can learn in the classroom environment as they are sitting directly in the classroom. As a result, students can benefit from increased collaboration and better integration of technology into their learning experience. To that end, it is important to ensure the system is equipped with the necessary features to enable our teachers to fulfill their duties and provide our students with the best education possible. To ensure our teachers are equipped with the right tools to foster success in our next generation, the system must be optimized for our teacher's training for online classrooms.

This training is essential to ensure that teachers understand how to effectively deliver the curriculum in a virtual environment. Going forward, virtual classes will equip our nation's students with the necessary skills and knowledge to foster educational success in the coming years. By introducing online classes, we



can help our students build the skills they need to succeed in the future. Consequently, it is vital for schools to prioritize these investments in order to achieve the best possible learning outcomes.

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