

Building a Healthier Future through Digital Inclusion for India's Youth

Jyoti Chaudhary, February 2025



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CONTENTS

1. INTRODUCTION	2
1.1. Methodology	3
2. FINDINGS	4
2.1. The Demographic Advantage: India's Youth in a Global Context	4
2.2. The Growing Concern of Mental Health Among Youth	5
2.3. Digital Literacy and Connectivity in India: Progress, Disparities and Implications for Healthcare	6
2.4. Urban-Rural Divide in Internet Access	7
2.5. Further Disparities in Digital Access Among Women	10
2.6. Missing Data	11
3. CONCLUSION	12
ANNEXURES	13
REFERENCES	22

1. INTRODUCTION

In an era marked by rapid technological advancements, digital technology has emerged as a transformative tool across various sectors, reshaping industries and redefining access to services. In healthcare, innovations like mobile health platforms, wearable devices and telemedicine have unlocked new possibilities for improving service delivery and accessibility. These advancements hold the potential to bridge longstanding gaps in healthcare systems, particularly in resource-constrained regions, by enabling remote consultations, real-time health monitoring and better management of chronic illnesses. However, alongside these opportunities lie significant challenges that threaten to widen existing inequalities, especially for underserved and vulnerable populations. Disparities in digital literacy, internet connectivity, infrastructure and socioeconomic status can severely limit the reach and impact of these technological solutions, leaving entire communities excluded from their benefits.

These challenges are particularly pronounced in low-and middle-income countries (LMICs) such as India. With a youth population of 371.4 million in the 15–29 age group, the country has a unique opportunity to harness the power of digital technology to build a healthier and more equitable future. The country's youth could be the drivers of innovation and adoption in the digital space. However, India's geographic and socio-economic diversity—including factors such as region, caste, income levels and education present complex challenges to ensuring that digital health solutions are accessible and inclusive for all. For instance, while urban youth might have access to smartphones, stable internet connections and a basic understanding of digital tools, rural and economically disadvantaged youth often face barriers ranging from a lack of infrastructure to limited digital literacy. (Nedungadi et al., 2018; Warren, 2007)

To fully leverage digital interventions for healthcare improvement in India, they must be understood not merely as technological innovations but as complex, multi-dimensional solutions requiring consideration of broader social, economic and cultural factors. This study aims to identify the available data on various aspects of digital determinants of health, a concept that extends beyond digital health to explore how digital transformations are shaping health and well-being. Specifically, it reviews data on disparities in digital infrastructure (such as mobile phone and internet access), and digital literacy across education, gender and income levels which influence India's youth in their ability to access and benefit from digital health initiatives. Identifying these variations is crucial for developing targeted interventions that ensure inclusive participation in the digital health landscape. Furthermore, these considerations become particularly significant in the context of India's overburdened public health system and the limited affordability of private healthcare for a large segment of the population (Sarwal & Kumar, 2021; Sharma & Popli, 2023). Digital health solutions

have the potential to mitigate these systemic challenges; however, their effectiveness depends on the extent to which they are designed with inclusivity at their core.

1.1. Methodology

To systematically assess these challenges, this study adopts a descriptive, data-mapping approach to identify and compile available data on broad digital determinants of health affecting India's youth, while also highlighting key data gaps by identifying missing indicators. The objective is to systematically assess existing datasets, reports, articles, opinion pieces, short columns and other relevant literature that provide insights into digital literacy, digital infrastructure and socio-economic factors that significantly influence access to and engagement with digital health initiatives. Additionally, the study seeks to identify where data is missing or insufficient, highlighting critical gaps that must be addressed to ensure a more comprehensive understanding of digital determinants of health in India.

The study primarily relies on secondary data sources, including:

- Government of India reports, particularly from the Ministry of Health and Family Welfare (MoHFW) and the Ministry of Statistics and Programme Implementation (MoSPI).
- National surveys, such as the National Sample Survey (NSS), National Family Health Survey (NFHS), and Census data.
- Data aggregators, including Our World in Data, Indiatat Data, and Data for India, which provide structured datasets on digital access and health-related indicators.

This work supports DTH-Lab's goal of addressing digital determinants of health, ensuring that future digital health systems are more inclusive and equitable. By offering insights into these dynamics and gaps, this analysis aims to support policymakers in designing digital health initiatives and digital governance responses that align with the diverse social, demographic, and economic realities of India's youth. Ultimately, a well-informed and inclusive approach can ensure that digital technology acts as a bridge rather than a barrier, fostering a healthier and more equitable future.

2. FINDINGS

2.1. The Demographic Advantage: India's Youth in a Global Context

India has a substantial youth population, with 371.4 million individuals aged 15–29 years old, comprising 27.3% of the country's total population.¹ The proportion of youth within the total population varies slightly by gender, with males accounting for 27.8% and females 26.7%. Compared to the global average, where the youth population (aged 15–24 years) stands at 1.26 billion, representing only 15.5% of the world's total population, India has a significantly larger share of young individuals.

A closer examination of youth demographics within gender groups reveals significant disparities between India and global trends. In India, 26.7% of the total female population and 27.8% of the total male population fall within the 15–29 age group, indicating a relatively youth-heavy population across both genders. In contrast, at the global level, only 15.14% of the total female population and 15.92% of the total male population belong to the 15–24 age group. Among countries with the largest youth populations, India occupies the leading position, surpassing China, Pakistan, and the United States.

Within India, the distribution of youth varies significantly across states, reflecting the country's geographic, cultural and socioeconomic diversity. States like Uttar Pradesh, Jammu and Kashmir, and the North Eastern States (excluding Assam) have the highest proportion of youth, each with more than 29% of their population, followed by Haryana and Assam at 27.8%. In contrast, Tamil Nadu and Kerala have the lowest youth population shares, at 23.2% and 22.1%, respectively. However, despite these variations, the overall percentage of youth across states remains significantly high, highlighting India's strong demographic advantage.

¹ The demographic data for India is sourced from *Youth in India* (2022), published by the **National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India, New Delhi**. The global demographic data is derived from *World Population Prospects* (2024), published by the **United Nations (UN)**.

2.2. The Growing Concern of Mental Health Among Youth

The mental health of young individuals is a critical determinant of their overall well-being, influencing their capacity to navigate life's complexities, form meaningful relationships and achieve academic and professional success. Adolescence and early adulthood are critical periods of susceptibility to mental health disorders, including anxiety and depression. (Blakemore, 2019; De Girolamo et al., 2012; Paus, Keshavan, & Giedd, 2008) Globally, mental health challenges are the leading cause of disability and poor life outcomes in young people. (Kieling et al., 2024; Sareen et al., 2006; Verhoof et al., 2013)

The advent of digital technology has introduced both opportunities and challenges in the context of youth mental health. On one hand, digital platforms offer access to mental health resources, support networks and interventions that can be particularly beneficial for tech-savvy younger populations. Conversely, excessive or unmoderated use of digital media has been associated with negative mental health outcomes. Studies have indicated that high levels of screen time correlate with increased risks of depression and anxiety among teenagers. (Boers et al., 2019; Twenge & Campbell, 2018; Twenge et al., 2018) Prolonged engagement with digital media, particularly without adequate moderation, can contribute to emotional distress and social isolation in adolescents.

According to data published by Saloni Dattani, Lucas Rodés-Guirao, Hannah Ritchie and Max Roser (2023) in *Our World in Data*, 40.5% of individuals globally reported experiencing their first episode of anxiety or depression during their youth. The data further indicates that 7.5% of individuals experienced their first episode under the age of 13, 11% between 13 and 19 years, and 22% between 20 and 29 years. This distribution underscores adolescence and early adulthood as critical periods for the onset of mental health disorders, emphasizing the need for early intervention and age-specific mental health strategies.

Globally, the prevalence of anxiety disorders is estimated at 4.55% across all age groups, with young adults aged 15 to 29 years exhibiting some of the highest rates, further reinforcing the urgency of targeted mental health interventions. In India, while anxiety disorder prevalence at 3.67% is slightly lower than the global average, it remains a significant and growing concern. The data reveals that the highest prevalence is among individuals aged 25 to 29 years at 4.58%, followed closely by those in the 20 to 24 age group at 4.06 percent. (Dattani et al., 2023)

The National Mental Health Survey (NMHS) 2015-16, conducted by the National Institute of Mental Health and Neurosciences (NIMHANS) in collaboration with the Ministry of Health and Family Welfare (MoHFW), Government of India, aimed to

assess the prevalence, patterns, and burden of mental health disorders across different regions of the country. As part of this initiative, a pilot study on adolescent mental health was conducted in four states, utilizing the MINI-KID diagnostic instrument to estimate the prevalence of mental disorders among adolescents. However, due to the small sample size and the use of a screener instrument, the findings require cautious interpretation.

The survey revealed that 7.3% of adolescents (13-17 years) suffered from some form of mental morbidity, with males (7.5%) and females (7.1%) having nearly equal prevalence rates. The burden of mental disorders was significantly higher in urban metro areas (13.5%), compared to rural regions (6.9%) and urban non-metro areas (4.3%). Among the most frequently reported conditions were anxiety disorders (3.6%) and mood disorders (0.8%), along with phobic anxiety disorder (3.6%), agoraphobia (2.3%), intellectual disability (1.7%), and autism spectrum disorder (1.6%).

While technological advancements have reshaped the mental health landscape, offering new tools for intervention and awareness, they have also introduced new challenges that require careful evaluation and regulation. India currently lacks comprehensive data measuring the direct impact of technology on adolescent mental health, including aspects like social media exposure, online bullying, digital fatigue and screen time effects. This data gap limits one's ability to estimate the direct impact of technology on mental health and assess whether technology-driven solutions are beneficial or exacerbating mental health concerns.

2.3. Digital Literacy and Connectivity in India: Progress, Disparities and Implications for Healthcare

Digital connectivity serves as the cornerstone of technological advancement. In India, the proliferation of mobile phones and internet access has been remarkable. Over the past decade, India has experienced a significant surge in mobile and internet connectivity. The number of registered mobile SIM cards has more than tripled since 2008, with over one billion active SIM cards in a country of nearly 1.4 billion people. This equates to approximately 81 mobile connections per 100 individuals, placing India 160th out of 208 countries in terms of mobile phone penetration. Similarly, internet accessibility has grown significantly: by 2014, nearly three in ten homes had internet access and by 2023, about eight in ten homes were connected to the internet. However, despite this progress, India ranks 100th out of 160 countries in internet penetration, highlighting persistent gaps in digital accessibility. (Waghmare, 2024)

As digital interventions become an integral part of healthcare delivery, the ability to navigate digital tools is essential for ensuring equitable access to medical resources, health information and telemedicine. While India has expanded its digital infrastructure, youth—particularly females and those in rural areas—continue to face challenges in digital competency. These disparities pose challenges to the widespread adoption and effectiveness of digital health solutions.

According to data from the Ministry of Statistics and Programme Implementation (MoSPI, 2017-18, Annexure Table 4), among individuals aged 15-29 years: Only 33.6% were able to operate a computer, and 40.4% reported being able to use the internet. Internet usage in the last 30 days was at 35.2%, indicating inconsistent engagement with digital tools.

Gender disparities in digital literacy are stark:

- Among females aged 15-29, only 31.9% reported being able to use the internet, while 27.6% could operate a computer.
- In contrast, 48.2% of males in the same age group reported the ability to use the internet, and 39% were capable of operating a computer.

2.4. Urban-Rural Divide in Internet Access

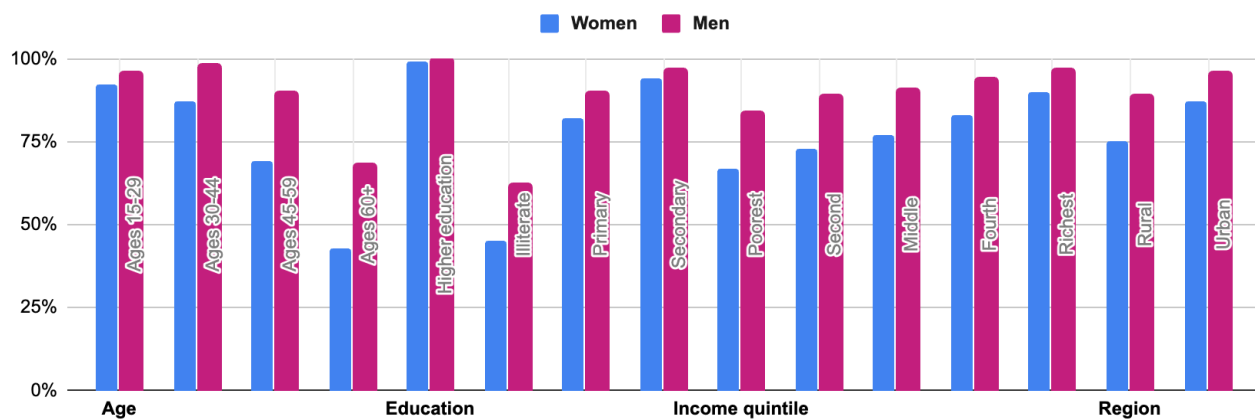
MoSPI data from 2019-21 confirms a substantial urban-rural gap in internet access among individuals aged 15-49 years:

- Urban women: 51.8% have ever used the internet.
- Rural women: Only 24.6% have ever used the internet.
- Urban men: 72.5% have ever used the internet.
- Rural men: 48.7% have ever used the internet.

While urban internet penetration is relatively higher, the rural digital gap remains significant, especially among women, with less than one in four rural women (24.6%) ever having used the internet, underscoring the need for targeted digital literacy initiatives to promote inclusive participation in India's digital ecosystem.

Similar findings were reported in an article by Abhishek Waghmare (2024), "Access to phones and the internet," published on *Data for India* where he highlights that despite impressive growth in mobile phone connections, disparities persist in mobile phone usage. The author uses the National Sample Survey Office (NSSO) data from 2022-23, and finds that about 85% of Indians (850 million people) reported using a mobile phone

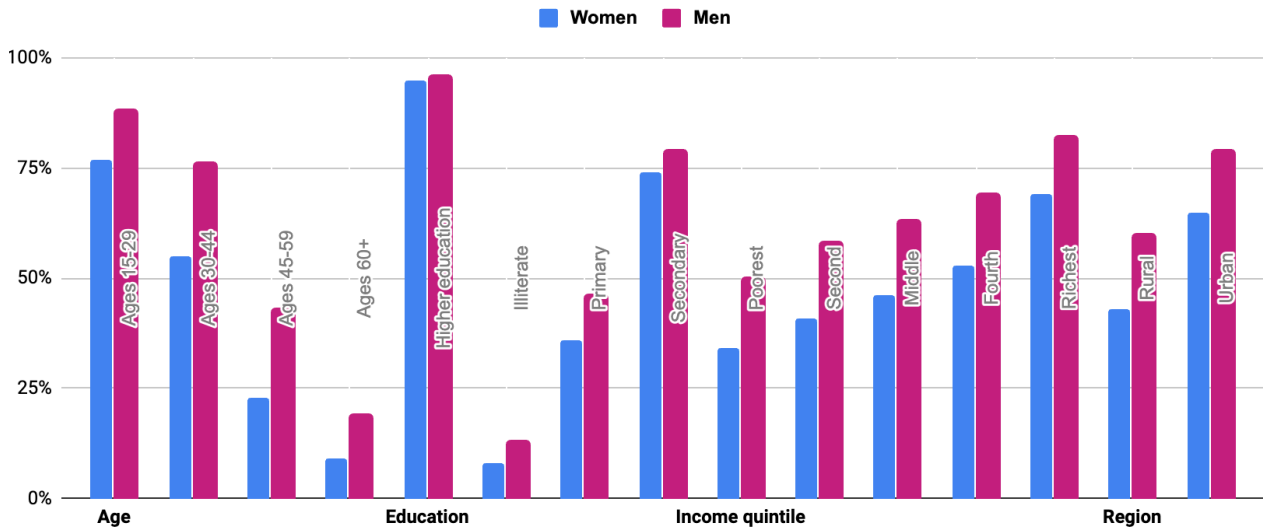
with an active sim card in the past three months. Over 90% of men reported phone use, while 80% of women did. Furthermore, 15% of Indians (300 million people) reported not using a phone at all in the last three months, with 90% of these non-users residing in households where others have a phone. And among those who do not use a phone, more than seven in ten are women. Shared phone usage is prevalent, particularly among women and rural populations, indicating that access does not necessarily translate to ownership. These findings suggest that non-usage is driven more by socio-economic and digital literacy barriers rather than a lack of device availability.



Source: Data retrieved from <https://www.dataforindia.com/comm-tech/>

Figure 1: Share of Indians Using Mobile Phones (2023)

Figure 1 highlights mobile phone usage disparities in India (2023) across gender, age, education, income levels and regions, demonstrating that while mobile phone access is widespread, women consistently report lower usage rates than men across all categories. Mobile phone ownership remains highest among younger age groups, with a notable decline among older populations. While almost all men across age groups have access to mobile phones, the gender gap is evident, particularly among older women. Education is a strong determinant, with nearly universal mobile phone usage among those with higher education, whereas illiterate individuals, particularly women, show significantly lower mobile access. Economic factors play a critical role, as mobile ownership increases with income level, with those in the richest quintile having the highest access, while lower-income individuals, particularly women, remain at a disadvantage.



Source: Data retrieved from <https://www.dataforindia.com/comm-tech/>

Figure 2: Share of Indians Using the Internet (2023)

Figure 2 illustrates significant disparities in internet usage in India (2023) across gender, age, education, income levels and regions, revealing patterns of digital inclusion and exclusion. Men consistently report higher internet usage than women across all categories, with the gap being most pronounced in rural areas and among lower-income and less-educated groups. Age plays a crucial role in internet adoption, as young people (15-29 years) exhibit the highest usage rates, with 77% of women and 88% of men using the internet. However, this percentage drops significantly with age, reaching only 9% of women and 19% of men among those aged 60 and above. Education is another key determinant, as individuals with higher education show the highest internet penetration, with 95% of women and 96% of men using the internet. In contrast, only 8% of illiterate women and 13% of illiterate men access the internet, reinforcing the strong correlation between education and digital engagement. Economic factors also influence internet usage, with wealthier individuals significantly more likely to be online. Among the richest quintile, 69% of women and 82% of men use the internet, whereas only 34% of women and 50% of men in the poorest quintile do so. The urban-rural divide remains stark, as urban residents have significantly higher internet access (65% women, 79% men) compared to rural areas (43% women, 60% men), reflecting persistent gaps in infrastructure and affordability.

2.5. Further Disparities in Digital Access Among Women

A digital divide already exists across genders, but further disparities emerge among women based on socio-economic determinants (see Annexure Table 5).

Age and Digital Engagement

Age also plays a crucial role in mobile phone ownership and digital literacy. Among young women aged 15-19 years, only 25% own a mobile phone, but this percentage more than doubles to 56% among those aged 25-29 years. However, despite higher phone ownership with age, digital literacy does not keep pace. Among 15-19-year-olds, 88% of mobile users can read SMS messages, but this figure declines to 71% for 25-29-year-olds and drops further to 48% for 40-49-year-olds. This trend suggests that while mobile phones become more accessible as women age, their ability to utilize digital features decreases, limiting their ability to engage with telemedicine, and mobile-based healthcare information.

Urban-Rural Divide in Digital Literacy

There is a stark urban-rural disparity in mobile phone ownership and digital engagement among women. While 61.8% of urban women own a mobile phone, only 36.9% of rural women do. Even among mobile users, 74.8% of urban women can read SMS messages, whereas only 58.2% of rural women have this ability. The lower digital literacy levels in rural areas indicate that rural women face additional barriers in accessing any digital service.

Education as a Key Factor in Digital Literacy

Education plays a crucial role in determining digital literacy. Among women with no schooling, only 25.4% own a mobile phone, and just 5.2% of them can read SMS messages. In contrast, 74.7% of women with 12 or more years of education own a mobile phone, and an overwhelming 97.1% of them can read SMS messages. This direct correlation between education and digital competency highlights that higher-educated women are significantly more likely to benefit from mobile-based healthcare.

Wealth Disparities in Digital Access

Economic status is another major determinant of mobile phone ownership and digital engagement. Only 21.7% of women in the lowest wealth group own a mobile phone, compared to 74% in the highest wealth quintile. Similarly, only 26% of the poorest women can read SMS messages, while 85.6% of the wealthiest women have this capability.

Gender disparities in mobile phone ownership and internet usage can exacerbate existing inequalities, limiting women's access to information, services and opportunities. Similarly, the rural-urban divide in digital access can hinder development in rural areas, restricting access to education, healthcare and markets. Socioeconomic and educational disparities further compound these issues, as individuals from lower-income and less-educated backgrounds may lack the resources or skills to effectively utilize digital technologies.

2.6. Missing Data

Although existing datasets provide insights into internet connectivity and mobile phone penetration among India's youth, there are several significant data gaps. There is very little data on the key attributes of digital access quality: bandwidth, stability of the connection and affordability—all of which are needed to determine real accessibility. There is also little information about the availability and use of digital health services for youth, including telemedicine and online consultations. In addition, there is a lack of data on the training of health care professionals in these digital health initiatives that can help ease the transition of technology into the delivery of health care. Despite the rise of digital health applications, the extent of usage and perceived effectiveness among youth is largely unknown. These gaps make it difficult to design effective and inclusive digital health interventions, and there is a need to improve data collection and analysis to address this.

3. CONCLUSION

India stands at a pivotal moment in its digital transformation, with unprecedented advancements in mobile connectivity, internet penetration and digital health innovations. These developments have opened new avenues for healthcare accessibility, particularly for India's youth, who represent a significant share of the population and are poised to drive technological and economic progress. However, the uneven distribution of digital resources—influenced by gender, income, geography and education—continues to pose challenges, limiting the full potential of digital health solutions.

This article does not seek to provide specific policy recommendations for advancing digital technology among India's youth. Instead, it aims to present an objective assessment of the existing digital disparities, highlighting gaps in access, literacy and infrastructure that shape the ability of young individuals—especially women and rural populations—to engage with digital healthcare and broader digital services.

The findings underscore that while digital connectivity has expanded significantly in India, inequalities persist across socio-economic, gender and geographic lines. Rural populations, lower-income groups and women face considerable barriers not just in accessing mobile phones and the internet but also in developing the digital literacy necessary to leverage these technologies effectively. These disparities have direct implications for healthcare, as digital interventions—such as telemedicine and mobile health applications—are only as effective as their accessibility and usability among intended populations.

Furthermore, the data presented here reveal that mere availability of digital infrastructure does not ensure equitable participation. Ownership of mobile phones does not always translate to independent usage, and having an internet connection does not necessarily mean individuals can effectively engage with digital health platforms.

ANNEXURES

Table 1 : Total Population and Youth Population aged 15-29 years in India

Year	Total Population			Youth Population (Age 15-29 years)			Percent Share of Youth Population in Total Population ('000)		
	Person	Male	Female	Person	Male	Female	Person	Male	Female
1991	838,568	435,208	403,360	222,747	114,292	108,455	26.6	26.3	26.9
2001	1,028,610	532,157	496,454	273,402	141,819	131,584	26.6	26.6	26.5
2011	1,210,855	623,270	587,585	333,365	172,911	160,453	27.5	27.7	27.3
2016	1,291,074	664,184	626,890	359,600	188,016	171,584	27.9	28.3	27.4
2021	1,363,006	700,623	662,383	371,426	194,576	176,850	27.3	27.8	26.7
2026	1,425,908	732,075	693,833	367,415	191,702	175,713	25.8	26.2	25.3
2031	1,478,775	758,146	720,629	356,593	186,567	170,026	24.1	24.6	23.6
2036	1,522,288	779,701	742,587	345,498	181,470	164,028	22.7	23.3	22.1
Source: Census 1991, 2001 and 2011, Office of the Registrar General of India and Report of the Technical Group on Population Projections for India and States 2011-2036, Ministry of Health & Family Welfare, July 2020									

Table 2 : Percentage Distribution of Projected Youth Population by Age and Sex

Age group	Person	Male	Female
1991			
0-14	37.2	37.2	37.3
15-29	26.6	26.3	26.9
2001			
0-14	35.3	35.6	35.1
15-29	26.6	26.6	26.5
2011			
0-14	30.8	31.2	30.3
15-29	27.5	27.7	27.3
2021			
0-14	25.7	26.2	25.2
15-29	27.3	27.8	26.7
2031			
0-14	21.8	22.3	21.3
15-29	24.1	24.6	23.6
Source: Census 1991, 2001 and 2011, Office of the Registrar General of India and Report of the Technical Group on Population Projections for India and States 2011-2031, Ministry of Health & Family Welfare, July 2020			

Table 3 : State-wise Projected Youth Population (Aged 15-29 Years)and Their Share in Total Population as on 1st March 2021

Sl. No.	State / Union Territory	2021			
		% of youth in total population of State/UT	Youth Population ('000)		
			Persons	Male	Female
1	Andhra Pradesh	25.1	13,257	6,826	6,431
2	Assam	27.8	9,737	4,980	4,757
3	Bihar	28.8	35,444	18,811	16,634
4	Chhattisgarh	27.7	8,151	4,120	4,031
5	Delhi	28.2	5,791	3,041	2,751
6	Gujarat	26.4	18,452	9,868	8,584
7	Haryana	27.8	8,208	4,445	3,763
8	Himachal Pradesh	25.1	1,859	984	875
9	India	27.2	371,426	194,576	176,850
10	Jammu and Kashmir	29.3	3,922	2,064	1,858
11	Jharkhand	29.1	11,169	5,744	5,426
12	Karnataka	25.3	16,957	8,782	8,176
13	Kerala	22.1	7,839	4,008	3,831
14	Madhya Pradesh	27.7	23,405	12,266	11,138
15	Maharashtra	26.1	32,460	17,190	15,270
16	North Eastern States (Excluding Assam)	29.2	4,703	2,387	2,315
17	Odisha	26.1	11,915	6,037	5,879

Sl. No.	State / Union Territory	2021			
		% of youth in total population of State/UT	Youth Population ('000)		
			Persons	Male	Female
18	Punjab	26.2	7,922	4,346	3,576
19	Rajasthan	28.7	22,722	11,904	10,818
20	Tamil Nadu	23.2	17,735	9,097	8,639
21	Telangana	26.4	9,934	5,107	4,827
22	Uttar Pradesh	29.9	68,947	36,619	32,328
23	Uttarakhand	29.2	3,329	1,744	1,586
24	West Bengal	26.2	25,787	13,227	12,561

Source: Report of the Technical Group on Population Projections for India and States, Ministry of Health & Family Welfare, July 2020

Table 4: Digital Literacy and Internet Usage Among Youth in India

Estimated Number of Persons (15-29) by Ability to Operate Computer (July 2017-June 2018)	Percentage	33.6
	Estimated (In ' 00)	1,000,891
	Sample	77,308
Estimated Number of Persons(15-29) by Ability to Use Internet (July 2017-June 2018)	Percentage	40.4
	Estimated (In ' 00)	1,204,513
	Sample	87,617
Number of Persons (15-29) Used Internet During Last 30 Days (July 2017-June 2018)	Percentage	35.1
	Estimated (In ' 00)	1,046,834
	Sample	78,606
Estimated Number of Female (15-29) by Ability to Operate Computer (July 2017-June 2018)	Percentage	27.6
	Estimated (In ' 00)	392,223
	Sample	30,120
Estimated Number of Female (15-29) by Ability to Use Internet (July 2017-June 2018)	Percentage	31.9
	Estimated (In ' 00)	452,272
	Sample	33,514
Number of Female (15-29) Used Internet During Last 30 Days (July 2017-June 2018)	Percentage	26.5
	Estimated (In ' 00)	375,532
	Sample	29,180
Estimated Number of Males (15-29) by Ability to Operate Computer (July 2017-June 2018)	Percentage	39
	Estimated (In ' 00)	608,669
	Sample	47,188

Estimated Number of Males (15-29) by Ability to Use Internet (July 2017-June 2018)	Percentage	48.2
	Estimated (In '00)	752,240
	Sample	54,103
Number of Males (15-29) Used Internet During Last 30 Days (July 2017-June 2018)	Percentage	43
	Estimated (In '00)	671,302
	Sample	49,426
Women aged 15-49 years who have ever used the internet (%) (2019-21)	Urban	51.8
	Rural	24.6
	Total	33.3
Men aged 15-49 years who have ever used the internet (%) (2019-21)	Urban	72.5
	Rural	48.7
	Total	57.1

Source: Retrieved from <https://www.indiastat.com>

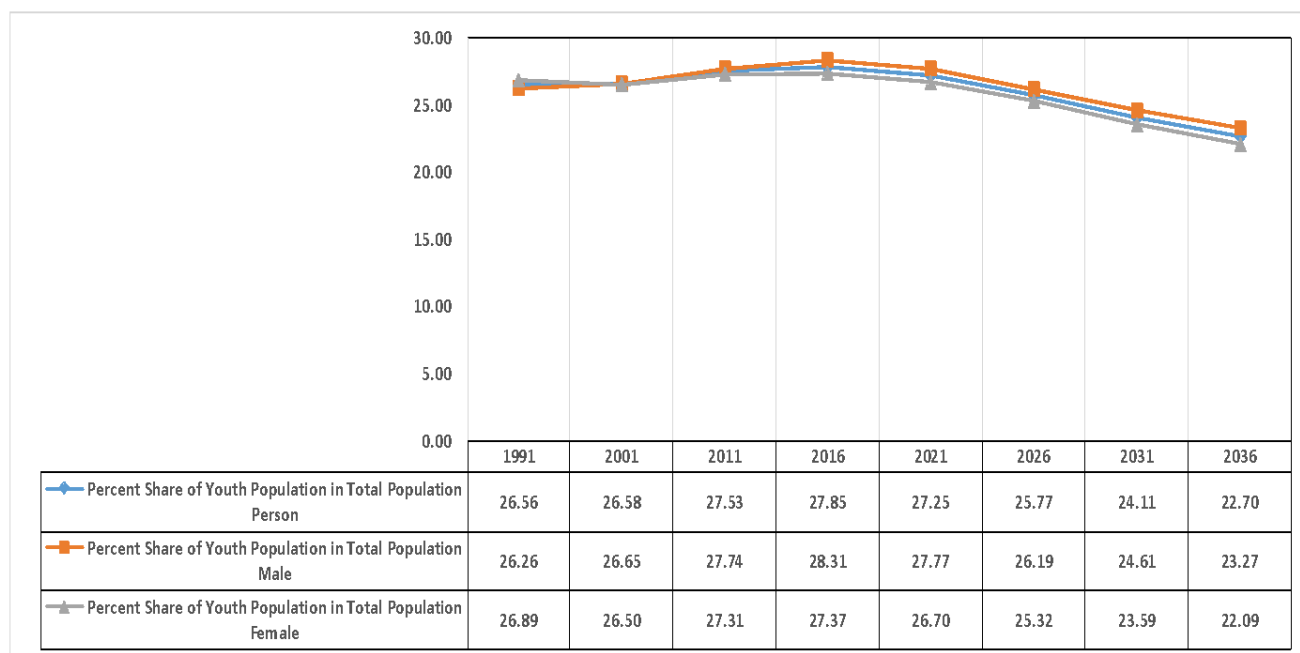
Table 5: Percentage of Women Own Mobile Phone for Use and Can Read SMS Messages According to Background Characteristics in India (2015-2016)

Background Characteristic	Women			
	Have a Mobile Phone that they Themselves Use (%)	Number	Among who have a Mobile Phone, Percentage who can Read SMS Messages (%)	Number
Age				
15-19	25	21,056	88	5,263
20-24	51.1	21,154	79.9	10,805
25-29	56	19,770	71	11,077
30-39	53.3	32,546	59.8	17,333
40-49	41.7	26,592	48	11,080
Residence				
Urban	61.8	43,520	74.8	26,893
Rural	36.9	77,597	58.2	28,664
Schooling				
No Schooling	25.4	31,883	5.2	8,087
Less than 5 Years	32	6,901	10.5	2,205
5-7 Years Complete	41	17,547	37.5	7,187
8-9 Years Complete	42.6	20,260	68.1	8,638
10-11 Years Complete	52.9	17,505	86.2	9,256
12 or More Years Complete	74.7	27,022	97.1	20,185
Household Structure				
Nuclear	45.4	60,895	62.5	27,674
Non-Nuclear	46.3	60,223	70	27,884

Background Characteristic	Women			
	Have a Mobile Phone that they Themselves Use (%)	Number	Among who have a Mobile Phone, Percentage who can Read SMS Messages (%)	Number
Religion				
Hindu	45.5	97,302	66	44,280
Muslim	43.8	17,292	61.1	7,582
Christian	63.4	3,064	81	1,942
Sikh	54.9	1,701	80.1	934
Buddhist/Neo-Buddhist	49	1,051	77.4	516
Jain	72.1	177	91	128
Other	33.3	530	74.4	177
Caste/Tribe				
Scheduled Caste	38.3	23,520	57.1	9,019
Scheduled Tribe	30.8	11,008	62.2	3,391
Other Backward Class	45.9	53,514	62.2	24,577
Other	56.5	32,498	77.1	18,350
Don't Know	38.1	578	47.8	220
Wealth Index				
Lowest	21.7	19,420	26	4,214
Second	29.5	22,839	43.9	6,729
Middle	40	25,236	56	10,095
Fourth	54.4	26,365	68.7	14,338
Highest	74	27,258	85.6	20,182
Total Age 15-49	45.9	121,118	66.3	55,558

Source: Retrieved from <https://www.indiastat.com>

Figure 3: Trends in Youth Population Share in India (1991–2036)



Data Source: Youth in India. (2022). *National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.*

REFERENCES

Abhishek Waghmare. (2024). Access to phones and the internet. Published on Data for India. Retrieved from <https://www.dataforindia.com/comm-tech/>

Blakemore, S. J. (2019). Adolescence and mental health. *The Lancet*, 393(10185), 2030-2031.

Boers, E., Afzali, M. H., Newton, N., & Conrod, P. (2019). Association of screen time and depression in adolescence. *JAMA Pediatrics*, 173(9), 853-859.

De Girolamo, G., Dagani, J., Purcell, R., Cocchi, A., & McGorry, P. D. (2012). Age of onset of mental disorders and use of mental health services: Needs, opportunities, and obstacles. *Epidemiology and Psychiatric Sciences*, 21(1), 47-57.

Gururaj, G., Varghese, M., Benegal, V., Rao, G. N., Pathak, K., Singh, L. K., Mehta, R. Y., Ram, D., Shibukumar, T. M., Kokane, A., Lenin Singh, R. K., Chavan, B. S., Sharma, P., Ramasubramanian, C., Dalal, P. K., Saha, P. K., Deuri, S. P., Giri, A. K., Kavishvar, A. B., Sinha, V. K., Thavody, J., Chatterji, R., Akoijam, B. S., Das, S., Kashyap, A., Ragavan, V. S., Singh, S. K., Misra, R., & NMHS Collaborators Group. (2016). National Mental Health Survey of India, 2015-16: Prevalence, patterns, and outcomes. Bengaluru: National Institute of Mental Health and Neuro Sciences, NIMHANS Publication No. 129.

International Institute for Population Sciences (IIPS) and ICF. (2021). National Family Health Survey (NFHS-5), 2019-21: India: Volume I. Mumbai: IIPS.

Kavyashree, C., & Nagaveni, S. J. (n.d.). A cross-sectional study on utilization and barriers of eSanjeevani telemedicine services in rural areas of South India: Curing at a distance.

Kieling, C., Buchweitz, C., Caye, A., Silvani, J., Ameis, S. H., Brunoni, A. R., ... & Szatmari, P. (2024). Worldwide prevalence and disability from mental disorders across childhood and adolescence: Evidence from the global burden of disease study. *JAMA Psychiatry*, 81(4), 347-356.

Linardon, J., Cuijpers, P., Carlbring, P., Messer, M., Fuller-Tyszkiewicz, M., & Tighe, J. (2022). Mobile technology-delivered interventions for mental health in adolescents: A systematic review and meta-analysis of randomized controlled trials. *JMIR Mental Health*, 9(7), e34254. Retrieved from <https://mental.jmir.org/2022/7/e34254>

Ministry of Health & Family Welfare, Government of India. (n.d.). eSanjeevani - National Telemedicine Service. MoHFW. Retrieved from <https://esanjeevani.mohfw.gov.in/#/>

Nedungadi, P. P., Menon, R., Gutjahr, G., Erickson, L., & Raman, R. (2018). Towards an inclusive digital literacy framework for digital India. *Education+ Training*, 60(6), 516-528.

Paus, T., Keshavan, M., & Giedd, J. N. (2008). Why do many psychiatric disorders emerge during adolescence? *Nature Reviews Neuroscience*, 9(12), 947-957.

Saloni Dattani, Lucas Rodés-Guirao, Hannah Ritchie, & Max Roser. (2023). Mental health. Published online at Our World in Data. Retrieved from <https://ourworldindata.org/mental-health>

Sareen, J., Jacobi, F., Cox, B. J., Belik, S. L., Clara, I., & Stein, M. B. (2006). Disability and poor quality of life associated with comorbid anxiety disorders and physical conditions. *Archives of Internal Medicine*, 166(19), 2109-2116.

Sarwal, R., & Kumar, A. (2021). Health insurance for India's missing middle.

Sharma, M. G., & Popli, H. (2023). Challenges for lower-middle-income countries in achieving universal healthcare: An Indian perspective. *Cureus*, 15(1).

The adolescent health indicators recommended by the Global Action for Measurement of Adolescent Health. (2024). Guidance for monitoring adolescent health at country, regional and global levels. Geneva: World Health Organization. Licence: CC BY-NC-SA 3.0 IGO.

Twenge, J. M., & Campbell, W. K. (2018). Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Preventive Medicine Reports*, 12, 271-283.

Twenge, J. M., Joiner, T. E., Rogers, M. L., & Martin, G. N. (2018). Increases in depressive symptoms, suicide-related outcomes, and suicide rates among US adolescents after 2010 and links to increased new media screen time. *Clinical Psychological Science*, 6(1), 3-17.

U.S. Department of Health & Human Services. (n.d.). Protecting youth mental health: The U.S. Surgeon General's Advisory. Retrieved from <https://www.hhs.gov/surgeongeneral/reports-and-publications/youth-mental-health/index.html>

U.S. Department of Health & Human Services. (2023). Social media and youth mental health: The U.S. Surgeon General's Advisory. Retrieved from <https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf>

Verhoof, E., Maurice-Stam, H., Heymans, H., & Grootenhuis, M. (2013). Health-related quality of life, anxiety and depression in young adults with disability benefits due to

childhood-onset somatic conditions. *Child and Adolescent Psychiatry and Mental Health*, 7, 1-9.

Warren, M. (2007). The digital vicious cycle: Links between social disadvantage and digital exclusion in rural areas. *Telecommunications Policy*, 31(6-7), 374-388.

World Health Organization. (2024). *World health statistics 2024: Monitoring health for the SDGs, Sustainable Development Goals*. Geneva: WHO. Licence: CC BY-NC-SA 3.0 IGO.

Youth in India. (2022). National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.

About DTH-Lab

DTH-Lab is a global consortium of partners working to drive implementation of The Lancet and Financial Times Commission on Governing Health Futures 2030's recommendations for value-based digital transformations for health co-created with young people. DTH-Lab operates through a distributive governance model, led by three core partners: Ashoka University (India), DTH-Lab (hosted by the University of Geneva, Switzerland) and PharmAccess (Nigeria).

Leadership Team

Aferdita Bytyqi, DTH-Lab Executive Director and Founding Member.

Ilona Kickbusch, DTH-Lab Director and Founding Member.

Anurag Agrawal, DTH-Lab Founding Member. Dean of Biosciences and Health Research, Ashoka University.

Rohinton Medhora, DTH-Lab Founding Member. Professor of Practice, McGill University's Institute for the Study of International Development.

Njide Ndili, DTH-Lab Founding Member. Country Director for PharmAccess Nigeria.



Digital Transformations for Health Lab (DTH-Lab)
Hosted by: The University of Geneva
Campus Biotech, Chemin des Mines 9
1202 Geneva, Switzerland

www.DTHLab.org