



## THE GENDER GAP IN DIGITAL LITERACY IS SIGNIFICANT, BUT THERE ARE GLIMMERS OF HOPE

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Foundational Literacy and Numeracy (FLN) skills were once considered basic skills that every individual should achieve during primary level of education. However, with rapid technological advancements transforming the future of work, it is imperative that another skill is added to this toolkit. Digital skills, or commonly known as digital literacy, has become crucial to enter the workforce today. The World Economic Forum (WEF) in its report titled 'New Vision for Education' has classified Information and Communications Technology (ICT) skills as a foundational skill for the 21<sup>st</sup> century. In the wake of this change, it is interesting to understand how India is performing on this front. Furthermore, the need to equip the next generation with the necessary skills for employment is also a sustainable development goal (SDG

4). Hence, all countries have undertaken various measures to improve digital literacy by including digital education in primary schooling, to providing digital skill training as a part of vocational training.

### What constitutes digital literacy?

The definition of digital literacy is still ambiguous. According to UNESCO, this includes competencies such as using ICT, processing information, and engaging with media. Digital literacy comes with different levels of complexities. To simplify the concept of digital literacy, the International Telecommunications Union (ITU) differentiates digital skills into basic, intermediate, and advanced. Basic digital skills comprise of the effective use of hardware, software, and ICT skills. Intermediate skills comprise

the ability to critically evaluate technology or create content. Lastly, advanced skills are defined as computer programming and network management skills.

### Digital Literacy in India

The Government of India has been on the forefront to make India 'digital ready'. Right from digitizing bank accounts, to providing digital applications during the pandemic for testing and vaccination, the importance of digitizing the Indian economy cannot be ignored. However, the complete usage of these platforms is essential on how digitally literate the population is. Hence, the first step would be to enhance digital literacy so that the

benefits can be leveraged completely. The Government of India has recently released a survey conducted in 2020-21 named 'Multiple Indicators Survey' that provides a measure of digital literacy across states in India. The survey measures nine indicators on digital literacy. Following the ITU classification, these nine indicators are classified into three categories: basic skills, intermediate skills and advanced skills. Figure 1 illustrates the hierarchy of digital skills in our measurement criteria.

Data from the 78th round of the National Sample Survey 78th indicates that digital literacy is very low for both men and women in India, with only 22% of all men and 21% of all women above the age of 15 having some form of digital literacy. The gender gap in digital literacy increases as the complexity of the skill increases. While the gender gap for basic digital literacy

skills is 6.7%, it increases to 7.4% for intermediate skills and rises to 9.8% for advanced skills. This gap gets further widened in the rural cohorts of the Indian economy. Looking at the demographic characteristics, it is observed that attainment of digital skills decreases with age for both men and women. The gender gap is significantly larger for younger women (between the ages of 15 & 29) as compared to older age cohorts across both rural and urban India. However, it is important to note that the total number of men and women attaining digital literacy is higher in the 15-29 age cohort, compared to the older cohort. Lastly, the gender gap is substantially larger for single women as compared to married women.

Looking at regional trends, Figure 2(a) and Figure 2(b) depict the gender gap in foundational and

digital literacy respectively across States/UT in India.

The average gender gap in foundational literacy is 20 percent compared to the average gender gap in digital literacy which is approximately 7 percent. What drives the inequality in different gendered outcomes for foundational and digital literacy? The correlation between the economic and social characteristics of a State/UT and their respective gender gaps in foundational and digital literacy is a strong indicator to explain the difference. Figure 3(a) to 3(d) show our results. We find that economic prosperity of state is a strong determining factor for reducing the gender gap in both foundation and digital literacy. However, the culture conservativeness of a State/UT only impacts the gender gap in foundational literacy. This could be because, unlike the attainment of

Figure 1: Digital skills hierarchy

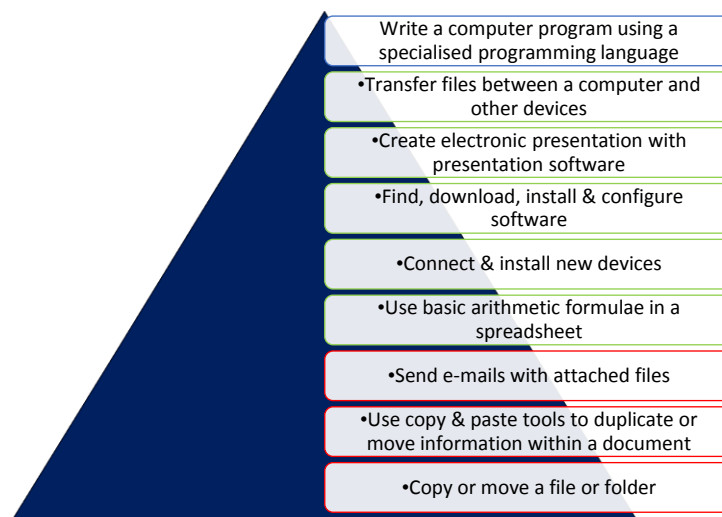


Figure 2(a): Gender Gap in Foundational Literacy Levels

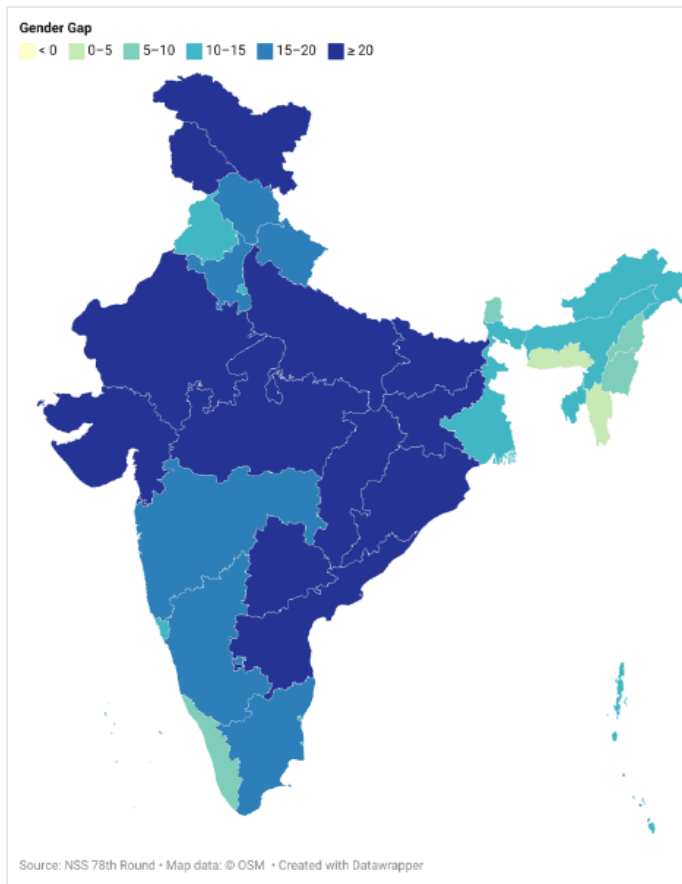
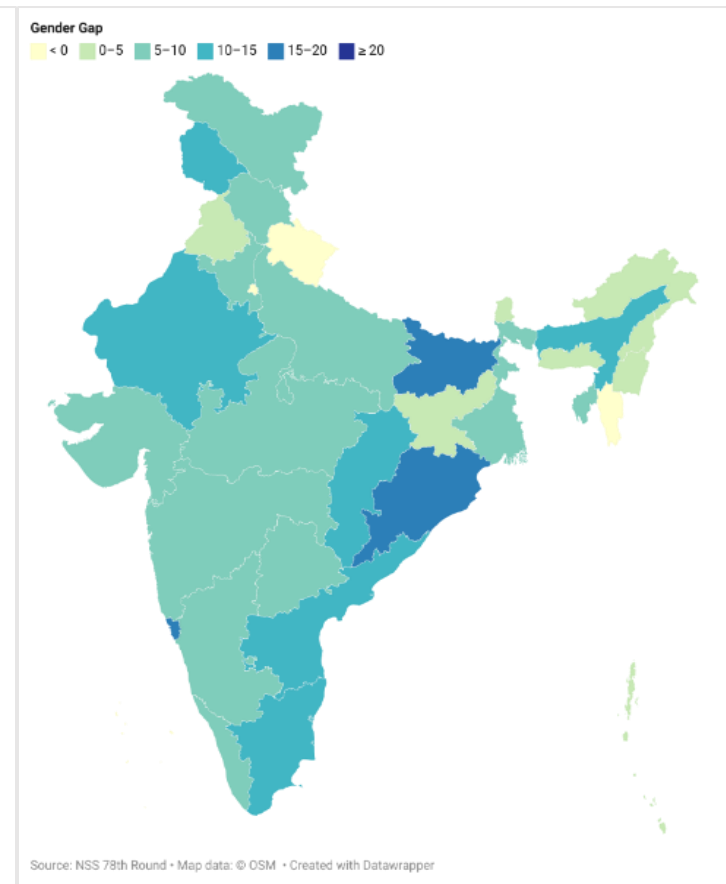


Figure 2(b) : Gender Gap in Digital Literacy Levels



digital literacy; foundational literacy has a large opportunity cost, especially for women in India. Furthermore, there is a location barrier (with regard to distance travelled) for gaining foundational literacy compared to digital literacy. Therefore, the barriers inhibiting digital literacy are much lower as compared to foundational literacy. These results throw a positive light on the possibility; that with the right policy mix, gender parity in digital literacy can be achieved in the near future.

The survey results throw light on some very interesting findings. There is a huge potential for India to increase its digital literacy. The lack of digital literacy has an adverse effect on [outcomes of](#)

[digitalization](#), with many unable to leverage the benefits of being online. While the government has been very proactive in digitising the economy by providing mobile applications for various sectors and stakeholders, it is essential that the skills are imparted. Increase in digital literacy will not only help improve the usage of digital platforms, but will also help reduce the risks associated with digital applications. To enhance the level of digital literacy in India, the governments should focus on making digital education mandatory at the school level. Providing the necessary digital skills at a young age will be essential in scaling up Digital India. Furthermore, for other sections of the society, awareness and training programs are essential mechanisms. For instance, the

recent news on the collaboration between All India Council for Technical Education (AICTE) and Adobe on bolstering digital literacy is a much welcome move. Similarly, Pratham Infotech Foundation (a wing of Pratham – an NGO in the education sector) has been instrumental in bridging the digital divide and fostering ICT adoption among schools in India. Through these mechanisms, these numbers are sure to improve in the future, creating a safe digital environment for India.

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Figure 3(a): Foundational Literacy & Prosperity

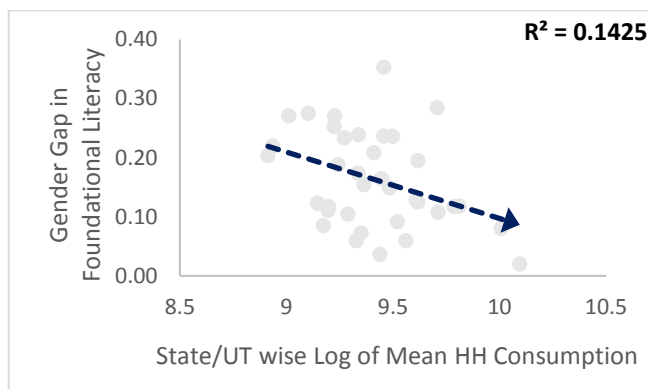


Figure 3(a): Digital Literacy & Prosperity

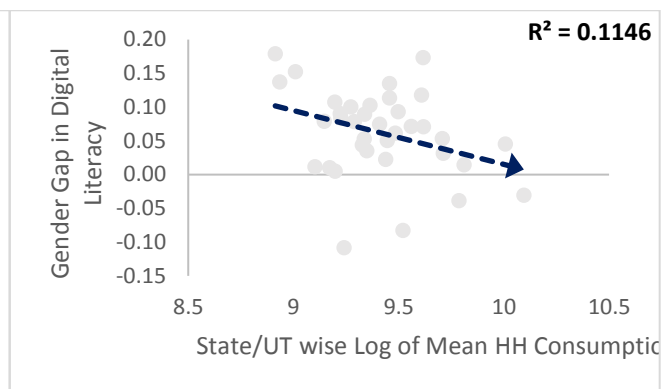


Figure 3(a): Foundational Literacy & Culture

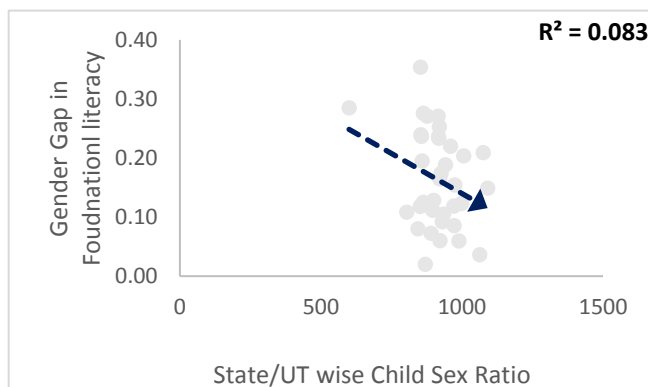
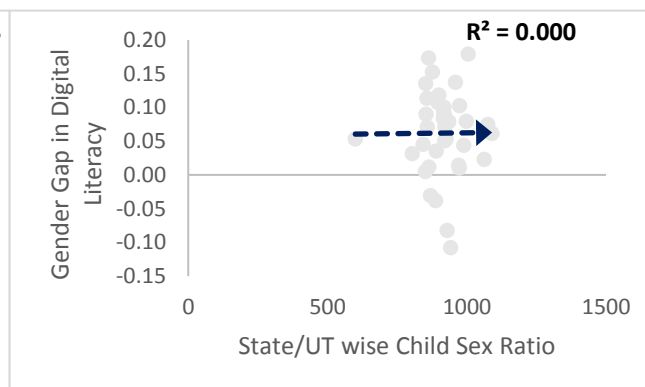


Figure 3(a): Digital Literacy & Culture



## ABOUT AUTHOR

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## ABOUT EPWD

Economic Policies for Women-Led Development (EPWD) is a network dedicated to advancing Women-led Development. It is a joint initiative of ICRIER, UNDP India and the Gates Foundation. The objective of the network is to enable the positioning of gender as a macro-critical issue, imperative for India's economic growth.

Under its G20 presidency, India initiated the mainstreaming of gender into economic policy discussions by shifting the focus from “women’s development” to “women-led development”. In this new paradigm, women are not simply seen as beneficiaries but as drivers of growth and development. It is now evident that narrowing gender gaps will be a vital source of economic growth, and addressing gender-related challenges is key to India becoming a \$ 30 trillion economy by 2047. Without increasing its Female Labour Force Participation Rate, India will not be able to achieve the sustained growth required to become a developed economy in two decades.

Therefore, we believe that it is necessary to mainstream gender in key economic policies, that have till now been “gender-blind” and did not take into consideration their gender-differentiated outcomes. The EPWD network intends to build on the ideas discussed at the G20 by striving to embed gender in core economic policy discussions by providing a platform for knowledge-sharing, networking, mentoring, capacity building, and advancing proposals to remove barriers to women-led development and for creating an enabling ecosystem for women to realize their full potential.



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