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DIGITAL LITERACY AND MEDIA CONSUMPTION DURING COVID-19: A CROSS-SECTIONAL STUDY AMONG WOMEN

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Abstract

The term, digital revolution may sound hackneyed in today's era, but the manner in which digitization has been ingrained into our lives cannot be ignored. As per the 2019 report of KPMG, digital is expected to be the dominant force in FY23 and is expected to be the second-largest among media formats after Television and will be the highest in marketing spend. And the market has seen growth in media consumption across both traditional and digital media in rural as well as regional markets. But another report titled, 'State of the World's Children 2017: Children in a digital world', by the United Nations Children's Fund (UNICEF) draws attention to the gender-based privilege among internet users in India with not even 1/3rd of India's total internet users are women. This may be because of lack of awareness, exposure, access and skills required to use digital media which is a result of numerous socio-economic and cultural factors prevalent in India. The consequence is the evolution of another stereotype of women being technophobic. This digital divide in terms of gender can be tackled by creating awareness regarding the usage of digital technology. The present study has been conducted with the prime objective of investigating how women use and experience various digital platforms during the pandemic. The paper also tried to examine the knowledge, digital skills, blockades and problems faced by women in the use of digital platforms in Covid-19 situation. The study also explores digital media consumption i.e. purpose & utilisation among women. To carry out the study, survey method is applied. The primary data is collected using questionnaires from a sample of 100 women from Gurugram, Haryana using quantitative as well as qualitative tools. The analysis of data collected has drawn conclusions on the topic. The inferences are relevant to understand the digital literacy among women.

Keywords: Digital Literacy, Media Consumption, Women, Digital Divide, Gender, Covid 19

Introduction

Digital Media is ubiquitous in everyone's life today and has emerged as one of the prime sources of information for the masses and forming relevant agendas in the public sphere. According to a report by TRAI in 2017, India has a very high perspective in developing ICTs for growth with 940 million households having Television sets, mobile phones owned by around 1.2 billion people and about 446 million people having internet access (TRAI, 2017). But on the other hand, this development lags behind many other countries in the world as revealed by the ICT Development Index (IDI) with India ranked at 134th position among176 countries.

According to American Library Association, "Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills" (American Library Association, 2019). Digital literacy is often confused with the term 'computer literacy which is frequently delineated and feebly defined (Goodson & Mangan, 1996). Digital literacy is the basic skills required by the user to operate effectively the software tools or to retrieve basic information from the internet (Buckingham, 2006), digital literacy skills are at two levels; first is the understanding of ICT terminology and the use of basic software tools (such as word processor and spreadsheet) while second encompasses the usage of search engines and databases and the capability to have knowledge of software tools (Williams et al., 2003). Whereas according to National Digital Literacy Mission (NDLM), 'Digital literacy is the ability of individuals and communities to understand and use digital technologies for meaningful actions within life situations 'in India. With nearly half of the people in India living in around 6,50,000 villages are still secluded from the benefits of the economic growth of the country. India is the second fastest-growing mobile market but is still facing the most prominent bases for social progress and development which is the issue of connectivity. With a vision to have a high-speed internet network even in the rural areas and to overcome this issue, the Government of India launched the initiative of 'Digital India 'slated for completion by 2019 is also the dream project of PM, Shri Narendra Modi.

"***Digital India is our dream for the nation. When I say 'Digital India 'It is not meant for the rich but for those who are poor".*** **Shri Narendra Modi, Prime Minister of India.**

As per the 2019 report of KPMG, digital is expected to be the dominant force in FY23 and is expected to be the second-largest among media formats after Television and will be the highest in marketing spend. And the market has seen growth in media consumption across both traditional and digital media in rural as well as regional markets with India leading with the largest number of Facebook users leaving behind the US (IAMAI, 2015). But another report titled, 'State of the World's Children 2017: Children in a digital world', by the United Nations Children's Fund (UNICEF) draws attention to the gender-based privilege among internet users in India with not even 1/3rd of India's total internet users are women. Almost 72% of the women are not accessible to mobile phones and a mere 8% of the women have access to the Internet in Urban areas while it is 12 % in rural India (GSMA, 2015). The digital divide has further broadened the gap as the skilled people more proficiently make use of ICT whereas their rural counterparts cannot (Sonia & Kumar, 2011). This may be because of lack of awareness, exposure, access and skills required to use digital media which is a result of numerous socio-economic and cultural factors such as the split between the affluent and the impoverished, the literate and the illiterate the urban and the rural, and the gender gap that is very prominent in India. Even the responsibilities and pressure of household work on women is a challenge using ICT services. The consequence is the evolution of another stereotype of women being technophobic.

This digital divide in terms of gender can be tackled by creating awareness regarding the usage of digital technology. Moreover, organisations as a part of their Corporate Social Responsibility (CSR) also spend billions of rupees to bridge this digital divide in developing countries such as India and China (UNDP, 2004). The digital divide is not only in terms of digital literacy but is also associated with cultural & social taboos, especially in India. This has resulted in the denial of even possessing a mobile phone and accessing it. Therefore, many women had to makeshift by borrowing mobile phones from their family members (GSMA, 2016). Another research study on, 'Transforming Women's Livelihoods Through Mobile Broadband 'acknowledged "smartphone complexity" as one of the constraints that prevents women from acquiring internet-enabled phones (GSMA, 2012) and similarly women in UP's Aligarh district in India owned the basic phones while most of the men own smartphones (Telenor, 2014). On the contrary, a study by the Grameen Foundation in India recognized that more than one-third i.e. 36% of women polled can proficiently operate mobile phones on their own (Grameen Foundation, 2014). This gender-disaggregated demarcation is not only observed in India but globally as well (ITU, Intel, UN Women, 2014). In a research done on mobile access and usage across the low and middle-income countries, a commune that women owners are 14% less in comparison to men whereas it is 38% in South Asia. Moreover, in nine of the eleven nations examined, female access to mobile internet is lower than male access. This gender divide is significant particularly in Kenya, India and Indonesia besides the rest of the countries surveyed. Inadequate digital skills and a lack of gender-sensitive planning for maximising the potential of ICTs are issues that contribute to women's lesser adoption of these technologies. This is due to the fact that just 10 to 15% of women are decision-makers in the ICT sector worldwide (GSMA, 2015).

In 2014, Google surveyed 5,000 women in the Asia-Pacific region. Thirty percent of women who didn't have the access to the internet cited "lack of digital skills," while another 35% expressed doubts about the internet's use for women. Similarly, 37% of the women who do not have access to the internet cited a lack of comfort and familiarity with the technology as the reason for their non-use. Moreover, no one was on hand to educate them about the know-how of the internet (Intel, 2012). Jamaluddin Bin Aziz & Norizan Abdul Razak's (2010) study reveals that participants were ICT literate but with limited abilities to work online nonetheless were able to work online after being trained.

Thus it needs to be noted that despite the various studies were done and initiatives were taken to make every-one digital literate which is the need of the hour, the women across the world are facing challenges and have apprehensions, but they readily adapted to the digitized process considering the present scenario and the re-quirements. So, keeping all these points, this paper tried to understand the knowledge, digital skills, blockades and problems faced by women in the use of digital platforms in Covid-19 situation.

Research Objectives

The present research study was conducted with the following objectives:

- To explore digital media consumption i.e. purpose & utilisation among women.
- To examine the digital skills that women developed during Covid-19.
- To understand the blockades and problems faced by women in the use of digital platforms in Covid-19 situation.

Research Methodology

The study was conducted in Gurugram, the cyber city of Haryana, India where the sex ratio is 853 females per 1000 males and the literacy rate is 84.4%. A sample size of 100 women was taken, divided equally amongst the 4 sub-divisions of Gurugram district in Haryana hence, putting a sample size of about 25 re-spondents from each subdivision namely Gurugram, Sohna, Badshahpur & Pataudi. Data were collected from women among the selected places using quantitative as well as qualitative tools. The present study has been conducted with the prime objective of investigating how women use and experience various digital platforms. To carry out the study, survey method is applied. The primary data is collected using questionnaires from a sample of 100 women using quantitative as well as qualitative tools.

Result & Discussion

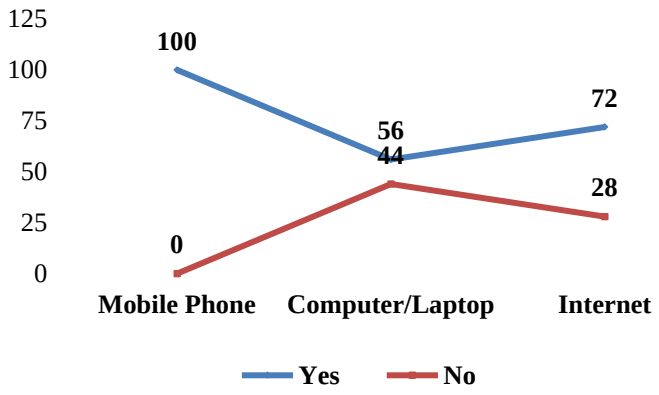
Demographic Profile of the Respondents

A primary survey was conducted on a sample size of 100 women selected from Gurugram, Haryana, one of the National Capital Region. The data represent the demographic profile of the respondents with nearly half of the respondents i.e. 48 were youth belonging to the age group of 18–27 years followed by 26 respondents from the 28-37 years of age group and 17 respondents were in the age group of 38-47 years. Mere 9 respond-ents were above 47 years of age. In developing countries like India, literacy is one of the greatest challenges which is one of the key basis of digital illiteracy. According to the 2011 census, Gurugram had a literacy rate of 84.4%, and three fourth of the women surveyed were minimum graduates or above with 44 being graduates followed by 23 women with post-graduation degrees and 7 either had a professional degree or diploma. While on the other hand 19 had just attained the secondary or higher secondary level of education and surprisingly, 7 respondents had never gone to school.

Of the total respondents, one-third of the respondents i.e. 33% were students followed by 28% women who were homemakers while 21% were self-employed and 18% were in service. Accumulating information about the income of families was a strenuous effort as respondents were hesitant in providing their income details. About 39% of the families had income between 1-3 lakh per month while one-fourth i.e. 25% of the families had income less than a lakh per month. 21% of families were earning between 3-5 lakh a month and only 15% of the families had income greater than 5 lakh.

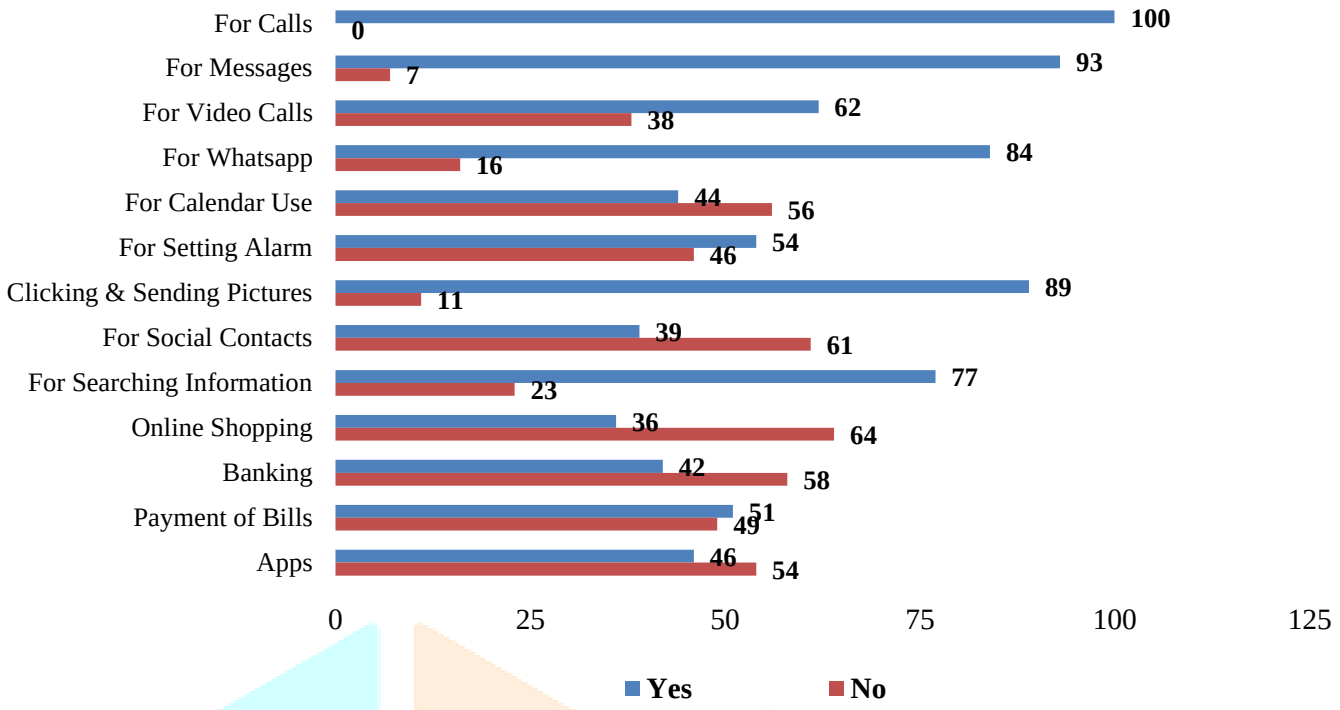
Ownership of Digital Devices Among The Respondents

Digital Literacy can be achieved if people have access to or own digital devices. Respondents have agreed that mobile phones have become a necessity in today's times. It was heartening to note that the ownership of mobile phones was quite high among the respondents as all of them own mobile phones for their personal and exclusive use and among these, 89% had smartphones. Astonishingly, only 7% percent of them had internet connectivity on their phones, but half of these women said they did not have an understanding of the internet and use the phone mainly for making & receiving calls & messages to stay connected with their family & friends. More than half i.e. 56% of the women respondents have a computer/laptop at home and of these 36% have their own personal laptops.



Usage of Mobile Phones During Pandemic

The present study reveals fascinating data in terms of usage of mobile phones by women during Covid-19. Making and receiving phone calls was the prime use of mobile phones by women of Gurugram, Haryana followed by SMS, photography, WhatsApp, Google Search and Video Calls were common functions and applications among many respondents.

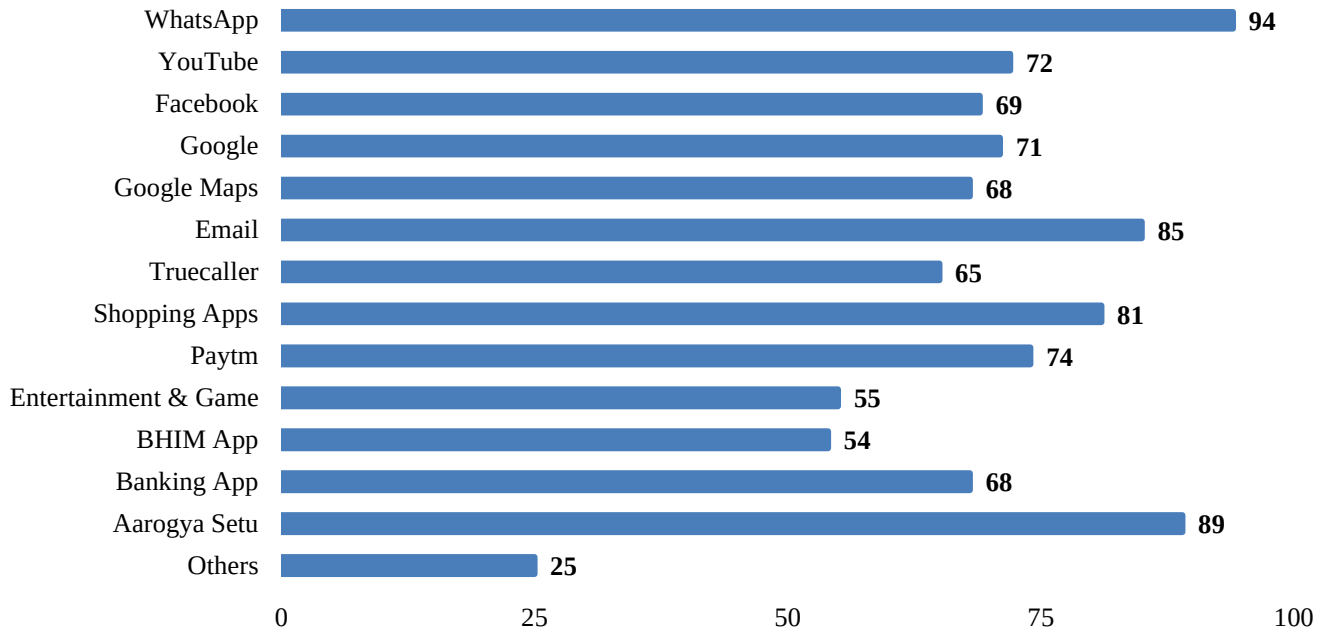


All the respondents agreed that they use mobile phones for making & receiving calls followed by 93 respondents that use mobile phones for sending and receiving messages to their acquaintances. The third most popular feature of mobile phones practised by the women in India is clicking & sending photographs is consented by 89% of the respondents followed by the use of WhatsApp application for various purposes like calls, chat & even video calls by 84% of the respondents. Searching for information was another activity that 77% of the women consented to followed by making video calls by 63% of the respondents. Other applications like setting alarms, using a calendar and joining social groups were the activities to which 54%, 44% and 39% of the women agreed upon.

Surprisingly, more than half i.e. 51% of the women pay their bills with mobile phones and 42% banking while 36% of the women frequently go online shopping through their mobile phones.

Mobile Phone Apps Usage By Respondents During Pandemic

To understand the usage of various mobile phone-based applications, respondents were provided with the list of most popular mobile-based applications and were inquired about the apps being downloaded during Covid-19. It was found that WhatsApp, Aarogya Setu, Email, shopping applications, Paytm, YouTube and Google were the most popular and highly acceptable applications. About 94% of the respondents downloaded WhatsApp on their phones followed by Aarogya Setu by 89% of the women followed by Email by 85% and Shopping apps by 81% of the respondents.



Next in the row are Paytm, YouTube and Google with 74%, 72% and 71% of the women from Gurugram. Facebook was used by 69% of the women followed by Google Maps which was downloaded by 68% of the

women. Truecaller, Entertainment apps and BHIM app were other popular apps downloaded by the women of Gurugram. Few respondents also admitted that they did not know how to download the applications and were either helped by their friends or family members who had downloaded these applications on their phones.

Digital Media Consumption by Respondents

To understand the knowledge of usage of digital devices among the women of Gurugram, Haryana, the respondents were asked if they can independently use various functions & applications on mobile phones if they need someone's help or if they do not use it at all. Out of the 100 women respondents, about 86% of the women agreed that were can independently make & receive calls while 11% confessed that they need some help with it and unfortunately 3% of the women could not make or receive calls on their own as they were either not allowed or do not know how to do it.

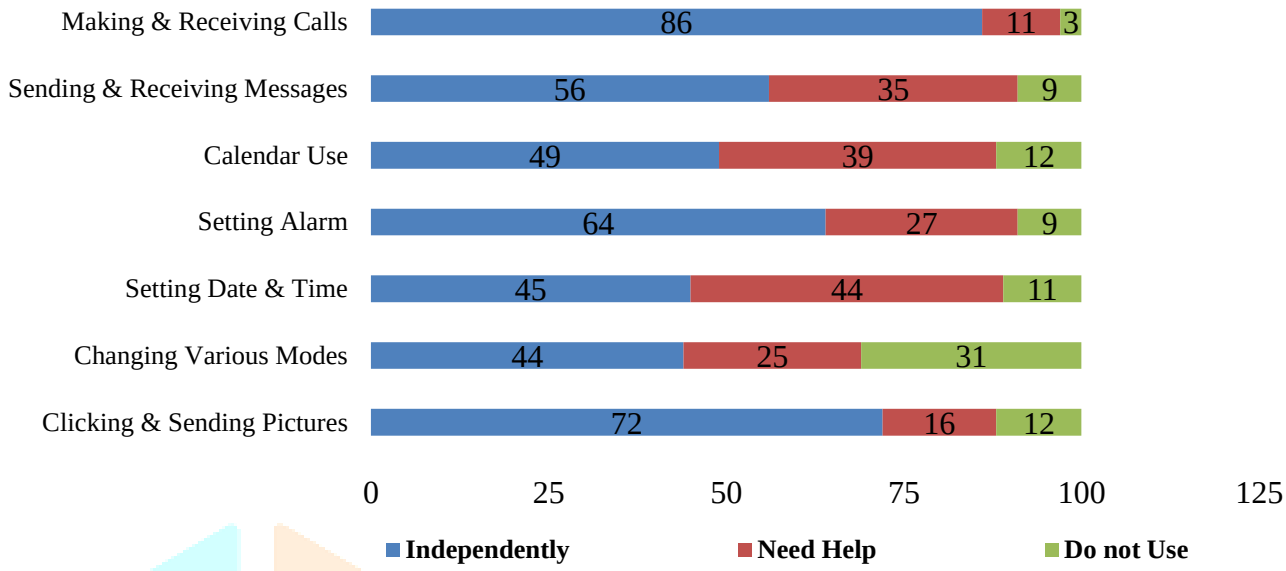
When enquired about SMS literacy, about 56% of the Gurugram women were well versed with how to send and receive text messages through SMS on their own whereas 35% agreed that they can see and reply to the message with some help only. Only 9% of the respondents do not know how to send or receive text messages through SMS at all. The low literacy rate is one of the major reasons for this.

Use of Calendar was another basic function related to which the next question was asked from the respondents. 49% of women knew how to observe or use a calendar and set a reminder on their phones independently. And 39% of the respondents want someone's help whereas 12% stated that they have never made any use of the calendar function and even don't know how to see the calendar or set a reminder on their phones. The rationale behind this can be again the lower level of education and lack of need to use the calendar on phone among the women.

Setting an alarm is considered the most common routine in the daily life of any individual and when the question was raised about if the respondents can independently know how to set an alarm on their mobile phones, 64% of the women respondents agreed that they can do so independently while 27% can set the alarm with the help of someone and 9% confessed that they have never set an alarm on their mobile sets. Most of the women knew it as was necessary for their daily chores like waking up early either to fill water or wake up other family members or cook and send children to school or get ready themselves for college/work.

When asked if the women of Gurugram knew how to set date & time on their mobile phones, 45% of women knew how to set date & time on their phones independently. And 44% of the respondents want someone's

help whereas 11% stated that they have never set a date and time on their phone and even don't know how to set it. Most women think that they don't need it otherwise.



Changing various modes on phone i.e. putting on silent mode or aeroplane or vibration mode is another basic function of a mobile phone and when the respondents were enquired about the same if they can independently change modes on their mobile phones, 44% of the women respondents are of the opinion that they can do so independently while 25% can shift the modes only if someone helps them in doing so and 31% of the respondents admit that they have never changed modes on their mobile sets, as they don't think that it is a requisite in their life.

Clicking and sending pictures to friends and relatives turned out to be the second most popular activity among the women of Gurugram. Nearly three fourth i.e. 72% of the respondents acknowledged that they knew how to click and send pictures. On the other hand, 16% of the respondents do it with the help of someone as they could take the pictures but needed assistance in transmitting the same while 12% either require assistance or did not know the same at all.

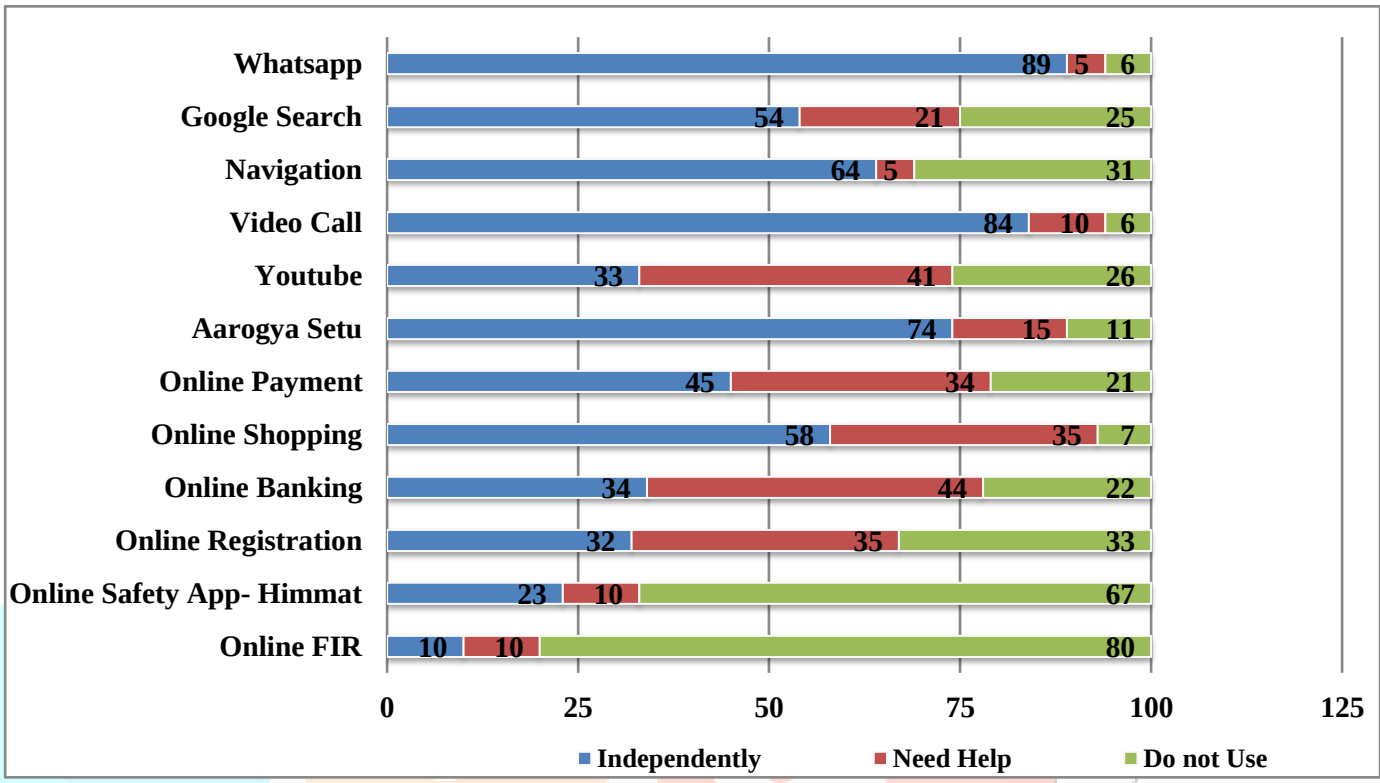
Digital Literacy of Respondents

The present research study is to comprehend the digital literacy among women of Gurugram, Haryana, to enquire about the same respondents were asked about the apps being used by respondents on their mobile phones. WhatsApp is the most popular app globally as it provides free text messages, images, and videos only at cost of internet access. The majority of women, 89%, confess that they are able to use WhatsApp without assistance, while 5% require assistance. Surprisingly, 6% of the respondents have never used WhatsApp at all. Almost half of the respondents knew how to chat or call but did not know how to form groups and also had doubts in searching for contacts. Few believe that they don't like it as face-to-face communication is better than chatting and moreover, they find it disturbing during household chores.

Searching for any information, be it related to the latest fashion trends, food recipes, latest gadgets or food joints, news, or work/assignment-related content is common among many women. When asked about whether the respondents can independently search for any information, 54% of the respondents confined that they are proficient in google search whereas 21% of the respondents needed someone's help to search anything online and 25% had no idea how to search information and have never experienced before.

Similar to Google search, Navigation is another common feature of digitization in today's times, as it not only traces unknown places but with the shortest distance and less time. More than half of the women of Gurugram i.e. 64% of the respondents said that they can independently use this app while just 5% of the respondents needed help to navigate places on their mobile phones. About one-third of the respondents (25%) have never used this app on their phones.

Video calling features played an important role to stay connected to the family and friends is the belief of most of the women of Gurugram. 84% of the respondents agreed that they are very active in making & receiving video calls while 10% agreed that they have gained knowledge on how to create and receive video calls. but can't do it independently and need someone to connect the call for them. Just 6% have never tried it as either they don't own any phone or a smartphone to do so.



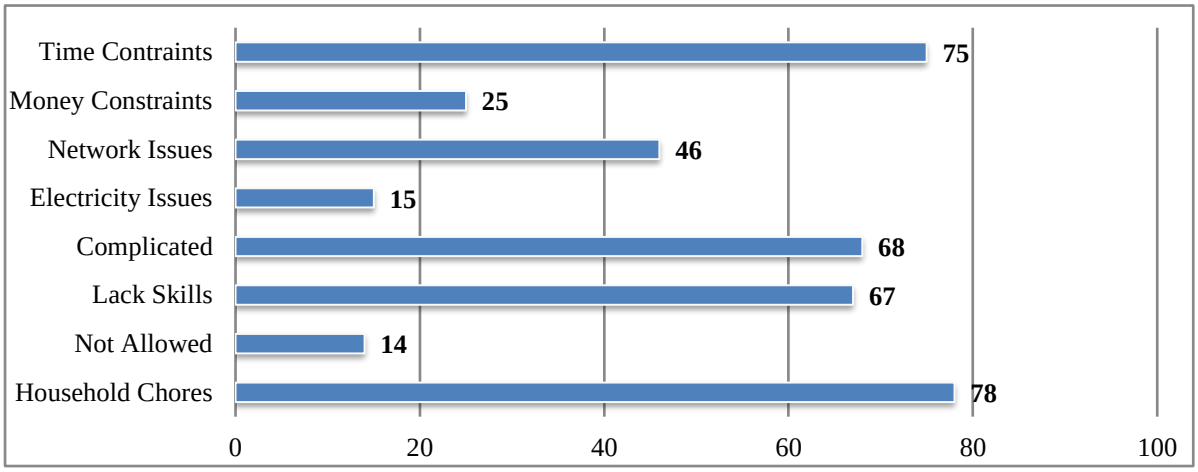
YouTube is invading the life of every individual, especially younger women was very popular as it is a free video-sharing service where one can see, like, share, comment and even can upload their own videos. But it was found through the study that nearly one-third i.e. 33% of women of Gurugram knew how to use YouTube on their own whereas 41% agreed that they needed help to make use of YouTube and 26% believed that they could not use the application and have never tried their hands on it as they found it difficult to learn.

The initiative by the government for the security of the people was the launch of the Aarogya Setu App to identify the people with covid symptoms and keep them aware of their neighbourhood. Of the 89 women that agreed to have the Aarogya Setu app being used 74 of the respondents consented that they knew how to use the app independently whereas 15 of the respondents need help to access the same.

With digitization, there appears an endless number of online applications for bill payments. When the respondents enquired if they can do online payment of bills, surprisingly 45% of the respondents knew how to pay bills independently through various applications like Paytm, BHIM, Google Pay, Phonepay and so on. On the other hand, 34% of women did not know how to use online payment applications on their own. About 21% of the respondents admitted that they have never used any online payment application due to the complexity of the app and moreover few of them did not have any bank account.
Online shopping applications are another extremely accepted feature among the younger women as 58% of the respondents confessed that they can use online shopping applications independently while 35% lacked knowledge of any internet shopping application and needed someone's help. But 7% said that they have never done any online shopping.

With demonetization in 2016 and a boost to online banking by the government of India public is now accepting it and learning to practice it. When the respondents were enquired about if they are proficient in online banking, nearly 34% of the respondents knew how to do banking services online on their own while on the other hand 44% of women did not know how to do online banking independently. About 22% of the respondents admitted that they have never used online banking due to the complexity of the app and moreover few of them did not have any bank account.

ORS (Online Registration System) is a smartphone application recognised by the government for scheduling online appointments with doctors located in various hospitals. Almost one-third of the respondents i.e. 32% of the Gurugram women were aware of the ORS application and were using it independently while 33% of the respondents did not know about the application at all. Only 35% of the respondents knew it but needed someone's help to operate it. 231067



Himmat application is another Government recommended internet security tool that enables women to feel safe and secure while they are alone. Additionally, it enables women to call the police and their families with a single click. It also operates in offline mode. When the respondents were asked about the same, more than half i.e. 67% of the respondents did not know about it or how to use it and only 23% knew how to use it independently and have used it once. While 10% of the women respondents said that they would require help to use the Himmat application. 101080

Online FIR is another initiative of the Government where women can lodge an FIR online through a website. When women were asked about the same most of the women i.e. 80% of the respondents did not know how to lodge an online FIR and have never used it while only 10% of the respondents knew how to do it independently and another 10% can do it but needed someone's help.

Challenges in Digital Learning & Practice During Pandemic

Another objective of the study was to find out the difficulties faced by women of Gurugram in digital learning and practice. When respondents were enquired about the constraints they are facing for non-usage of digital devices burden of household chores took the first place with more than three fourth i.e. 78% of the respondents approved of it followed by time constraints which is the belief of 75% of the respondents. On the other hand, 68% of the women found it to be complicated to use and costly equipment closely followed by 67% of the women who thought that they lack skills in operating the digital devices. In addition, 46% of the women said that substandard Wi-Fi connectivity and highly expensive internet connectivity are other reasons for the non-usage of digital devices whereas unaffordable services were another reason for 25% of the respondents. Electricity issues and cultural taboos were additional reasons cited by 15% and 14% of the women respectively.

Findings

The present research study deals with how women use and experiences various digital platforms during the pandemic. The following are the major findings of the research study:

- Nearly half of the respondents who participated in the research study were youth belonging to the age group of 18–27 years.
- With the literacy rate of 84.4 in Gurugram, 93% of the women respondents were literates with 44 were graduates followed by 23 women with post-graduation degrees and 7 either had a professional degree or diploma.
- Of the total respondents, 33% were students followed by 28% as homemakers while 21% were self-employed and 18% were in service.
- 39% of the families had income between 1-3 lakh per month while 25% of the families had income less than a lakh per month. 21% of families were earning between 3-5 lakh a month and only 15% of the families had income greater than 5 lakh.

- All the women surveyed in Gurugram own mobile phones and 89 percent had smartphones.
- Only 72 percent of them had internet connectivity on their phone. 56% of the women respondents have a computer/laptop at home and of these 36% have their own personal laptops.
- Women of Gurugram primarily use mobile phones for making and receiving phone calls followed by SMS, photography, WhatsApp, Google Search and Video Calls during pandemic.
- WhatsApp, Aarogya Setu, Email, shopping applications, Paytm, YouTube and Google were the most accepted applications used by the respondents during the pandemic.
- 86% of the women agreed that were can independently make & receive calls while 11% confessed that they need some help and unfortunately 3% of the women could not make or receive calls on their own as they were either not allowed or do not know how to do it.
- Nearly half of the women agreed they can independently send and receive text messages through SMS, knew how to observe or use a calendar and set a reminder on their phone, know how to set an alarm on their mobile phones, and even knew how to set date & time and how to change modes on their mobile phones. The respondents also acknowledged that they knew how to click and send pictures independently.
- Most of the respondents consented to knowing how to use WhatsApp independently along with other apps like Google search, Navigation, YouTube, and Aarogya Setu App.
- Almost half of the respondents were able to independently make online bill payments and do online shopping applications but only one-third were proficient in online banking or doing ORS (Online Registration System).
- Few respondents were able to make use of security apps like Himmat App and knew how to do online FIR.
- Household chores, time constraints, skills, poor Wi-Fi connectivity, high cost of internet connectivity and cultural taboos were prominent reasons cited by the women of Gurugram that hampered their digital literacy.

Conclusion

The research study demonstrates the average level of digital literacy among women in Gurugram during Covid-19. Women in Gurugram utilised the phone's various capabilities and applications in addition to its primary usage for making and receiving phone calls. Women were able to send and receive messages via WhatsApp, SMS, clicking and sending images, setting alarms and seeing the calendar, video calling, and Google search since these services were often utilised in their daily lives. However, they have difficulty mastering mobile programmes such as Bhim, ORS, and online shopping. This was because there was a dearth of need, no bank accounts in their names, no credit or debit cards, and their Aadhaar numbers were not linked to their bank accounts. Numerous applications were only available in English, making it impossible for many women to understand and complete them. Because they feared disclosing their information and arranging an appointment or filing an FIR, they were hesitant to follow the instructions provided by the applications. The ladies stated that they did not require internet shopping applications and preferred to make purchases in-store using cash. Since women were previously excluded from the use of digital technology, it is crucial to include them as key stakeholders in India's digital transformation.

Even women with little resources and limited literacy are aware of the power of digital technology. If given the chance, women may use ICTs to advance their fundamental needs and interests. To allow women to utilise digital technologies, it is vital to offer them affordable access to digital equipment and support services, such as internet connectivity. Given that the usage of digital technology has an all-encompassing influence on numerous domains such as education, health, employment, and environmental sustainability, such training may genuinely assist women in gaining confidence and enhancing the quality of their personal and professional lives. Women may also utilise digital skills to seek out other career possibilities and opportunities, better their own enterprises, and increase their income, all of which contribute to a higher quality of life and their own empowerment. It is crucial, then, to transition from the 'digital divide' to 'digital opportunities' for the most disadvantaged members of society, such as urban and rural impoverished women.

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