Understanding Exclusivities in the Digital Space of India in the Times of COVID 19

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Abstract

As a tool for addressing various forms of social-economic inequalities and marginalization, the research on digital inclusion and exclusion simultaneously received a lot of attention in developing nations. The digital divide between Indian men and women persists despite rapid advancements in internet access, particularly via mobile internet use, which has nearly doubled between 2018 and 2020. This was evident during the COVID outbreak, which revealed disparities that already existed within societies. The paper analyse the Digital inequality, in India , during the COVID 19 pandemic which in turn contributes to the (re)production of social inequalities.The paper also points out the lacuane that exist within the policies of the Indian state that making it difficult to bridge the digital gap that exist within the country and that ultimately paving the path of rich capitalist entry as big brothers to care of bridging the gap. In this scenario, the 'digital marginalised' in India has no option but succumb to expensive network connections.

Keywords: Inequalities, Marginalisation, Inclusion Internet, COVID 19, digital gap, digital marginalised

Background:

Digital space is a part of the larger economic, cultural, subjective, and societal frameworks in which we live. Many people have attributed the most fundamental social shifts and trends to technological advancement. The problem lies in coming up with analytical categories that will enable us to comprehend the power dynamics in the digital space and the intricate connections between technology and society. The following dimensions can be used to evaluate the digital divide: outcomes, use, and access. When one observes that the utilization of technology within social relations results in the production of inequality, it is crucial to evaluate the significance of exclusion from social networks based on digital technology. The digital divide, which is defined as stratification in Internet access and use, is inextricably linked to the idea of social inequalities (van Dijk, 2005). The inclusion of people in digitally enabled networks is important for economic opportunities as well as participation in political, social, and cultural life. People all over the world are experiencing digital technology's incorporation into social, economic, democratic, and cultural processes in varying degrees. When digital technology is developed and used differently in contexts of global inequality, a dynamic emerges that both reproduces existing social divisions and new forms of poverty and exclusion. A digital divide is frequently used to describe the current disparities and divisions in an information- and networked society (Norris, 2000). When looking into the dynamics of inequality in a global information culture, the concept of a digital divide is a good place to start (Lash, 1999). According to Castells (2001), the digital divide encompasses more than just those with and without Internet access. He says that different levels of access to and use of digital services "add a fundamental cleavage to existing sources of inequality and social exclusion in a complex interaction" (Castells, 2001). When digital

technology is seen as a resource, it can be seen as part of a virtuous circle in which those with access to (fast) Internet, a good education, and a good socioeconomic background are in a good position to benefit from economic growth (Fox, 2005). However, those who do not have access to any of these resources face disadvantage and the possibility of exclusion. The distribution of resources is correlated with positions of power; those with fewer resources have less control over their futures, securities, and participation freedoms.

It is essential to comprehend that the manner in which technology is incorporated into social relationships is the underlying cause of the disparities putting technology in the context of how inequality and cultural change happen. According to MacKenzie and Wajcman (1985), the social shaping approaches to technology contend that social factors like economic concerns and gender relations influence technology. Concerns about the emergence of new inequalities and the reproduction of existing inequalities are being raised by the development and expanding use of digital technology in global economic, political, social, and cultural life (Wyatt et al., 2000). The sociological perspectives drive the analysis of the digital divide, which aims to comprehend the nature of social inequality and the new digital discrimination/virtual inequality (Mossberger et al., 2003). Ethnicity, age, caste, gender, education levels, and socioeconomic background and status are some of the dimensions of the digital divide that are crucial to comprehending its dynamics. People who fall on the wrong side of any of the digital divides—access, use, or outcomes— are disadvantaged, whereas those who are digitally advantaged regularly and reliably have access to opportunities. During COVID-19, where accessibility, usage, and digital skills appear to determine the impact of the pandemic on a particular segment of the population, these inequalities of the digital space are now becoming more prominent in the education and employment sectors. The digital divide has implications for education, health, mobility, safety, financial inclusion, and every other imaginable aspect of life as a result of the growing dependence on digital technologies and the internet.
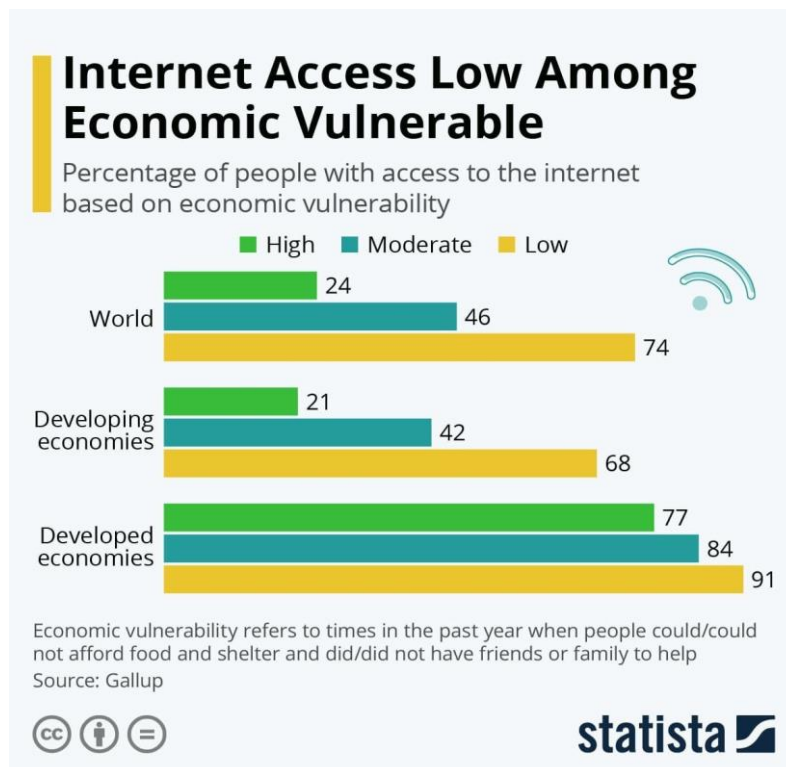
Source: Statista

Central Research Question:

Why inequalities exist within the digital space in India?

Related Question:

- How to bridge the digital divide(s) that exist within the Indian society?
- What are the implications of COVID-19 on the digitally marginalized?

Hypothesis:

Based on the literature referred so far, the following hypothesis can be formed. The dimensions like ethnicity, age, caste, gender, levels of education and socio-economic background and status are significant to understand the dynamics of the digital divide. People who are on the 'wrong side' of any of the digital divides — access, use, and outcomes — can be seriously disadvantaged. There are others -the digital advantaged- that have regular, reliable access to digital technologies without significant opportunity costs. Digital Divide needs to be viewed upon by the dynamics of power relations that exist within society. The complex imbrication between the digital and the non-digital brings with it the destabilizing older hierarchies of scale and often dramatic re-scaling of the new hierarchies. With the pandemic, the inequalities that exist within the education sector and employment sector seemed to reinforce the already existed hierarchies and thus placing some on the core as Information Elites who benefit due to their technological privilege and those on the periphery of the networked society as excluded, those facing inequalities both before and during pandemic.

Literature Review:

The study will take as its point of entry the many studies available across discipline- sociology, economics, education and politics. Based on limited literature referred to so far, the literature can be divided into following categories – First category of literature deals with theoretical base of study, Sociology of Digital Divide where it explains the inequalities that exist in the digital arena. Second category of literature understanding the divide through the concepts of power. Third category of literature reflects upon the impact of COVID in the digitised education sector and labour market.

Wei and Hindman in *Does the Digital Divide Matter More* – talks about digital divide in their article and recommend a new definition for it: digital divide is inequalities in the use of communication and information technologies. Digital divide is based on a difference between technological haves and have-nots. Inequities in the access to and use of digital technologies were focused and researched in the previous studies; however, with the widespread use of the Internet and its popularity for information and news gathering, some digital divide researchers have started to reconsider the notion of the digital divide and their focus shifted from material access to actual use (e.g., use of smartphones) (as cited in Wei and Hindman 2011)

In the edited volume, **The Digital Divide: The internet and social inequality in international perspective**, in the second chapter **A theory of the digital divide**, **Jan van Dijk** analyse digital divide in the context of the network society in which structural inequality is potentially growing between the information elite, a participating majority, and those who are excluded, as these three segments of society have differential opportunities for connecting to the network. Inequality in the network society. According to him, using a relational view of inequality differences of physical access (connectivity), skills and usage will become strategically important in a network society. He defines a network society as a society that is increasingly based upon a combined infrastructure of social and media networks (van Dijk, 1999, 2006b, 2012). In this society, occupying particular positions and having relations with this position become

decisive for one's place, opportunities and chances in society (van Dijk, 2005). Access to and being able to use social and media networks increasingly merge in a network society. Those who have less connection in social networks usually also have less access to and ability to use media networks such as the Internet. Inclusion and exclusion in both social and media networks combined might be a powerful creator of structural inequality in the network society. It could create the following tripartite structure. The core of this concentric picture of a network society portrays an information elite of about 15 percent of the population in high-access developed societies that has very dense and overlapping social and media networks. They are people with high levels of income and education, they have the best jobs and societal positions and they have more than 95 percent Internet access. These elite are accustomed to living in dense social networks. They are extended with a large number of long-distance ties that are part of a very mobile lifestyle. The majority of the population (50 to 60 percent) in these societies has fewer social and media network ties and less Internet access, skill and use. The Internet applications used are of a relatively less serious and more of an entertainment kind as in the case of the usage gap thesis discussed earlier. Finally, the unconnected and excluded part of society that is relatively isolated in terms of both social networks and media network connections. They comprise at least a quarter of the population of developed societies as well. They consist of the lowest social classes, the unemployed, particular elderly people, ethnic minorities and a large group of migrants. They participate considerably less in several fields of society.
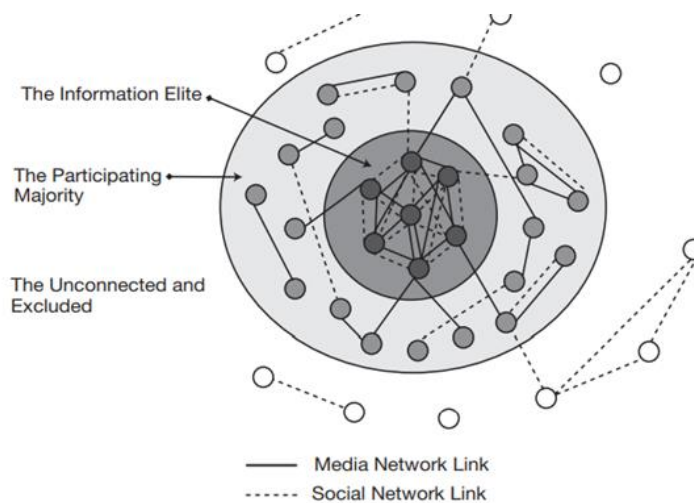

Figure 2.6 Potential tripartite structure of the network society. Source: van Dijk (1999, 2006, 2012)

In the article, **Privilege and Repression in the Digital Era: Rethinking the Sociopolitics of the Digital Divide**, **Paul C. Gorski,** examines this problem of digital divide in the context of a greater picture of race, gender, class, language, and ability privilege, moving toward a more progressive approach for dismantling the digital divide. He differentiates the new paradigm approach to understand the divide based on at least 7 principles- Firstly**,** a new approach for framing the digital divide must be critical of digital inequities in the context of larger educational and social frames of privilege and power. **Secondly,** he urges to broaden the meaning of "access" beyond that of physical access to, or usage rates of, computers and the Internet to include access to equitable support and encouragement to pursue and value technology-related fields, educationally and professionally. Educators, parents, the media, and society in general must continuously express expectations and assumptions that all people have an opportunity to achieve mastery of computer and Internet skills, regardless of race, gender, socioeconomic status, ability status, or any other dimension

of their identity. **Thirdly**,"access" according to him, needs to include equitably nonhostile, inclusive software and Internet content and experiences**. Fourthly**, a new approach for understanding the digital divide must critically examine both who has access to, or uses, computers and the Internet, as well as how these technologies are being used by various individuals or groups of people or by those teaching them. **Fifthly**, the 'paradigm shift' must also lead us to consider the larger sociopolitical ramifications of, and socioeconomic motivations for, the increasing levels of importance assigned to information and instructional technology both in schools and society at large**. Sixthly**, this approach must expose capitalistic propaganda, like commercials portraying children from around the world announcing their recent arrival online, that lead people to believe that these technologies are available to anyone, anywhere, under any circumstances, who wants to use them. Such messages understate the severity of digital inequities and further demonize those who for various reasons do not have access to, or perhaps do not want to use, these technologies. **Finally**, the new approach must reject any measure or program that purports to "close" the digital divide simply by providing more computers and more, or faster, Internet access to a school, library, or other public place. In addition to its offensively patriarchal nature, the suggestion that increasing or improving physical access to computers and the Internet will close the divide is simplistic and shallow - the type of Band- Aid approach to larger inequities that, in the name of justice, simply lock privilege and power in place. These seven principles provide a crucial starting point for examining the problem of the digital divide and formulating viable and far-reaching solutions in context. But more so, they demonstrate the complexity of digital privilege and other related equity issues and the interrelatedness. This complexity and interrelatedness will become even more pronounced as five dimensions of the digital privilege and inequity: racism, sexism, classism, linguisticism, and ableism are explored .

In Revisiting the Digital Divide in the Context of a 'Flattening' World, Deepak Prem Subramony explains nature and ramifications of this Divide theoretical lenses, and have talked about *'Knapsack' of Technological Privilege'*. Borrowing Mcintosh's (Mcintosh,1988) theoretical lens, he proposed that social/economic/cultural groups that find themselves on the right side of the Digital Divide - namely, those who comprise the technological haves-knowers- doers - can be seen as largely oblivious beneficiaries of a vast matrix of privileges, unconscious possessors of a significant knapsack of gifts, when it comes to their relationship.

Jeremy Moss in Power and Digital Divide analyses the importance of understanding power in the digital divide. He has presented two types of power-over – force and influence – as the primary types of constraint that result from the digital divide. Ultimately, the reasons for arguing that the constraints imposed by the digital divide are more severe is that they strike at more fundamental human interests than those threatened by either of the other forms of constraint. This is especially true in the developing world. The sheer scale of the digital divide between countries hampers the fulfilment of even the most basic needs. Not having access to forms of technology which are instrumentally vital for access to other goods (employment, knowledge about health outcomes or access to democratic institutions) is a larger threat to agents' well-being than at least some of the threats that accompany digital technology, severe though these are. Returning to our initial definition of power in terms of how it structured agents' options for action, force clearly reduces the options that agents have in a more severe way than either coercion or influence. By denying access to digital technologies and controlling their distribution this operation of power prevents a larger range of important actions that the operation of influence described above It tries to understand what sort of power a social arrangement exhibits and how it affects people .While discussing *'power-*

over', he tries to explain are exclusionary practices in which he explained the disadvantages suffered as a result of lack of access to ICT resources that might be necessary for participation in a social institution or a culture. He explains another characteristic of power - *'force,'* where force is understood as an act by which A keeps B from doing x or makes B do something that B would not otherwise do. People are prevented from having access to digital technology because of factors like costs and pre-existing inequalities that are tracked in the digital sphere. While trying to explain the concept of '*coercion'* , he said that the agents who are being coerced at least have the opportunity to refuse the dominant strategy even though the consequences may be disastrous. Instances of this type of power involving the digital divide are where people are coerced into purchasing systems that may be inferior or do allow adequate access. What characterises '*influence'* is that it is a form of power-over that operates not to prevent or coerce, but to alter the self -understanding of the successfully influenced agent. This might occur, for instance, where a person is intentionally given information which prompts them to view a situation in a way that corresponds to the view of a dominant agent. The most significant product of influence is the way in which a person will internalise a norm or set of norms that thereby make them more likely to choose a certain range of options that accord with a strategy of power. *Disciplinary power* operates not just to make someone do something, but to make them want to do it without, ultimately, the overt threat of coercion or the use of violence. That is also reflected in the digital space.

For many people across the world the pervasiveness of digital technology – whether experienced as a presence or an absence – is significant. A distinctive aspect to digital technology is that it is both an artifact and a communication medium, which **Silverstone and Hirsch** in **Consuming technologies: Media and information in domestic spaces** calls "double articulation." This is important in terms of assessing inequality in a digitally enabled network society: it is not only the networked structuring of the technology and the ability to access and use it that are contributing factors in inequality but it also provides access to information and the public sphere, which is a key resource in an information society. In overall terms the significance of the technology lies in the way in which it is embedded within the relations of production; in information flows; and in the way it underpins participation. Thus, the utilization of technology within the economic, political, and socio-cultural processes of society shape inequalities at the digital space.

Castells in ***The Internet galaxy: Reflections on the Internet, business and society*** argues that the digital divide goes beyond those who have access to the Internet and those who do not have access. He writes that differing levels of access to, and usage of, digital services "adds a fundamental cleavage to existing sources of inequality and social exclusion in a complex interaction"

UNICEF Report titled '***How Many Children And Young People Have Internet Access At Home?*** 'finds that 2.2 billion children and young people aged 25 years or less – more than 65 per cent of young people globally – lack internet access at home. In addition to highlighting the vast number of children and young people who lack digital connectivity, the data have also shown that internet access depends largely on where these children and young people live and the relative wealth of their household. Globally, children and young people aged 25 years or less from rural areas have rates of internet access that are 16 percentage points lower than their urban peers. More significantly, home internet access for children and young people whose households belong to the poorest quintile in their countries is 42 percentage points lower than that of their peers from richest households in the same countries, which further exacerbates existing inequalities in access to education. This critical situation undermines the potential for children and young people to succeed in school, work and life in an increasingly digital world. With education systems investing in hybrid and remote learning due to the COVID-19 pandemic, it is increasingly clear that this

lack of connectivity is a barrier that will prevent children and young people from accessing effective and interactive forms of learning going forward. Significantly expanding internet access in homes, communities and schools is vital to ensure that this and subsequent generations of children and young people can acquire the knowledge and skills they need to support a sustainable future.

ILO's report titled *Digital skills and the future of work: Challenges and opportunities in a post COVID-19 environment* stresses the importance of accessibility. It says that Connectivity is becoming a new human right. Access to medical services, education, training and work opportunities increasingly depend on connectivity in today's world. At the same time as a new type of inequality in the form of access to connectivity is widening the gap between those that 'have' and those that 'have nots'. The pandemic has shown that it is disruptive, accelerating some trends that impact both short-term and long-term transformations, which puts pressure on adapting "traditional" employment policies to the new circumstances. The ILO advocates for a human-centred approach to these transformations. Many jobs are fully or partially being transformed into digital jobs, expanding the digital economy and related activities. As the COVID-19 pandemic has introduced an additional disruption in this trend, it is crucial that decent jobs for all regardless of age, gender, race, location, disabilities, etc. is addressed within a fair and coherent employment policy framework that avoids inequalities. The digital economy (including digital jobs) requires different digital skills, which differ from country to country and from cohort to cohort, based on levels of development, both economic and technological. Therefore, the methods of assessments and implementation of digital skills upgrade suggested by ITU are adapted to each (national) situation. Data has revealed that people with low skills have been more impacted by the pandemic, and that women have been more impacted than men have.

According to **'India Inequality Report 2022: Digital Divide' released Oxfam**, Indian women are 15 per cent less likely to own a mobile phone and 33 per cent less likely to use mobile internet services than men.In Asia-Pacific, India fares the worst with the widest gender gap of 40.4 percent, says the study.Despite registering a significant (digital) growth rate of 13 percent in a year, only 31 percent of the rural population uses the Internet compared to 67 percent of their urban counterparts, says the report. In rural India, the tendency to use formal financial services is lowest for ST households, followed by SC households and OBC households. The likelihood of access to a computer is more for the General and OBC groups than for the SC and ST populations. Among all religions, Sikhs have the highest likelihood of having a computer followed by Christians, Hindus and lastly Muslims.As per the National Service Scheme [NSS (2017-18)], only about 9 percent of the students who were enrolled in any course had access to a computer with internet and 25 percent of enrolled students had access to the internet through any kind of devices.The chances of having a computer are higher with higher levels of education as well as income.Among states, Maharashtra has the highest internet penetration, followed by Goa and Kerala, while Bihar has the lowest, followed by Chhattisgarh and Jharkhand, the report said. The digital push driven by the pandemic resulted in India experiencing the largest number of real-time digital transactions in 2021 at 48.6 billion.However, the likelihood of a digital payment by the richest 60 percent is four times more than the poorest 40 percent in India.

Power and Knowledge

Power generates knowledge, or at least its apparatuses, and knowledge transforms into power; They are linked. Knowledge emerges whenever there is power. Knowledge and power cannot be separated. Relationships of power exist across all social strata. It also happens between people and shows up in our

personal relationships. Foucault argues that the dominant scientific knowledge that exists in the West is the result of a specific community or group that has successfully subjugated other people's knowledge. At the level of knowledge, power raises particular discourse and knowledge reinforces power. Power is a complex set of techniques. My argument in the paper is based on the idea that "digital elite" people have more power than "digital marginalized" people. There are inequalities in internet accessibility and affordability as a result of the extremely low penetration of government-owned internet services. In India, it is evident that the state was unable to close the digital divide through its various programs, paving the way for commercial enterprises to rapidly provide the "digital marginalized" with internet access, forcing them to bow their heads in front of the capitalists. Interesting fact: Jio, owned by India's Mukesh Ambani, a billionaire, has over 50% of the subscriber base and is on the verge of becoming a monopoly. This is concerning because competition authorities typically ensure that situations like this do not occur. Jio is able to maintain its low prices because it is supported by the financial strength of its parent company. However, once Jio has eliminated its rivals, it is highly unlikely that it will continue doing so. Even though Jio has made its services more accessible and affordable, there are still worries that prices will rise, especially in 2022. The COVID 19 pandemic has shown the world's existing social and economic disparities, making the digital divide a serious issue during and after a pandemic.

Research Methodology: The research is analytical and descriptive, and uses a mixed method of analysis. Mostly the paper is based on textual analysis of the literature on digital divide. The research also adopt ethnographic method of research includes analysis of policy documents and state action in India and questionnaire-based surveys.

A Dream of Digital India ?

In India, 70% of the population has poor or no connectivity to digital services, compared to 3.7 billion people worldwide services.[1] As per the NSSO, only 24 per cent of Indian households had an internet connection in 2017-18.[2] What is more alarming is that While 66 per cent of India's population lives in villages, only a little over 15 per cent of rural households had access to internet services in 2017-18,41 which grew to 31 per cent by 2022.[3]

The role of technology in bridging inequality is questioned due to factors like affordability, the purpose of use and reliability of broadband services.[4] There is a noticeable difference in access to computers and the internet between the advantaged and disadvantaged groups.[5] Access to technology has been largely in the hands of the privileged, allowing them ease of access to services, which further exacerbates inequality. According to NSSO, only one-fifth of the population can operate a computer or use the internet[6] despite

[1] Kumar, S. K. A., Ihita, G. V., Chaudhari, S., & Arumugam, P. (2022, January). A survey on rural internet connectivity in India. In 2022 14th International Conference on COMmunication Systems & NETworkS (COMSNETS), IEEE. pp. 911-916.

[2] Ministry of Statistics and Programme Implementation. (2019). Key Indicators of Household Social Consumption on Education in India, NSS 2017-18. National Statistical Office. .https://pib.gov.in/Pressreleaseshare.aspx?PRID=1593251#:~:text=Literacy%20rate%20among%20persons%20of,urban%20areas%20it%20was%2057.5%25.

[3] Dilipkumar, B. (2022). India will witness significant increase in frequency and duration of internet access: study. Economic Times. https://economictimes.indiatimes.com/tech/technology/india-will-witness-significant-increase-infrequency-and-duration-of-internet-access-study/articleshow/91012991.cms

[4] UN.ESCAP. (2018). Inequality in Asia and the Pacific in the era of the 2030 agenda for sustainable development https://hdl.handle.net/20.500.12870/1551.

[5] OECD. (2015). Inequalities in Digital Proficiency: Bridging the Divide, in Students, Computers and Learning: Making the Connection, OECD. https://doi.org/10.1787/9789264239555-8-en.

[6] Ministry of Statistics and Programme Implementation. (2019). Key Indicators of Household Social Consumption on Education in India NSS 2017-18. National Statistial

there is an increase of internet subscribers, and that more than 34 per cent of the population accessed the internet in 2017, only 17 per cent had used the internet in the previous month. Only 2.7% of the poorest 20% of households have access to a computer and 8.9% have internet access, whereas the proportions are 27.6% and 50.55%, respectively, among the wealthiest 20% of households[7]. These disparities were made even worse by the pandemic.The pandemic further exacerbated these inequalities. According to Oxfam India's policy brief on Educational Technology in School Education in India,[8] more than half the children with disabilities (56.5 per cent) were struggling to attend classes, only 4 per cent of SC/ ST households were reported to be studying online regularly (contrasted with 15 per cent among other castes), and 57.6 percent of adolescent girls felt that boys get easier access to digital facilities in schools and colleges.

According to the Oxfam Report (2022), the majority of people do not have access to computers and do not own one. However, the general and OBC populations are more likely than the SC and ST populations to have computer access. Urban residents are 7 to 8% more likely than rural residents to own a computer, according to estimates. From January to April 2018, people in the general category are 10% more likely than STs to own a phone. By the end of 2021, this gap had decreased to 3%. Compared to SC and ST, general and OBC are more likely to spend more than INR 400 per month on cell phone charges. Prior to the pandemic, SC, ST, and OBC were more likely to spend less than INR 100. However, they are more likely to spend more than INR 400 after the pandemic. When compared to SC, the general category spends an average of 10% more than INR 400. According to the report, 61% of men will own a mobile phone by the end of 2021, compared to 31% of women, a 30% gap. In terms of ownership of a mobile phone, 61% of men will own one, while 31% of women will own one.

Even with the mass movement towards digital mediums, especially since 2020, reports suggest that 25,067 villages (4 per cent) in India lack mobile and internet connectivity.[9] Moreover, less than half of the 2.5 lakh village panchayats targeted by the flagship BharatNet rural broadband project have Wi-Fi hotspots,[10] and only 65,000 of those provide service. Even with increasing number of internet subscribers in India, the quality and speed of internet connection is questionable. As per a survey by LocalCircles, 56 per cent respondents experience 3 or more disruptions in their connection each month, while 33 per cent said the connection speed "received is much lower than what we are paying for."[11]The majority of the population (over 90 per cent) spends less than INR 100 per month on internet charges. Between the pre and post pandemic era, percentage spending less than INR 100 has increased. The price per gigabyte of data was INR 9.53 in JulySeptember 2021, while the average Wireless Data Usage per wireless data subscriber per month was 14.73 GB.[12] Hence, the total average cost of internet charges was approximately INR 140 per month. In spite of this, close to 94 per cent of respondents were spending less than INR 100 on internet charges, indicating low consumption of internet.

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[7] Kundu, P. (2020). Indian education can't go online–only 8% of homes with young members have computer with net link. CBGA. https://www.cbgaindia.org/blog/indian-education-cant-go-online-8-homes-young-memberscomputer-net-link/

[8] Taneja, A & Noopur. (2022). Educational Technology in School Education in India. Oxfam India.

[9] Ali, S. (2022). Over 25,000 villages lack mobile connectivity, govt data shows. Business Today. https://www.businesstoday.in/industry/telecom/story/over-25000-villages-lack-mobile-connectivity-govt-datashows-321376-2022-02-03

[10] Sarma, A. (2021). Quantity over quality? Towards universal broadband in India. Observer Research Foundation.https://www.orfonline.org/expert-speak/quantity-over-quality-towards-universal-broadband-in-india/

[11] Mihindukulasuriya, R. (2022). 2 in 3 broadband users in India struggle with connectivity issues or low speeds, survey shows. The Print. https://theprint.in/tech/2-in-3-broadband-users-in-india-struggle-with-connectivity-issuesor-low-speeds-survey-shows/830814/.

[12] Telecom Regulatory Authority of India. (2022). Indian Telecom Services Performance Indicator Report for the Quarter July-September, 2021. Retrieved November 15, 2022, from https://www.trai.gov.in/sites/default/files/PR_No.02of2022.pdf.

India as a developing country cannot ignore the role of financial inclusion and digital literacy in its growth and development and needs to actively increase the digital penetration in the country in an inclusive manner. The model of internet connectivity in India, too, is such that private companies have rooted themselves as the foremost providers. For example, performance indicator reports of TRAI show that The government sector has failed to find its footing in this arena. The flagship scheme, BharatNet, with its aims to provide internet connectivity in rural India, by connecting all the 2.50 lakh gram panchayats by 2025 is faltering. In some states, the centre is providing partial funding of the project with the responsibility of roll out of projects on the states, whereas in Tamil Nadu, not all works have been sanctioned. In Maharashtra the progress of work is slow and connectivity has been impacted due to permissions from Forest Department, etc.[13] The government also said that the tender for village connectivity through a PPP model has had no response. This raises questions of rise in inequality, especially the urban-rural divide wherein giants like Jio and Airtel have started disseminating their 5G services in metropolitan cities while villages struggle with internet connectivity due to bureaucracy and lack of incentives for private players to intervene. One of the major goals of private companies is profit maximization. In the Indian neoliberal context, this has been successful in driving fast-paced infrastructure creation in urban spaces that provide incentives to them in return. On the other hand, the lack of incentives, in the form of purchasing power that can be derived from the rural population is not comparable to the urban counterparts. This has led to comparatively lower internet coverage in rural areas. There is a sense of techno-capitalism where one private player accounts for half of the total market share of internet services whereas government provisioning of the same remains negligible, leading to the exclusion of the rural population in the race towards digitization.

COVID 19 and Digital Divide

From the Great Plague to the Spanish flu, mankind has already witnessed pandemics in the course of its History (Taubenberger, Kash, & Morens, 2019). However, there are at least two reasons why the COVID-19 pandemic is unprecedented. First, its scale and effects are unparalleled, with more than three billion people incarcerated as of the date this paper was written. Second, there is a fundamental difference between our current period of collective forced isolation and previous quarantines: technology's overwhelming presence (Guitton, 2020). For governments and supranational organizations like the World Health Organization to communicate their messages and recommendations, online technologies became the preferred channel. Online technologies are also becoming the primary tool for attempting to deal with the economic consequences of the crisis, from online shopping and telework to distance education. In addition, technology is becoming increasingly important for maintaining active social interactions. As a result, the COVID-19 pandemic crisis highlights the significance of digital inequalities, a hidden form of social inequality. Indeed, individuals and social groups differ not only in terms of their ability to benefit from technology use but also in terms of their access to it (Hargittai, 2010). Digital inequalities can be conceptualized as arising from differences in digital literacy – the degree to which individuals have the capacity, knowledge, motivation, and competence to access, process, engage, and understand the information required to obtain benefits from the use of digital technologies like computers, the Internet, and mobile devices and applications – despite the existence of multiple definitions. Access and digital literacy disparities are deeply ingrained in social, economic, cultural, and global contexts. People who are

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[13] Singh, S.R. (2022). BharatNet loses speed: "2025 target doubtful". The Hindu Business Line https://www.thehindubusinessline.com/info-tech/completion-of-bharatnet-by-2025-doubtful-say-stakeholders/article65068599.ece.

socially and economically disadvantaged are more likely to contract the virus and suffer from the numerous socioeconomic effects of the pandemic because of digital inequality. However, despite the significant impact they are having on the spread of the epidemic, decision-makers are currently not paying enough attention to addressing digital inequalities.

Fundamental inequalities differentially modulate the risks for various populations, regardless of how political decisions affect crisis management. As a result, the purpose of this paper is to investigate the connection between COVID-19 and digital inequality. The circumstances of the COVID-19 pandemic pose a significant threat to the expansion of digital inequality, which in turn contributes to the (re)production of health and social inequality.

Digital inequalities are part of a multidimensional continuum that reflects social inequalities like socioeconomic status, for instance.

Access to government, corporate, and higher education-provided services, support, and information frequently necessitates digital literacy (Hardill & O'Sullivan, 2018; Cruz-Jesus and others, 2016). In order to make and keep social connections, digital technologies are becoming increasingly important. According to Mesch, Mano, & Tsamir (2012), use of communication apps is linked to an increase in social capital and a decrease in social isolation (Cho, 2015). Digital inequality must also be viewed from both a technosocial and a macrosocial perspective.

Some people were able to function normally in the majority of aspects of social life without Internet access prior to COVID-19, either with the assistance of someone else or simply because their social context did not require it (Lupac, 2018). However, the status of virtual digital spaces has changed from an amenity to a necessity as a result of what is now a global lockdown that severes the interpersonal ties that are so essential to the upkeep of our fundamental social structures. There are few alternatives to using technology to handle even the most routine tasks in the COVID-19-related quarantines. COVID-19 is bound to exacerbate existing digital inequalities based on the four factors listed below because of the stress placed on the structures themselves and the increased dependence on technology.
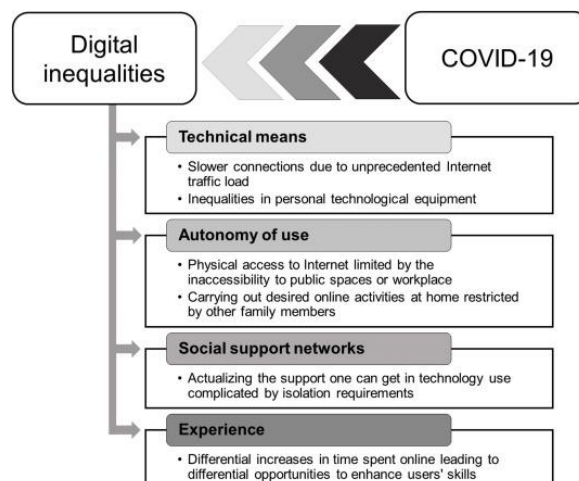
Source: Beaunoyer et al. (2020)

During the COVID-19 outbreak, the effects of digital inequalities increase as technology use rises dramatically. Digital inequalities put the most digitally disadvantaged at greater risk of contracting the virus itself and suffering from negative consequences associated with the crisis as a whole because of their reliance on technology across all spheres of life. Digital spaces have been the primary tool government

and official agencies, like the World Health Organization, have used since the beginning of the COVID-19 crisis to disseminate information about the steps people need to take to both avoid getting contaminated and contaminating others. The significance of digital inequalities as one of the primary determinants of well-being is emphasized by the fact that, in the context of COVID-19, digital spaces are becoming increasingly necessary to maintain daily life activities, education, work, services, or entertainment. Cybersecurity concerns are also brought up in relation to COVID-19. Indeed, people are more susceptible to cybercrime due to their increased dependence on technological tools and increased online time (Guitton, 2019). It is important to note that numerous fraudulent scams that exploit a lack of eHealth literacy and fear have already been reported (Saltzman, 2020; 2020 (World Health Organization)
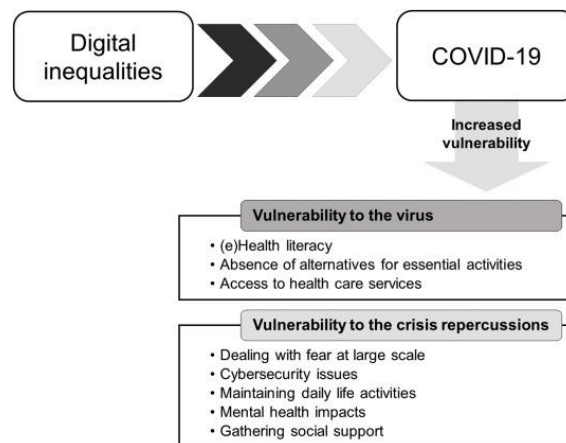
Source: Beaunoyer et al. (2020)

After China, India has the largest school system in the world. In the midst of the COVID-19 crisis, the most logical course of action was to close schools to maintain social distance. Nevertheless, the most vulnerable students suffer the most from this extended closure. According to a UNICEF study, the pandemic has not only increased the wide gap in educational inequality but also exacerbated the existing disparities.

According to a UNESCO study, approximately 320 million Indian students have been adversely affected and have moved into the 1.5 million-school e-learning industry. 32 million children, the majority of whom belonged to the country's socially disadvantaged class, were already out of school before the pandemic, according to a 2014 NSSO report.

E-learning platforms cannot replicate the various dialects, various contexts, and various lived experiences that are brought together by physical classrooms, despite the government's endorsement of India as the digital revolution's flagbearer and recognition of the country's diversity and multilingualism, as supported by the recently drafted new education policy. If e-learning is to become the "new normal," the policy needs to consider the viability of digitalization in order to guarantee quality and equity in education.

According to data from the NSSO from 2014 to 2015, economic factors play a significant role in the rate of school dropout in India. 1.4 million migrant workers and others in the unorganized sector have been affected by the pandemic and lockdown (90 percent of India's population is engaged in disorganized work). Either the migrants have returned to their homes with their families or are unable to send money home during this time of year. As a result, the country's emphasis on technology-driven education is preventing many children from completing school.

Based on the 2017-18 NSSO, the Key Indicators of Household Social Consumption on Education in India report indicates that less than 15% of rural Indian households (compared to 42% of urban Indian households) have internet access. Only 13% of rural residents (those over the age of five) and 8.5% of women could access the internet, according to the survey. Girls in vulnerable households have to do more at home, which prevents them from getting online education. This could be because they don't have access to the internet and gadgets, or because the male child and his education are more important. Child labor and child marriage may result from this silent exclusion of children from troubled families.

Policies for economic reform have always leaned heavily toward hyper-digitalization. They have been discussing ways to innovate working and studying with at-home technologies for a considerable amount of time. However, the educational disparities that have emerged as a crisis in India's caste and class struggle have not been addressed by these policies.

The COVID crisis widens the digital divide that already exists in India. It affects children from low-income, rural, and remote areas, as well as gender inequality. Different groups of children are affected differently by the current pandemic, which exacerbates existing inequality while also creating new ones. The dropout rate among children who do not have access to the internet infrastructure and facilities will increase the risks of child labor, child marriage, and criminal activity. The disadvantaged section of society is experiencing an increase in inequality. The digital divide has social and economic repercussions of its own. Inequality in education: - The Lockdown has made learning inequality even worse among people with middle-class and low incomes. Because they have physical access and the technical know-how to educate their children at home, wealthy families are able to easily address this issue. Strategies for distance learning do not include disabled children who were already excluded prior to the outbreak. Inequality between the sexes: When it comes to prioritizing education, the poor parent must choose between their son and their daughter. They frequently educate their son over their daughter. As a result, the rate of girl dropouts is likely to rise. The issue of gender inequality is once more made worse by this. Economic inequality: The closure during the pandemic exacerbates economic inequality because poor parents lose their jobs. This directly affects the education of poor children, which will demonstrate the effect's long-term nature. Children who do not have access to electronic resources, a regular supply of electricity, teachers who are technologically savvy, or other issues that compelled them to drop out of school have seen their E-Learning fall behind.

Conclusion

UN Deputy Secretary-General Amina Mohammed has even claimed that the digital divide has the potential to be the "new face of inequality" because of the internet's ever-increasing importance and the rapid digital transformation brought on by the COVID-19 pandemic. The impact on education will be felt even more strongly in nations with low learning outcomes, high dropout rates, low shock resilience, and inadequate infrastructure to rebuild better. According to a variety of reports, the COVID-19 pandemic has had a negative impact on 320 million Indian students, prompting them to switch to e-learning. This transition has not been possible for all students and educators due to significant regional and household disparities in internet and technology access. As a result, the long-standing issues of inequality and a digital divide in India have resurfaced and must be addressed by future economic, education, and digitalization policies. The government needs to come up with the right policies and a plan in this critical pandemic situation to build an inclusive and effective education system so that everyone's Right to Education is protected equally and without discrimination. Access to digital technology is crucial in

today's information age. The National Digital Literacy Mission and the Pradhan Mantri Gramin Digital Saksharta Abhiyan are two examples of government efforts to improve digital literacy, but more should be done. In order to guarantee that all segments of society have physical access to ICT, it is also essential to enhance the existing digital infrastructure. In addition, underprivileged groups require digital skills training and motivation to incorporate technology into their daily lives. It is interesting to see how digital marginalised are left with only two options. Firstly, to wait for the Indian state to "take care of them" and make them part of the digital elite circle. Secondly, with the entry of capitalists as bridging the digital gap, the digital marginalized will remain as digital marginalised due to their inability to bear the cost of the internet access providers due to one's social and economic standing.

Bibliography

1. Beaunoyer E., Dupéré, S., & Guitton, M. J. (2020). Covid-19 and digital inequalities: Reciprocal impacts and mitigation strategies. *Computers in Human Behavior*, *111*, 106424. https://doi.org/10.1016/j.chb.2020.106424
2. Castells, M. (2001). The Internet galaxy: Reflections on the Internet, business and society. Oxford, UK: Oxford University Press.
3. Cho, J. (2015). Roles of smartphone app use in improving social capital and reducing social isolation. *Cyberpsychology, Behavior, and Social Networking*, *18*(6), 350–355. https://doi.org/10.1089/cyber.2014.0657
4. Cruz-Jesus, F., Vicente, M. R., Bacao, F., & Oliveira, T. (2016). The education-related digital divide: An analysis for the EU-28. *Computers in Human Behavior*, *56*, 72–82. https://doi.org/10.1016/j.chb.2015.11.027
5. Fox, S. (2005). Digital divisions: There are clear differences among those with broadband connections, dial-up connections, and no connections at all to the Internet/ Pew Internet & American Life Project
6. Gorski, P.C. (2003) Privilege and Repression in the Digital Era: Rethinking the Sociopolitics of the Digital Divide . Race, Gender & Class , 2003, Vol. 10, No. 4, pp. 145-176
7. Guitton, M. J. (2019). Facing cyberthreats: Answering the new security challenges of the Digital age. *Computers in Human Behavior*, *95*, 175–176. https://doi.org/10.1016/j.chb.2019.01.017
8. Guitton, M. J. (2020). Cyberpsychology Research and covid-19. *Computers in Human Behavior*, *111*, 106357. https://doi.org/10.1016/j.chb.2020.106357
9. Hargittai, E. (2010). Digital na(t)ives? variation in internet skills and uses among members of the "Net Generation." *Sociological Inquiry*, *80*(1), 92–113. https://doi.org/10.1111/j.1475-682x.2009.00317.x
10. Hardill, I., & O'Sullivan, R. (2018). E-government: Accessing public services online: Implications for citizenship. *Local Economy: The Journal of the Local Economy Policy Unit*, *33*(1), 3–9. https://doi.org/10.1177/0269094217753090
11. Lash, S. (1999). Another modernity: A different rationality. Oxford, UK: Blackwell Publisher.
12. Lupac,P. (2018)Digital Divide Research: *Beyond the Digital Divide: Contextualizing the Information Society*, 45–131. https://doi.org/10.1108/978-1-78756-547-020181008
13. MacKenzie, D. and Wajcman, J. (eds.) (1985). The social shaping of technology. Maidenhead, UK: Open University Press
14. Mcintosh, P. (1988). White privilege and male privilege: A personal account of coming to see correspondences through work in Women's Studies. Wellesley, MA: Center for Research on Women, Wellesley C

15. Mossberger, K., Tolbert, C. J. and Stansbury, M. (2003). Virtual inequality: Beyond the digital divide. Washington, DC: Georgetown University Press.

16. Mesch, G., Mano, R., & Tsamir, J. (2012). Minority status and Health Information Search: A test of the social diversification hypothesis. *Social Science & Medicine*, *75*(5), 854–858. https://doi.org/10.1016/j.socscimed.2012.03.024

17. Moss, J (2002). Power and the digital divide. Ethics and Information Technology 4, 159–165

18. Norris P. (2001). Digital divide: Civic engagement, information poverty, and the Internet worldwide. Cambridge, UK: Cambridge University Press.

19. Saltzman,M(2020).Coronavirus pandemic generates new fraud strains:COVID-19scams on computers,smartphoneshttps://www.usatoday.com/story/tech/columnist/2020/04/04/coronavirus-scams-going-viral-attacking-computers-and-smartphones/2939240001/

20. Subramony, D.P. (2014). Revisiting the Digital Divide in the Context of a "Flattening" World. Educational Technology, 54(2), 3-9

21. Silverstone, R. and Hirsch, E. (1994). Consuming technologies: Media and information in domestic spaces. London: Routledge.

22. van Dijk, J. (2013). A theory of the digital (eds.)The Digital Divide: The internet and social inequality in international perspective. Routledge, 2, 29-49

23. van Dijk, J. (2012). The network society: Social aspects of new media, 3rd Edition. London: Sage.

24. van Dijk, J. (2006b). The network society: Social aspects of new media, 2nd Edition. London: Sage.

25. van Dijk, J. (2005). The deepening divide: Inequality in the information society. Thousand Oaks, CA, US: Sage.

26. van Dijk, J. and Hacker, K. (2003). The digital divide as a complex and dynamic phenomenon. Information Society, 19(4), 315–327

27. van Dijk, J. (1999). The network society: Social aspects of new media, 1st Edition. London: Sage.

28. Wei L and Hindman D B (2011). Does the Digital Divide Matter More? Comparing The Effects of New Media and Old Media Use on The Education-Based Knowledge Gap, Mass Communication & Society, 14, 2, 216-235,

29. Wyatt, S., Henwood, F., Miller, N. and Senker, P. (2000) (eds.)Technology and in/ equality: Questioning the information society. London: Routledge.

Reports

1. ILO Report (2020) Digital skills and the future of work: Challenges and opportunities in a post COVID-19 environment.

2. National Statistical Commission Report http://www.mospi.gov.in/sites/default/files/annual_report/nsc_AR_2014-15.pdf

3. Oxfam India (2022) India Inequality Report 2022: Digital Divide.

4. UNICEF Report (2020) How many children and young people have internet access at home? Estimating digital connectivity during the COVID-19 pandemic.

5. World Health Organisation(2020).Beware of criminals pretending to be WHO. https://www.who.int/about/communications/cyber-security.

6. Ministry of Education, Government of India (2022). New Education Policy https://mhrd.gov.in/nep-new

Others

1. Patel,Champa (2020) *Covid-19: The hidden majority in India's migration crisis*. Chatham House –

International Affairs Think Tank. Retrieved February 14, 2023, from https://www.chathamhouse.org/expert/comment/covid-19-hidden-majority-indias-migration-crisis

2. Sudevan, P. (2020). Why e-learning isn't a sustainable solution to the Covid-19 education crisis in India. *The Hindu*.

3. Trines,S.(2022). *Education in India*. WENR. Retrieved February 14, 2023, from https://wenr.wes.org/2018/09/education-in-india

Glossary

Caste: The caste system divides Hindus into four main categories - Brahmins, Kshatriyas, Vaishyas and the Shudras.The caste system in India has its origins in ancient India, and was transformed by various ruling elites in medieval, early-modern, and modern India, especially the Mughal Empire and the British Raj.

General: Forward caste or General Category is a term used casually in India to denote castes which are on average considered ahead of other castes economically and educationally. Forward castes account for about 30.8% of the population based on Schedule 10 of available data from the National Sample Survey Organisation 55th (1999–2000) and National Sample Survey Organisation 61st Rounds (2004–05) Round Survey

NSSO: The NSSO was set up in 1950 to conduct large-scale sample surveys throughout India.The National Sample Survey Office used to work under the Ministry of Statistics of the Indian government until May 2019. On 23rd May 2019, the Indian government passed the order to merge the NSSO with the Central Statistics Office (CSO) to form the National Statistical Office (NSO). The Government stated that the NSO will be headed by the Ministry of Statistics and Programme Implementation (MOSPI)

OBC: The Other Backward Class is a collective term used by the Government of India to classify castes which are educationally or socially backward. It is one of several official classifications of the population of India, along with General castes, Scheduled Castes and Scheduled Tribes (SCs and STs).

SCs and STs: The Scheduled Castes (SCs) and Scheduled Tribes (STs) are officially designated groups of people and among the most disadvantaged socio-economic groups in India.The terms are recognized in the Constitution of India and the groups are designated in one or other of the categories.