

# Gender Bias in Mobile Phone Usage: A Case Study of Mukhra Village

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**Abstract:** *Mobile phone became a part and parcel of human lives nowadays, and basically, not being a gendered item, but women are excluded in access to this service unlike men. The notion of gender bias/patriarchal dominance in this regard causes their material exclusion. That's why, women are still lagging behind in owning mobile phone, accessing to digital services through mobile phone and so on. But, gender equality is somehow disappeared regarding availing services of mee-Seva and bio-matric. This digitalization process cannot be successful unless there must be removal of gender-bias being rooted in an ideological form/ non-physical form.*

**Keywords:** Gender bias, mobile phone, material exclusion, Gender-neutral

## 1. Introduction

“The quickest way to get out of poverty right now is to have one mobile telephone” (Nobel Peace Laureate Muhammad Yunus (2003) stated at a conference on poverty and ICTs)

Information and communication technology (ICT) enables people to access numerous services digitally that removes the physical presence of people at the concerned offices and also minimises the duration of time that they usually allocate to that purpose. The ICT revolution has turned the world into a global village, in which people can access many services online and get connected with people living in other part of the world. Nowadays, digital services are relocated to a mobile base, which means that the service further simplifies for people to access various services online from their homes itself. In this regard, smartphone is considered a prominent digital device by which people can avail these services that result in its usage being enhanced constantly. Internet which is the backbone of the digitalization process dictates this digital-world and penetrated into the nook and corner of the country with a support of revolution policies framed and initiated by the government of India.

On July 1, 2015, digital India came into exist with a few objectives, viz. at least one person from a family should be trained as e-literate; and its ultimate aim is to turn the country into a knowledge-based information society. Under its objectives, there are a few substantial programmes initiated and one of them is “Bharat Net Programme, to reach out to one-lakh panchayats that embrace about 550 million people, with an ultimate aim of making them recipients of internet/digital services (Mishra, 2018). As a result of this tireless effort, the number of internet users has been increased unexpectedly in a short period of time.

Both the government and private agencies rely widely on internet facilities to disseminate services/information, which rapidly reduces time gaps and physical distance in the fields of agriculture, administration, service sector and entrepreneurship. Further, a study noticed that it has enhanced support for empowerment of rural people, particularly women (Gupta and Arora, 2015). All state governments in the country are pursuing the goals set up under the mission and reaching out to people residing even

in rural and isolated places with this aim of digitalization. For instance, Gujarat state initiated and has been rolling out a digital program in Akodara village. As a part of this, it has set up CCTVs to monitor all the activities of the villages. Likewise, a village called Mukhra in Adilabad District of Telangana State adopted this digitalization process, and encouraged all the villagers to make all monetary related transactions through Paytm. But gender inequality is still prevailing in this village about which the following discussion is clearly elucidated.

### 1.1 Mobile Phone

Mobile phone in the present era has turned into a necessary device, providing numerous services online. It also can enhance the living standards and nutritional levels of households, and also gender equality in the society. These can all be possible when women start to access this mobile device (Sekarbira and Matin, 2017). A macro-level study that was carried out in 200 countries reveals that it reduces gender bias regarding both maternal and child mortality rates and also enhances contraceptive use (Rotondi, Ridhi, Luca, Simone, and Francesco, 2020). Presently, its usage has penetrated into many fields, even into a fishermen's community. In this community, it eradicates a long-lasting communication gap that exists usually between community and market that eventually drives them to be included in the booming of mainstream economy (Abraham, 2006). It has also impacted fields of agriculture, employment, education, health, and business, being noticed in a study carried out among 418 respondents from 12 villages in six districts of Bihar State (Mehta, 2016). It also favors women's safety, which means about 93% of women from developing economic categories feel a sense of safety, security, connectedness, and assistance (the Cherie Blair Foundation for Women, 2010). So, the basic nature of mobile usage is to reduce gender bias.

### 1.2. Gender Bias

Mobile phones became a necessity device for all households and can connect people across the world. Almost all households in the country avail the service of the mobile phone at least once. Individually, a few sections of households are unable to possess the device even in the 21st

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century because of financial unaffordability, gender bias, certain socially inherited norms, etc. In the case of gender bias, a study in 2015 reveals that men in low- and middle-income countries, and especially in South Asian countries, possess mobile phones and access internet services very rapidly when compared to women. Another study reveals that about 200 million women in India possess mobile phones, accounting for just 14% of such people in the world (Mariscal, Gloria, Urvashi, and Alina, 2019). Despite of being the most populated country in the world, about 79% of men and 43% of women in the country possess mobile phones (Mariscal, Gloria, Urvashi, and Alina, 2018). It clearly shows gender bias. Lack of mobile phone for women is a way of promoting gender inequality.

Prominent reasons for absence of ownership for women include low-income status, age, and the category of work they engage in, marital status, and so on (Rice and James, 2003). The lack of a mobile phone among them is considered a material exclusion, which is being influenced by patriarchal norms. In Mathura village, for instance, there is a presence of a village council that exercises overwhelming power over women and sometimes intervenes in their private lives, which causes women to omit ownership over mobile phones. By doing this, the council firmly believes that such restrictions secure their personal lives and enable them to be excellent in their studies (Mariscal, Gloria, Urvashi, and Alina, 2018).

## 2. Research Problem

Gender bias is not just confirmed by material unfairness for women but is a product of patriarchal social norms, i.e., nonmaterial norms. Lack of ownership for women over mobile phones connects to the root-cause of patriarchal norms and is, therefore, not just material exclusion.

## 3. Methodology

The village is geographically located 40 kilometres away from the headquarters of Adilabad District, Telangana State; became famous for being the fourth-digital village in the state with a digital money-transaction by Paytm service. They are two social categories viz., Madigas (SC) and Maraties (BC), residing together in the village without any geographical segregation. Maraties are a prominent group in terms of population, holding of a high social status and of political power and being economical well-off whereas SCs are marginalized people. The study assessed various elements viz., educational status, economic level, ownership as well as access of mobile phone, and access to other services known as both Mee-Seva centers and public distribution shops (PDS). Respondents are selected randomly for the interview. The total population of the village is then 700 people, from whom there are only 76 respondents selected for the study, being fallen in the age of 18-35 years. These sampled respondents are again distributed as 38 each between these two genders. The interview schedule contains both open and closed-ended questions.

## 4. Theoretical Framework

Henrietta Moore's book, "Feminism and Anthropology" (1988), explains gender differences connected with other social disparities. It views how the non-material aspect (ideological aspect) causes material vulnerability among women.

## 5. Data and Findings

### 5.1 Education

Education is considered as a vital tool for empowerment of an individual and of society as a whole. English language presently plays a prominent role in the mission of digitalization process through mobile devices. So, a higher level of education leads to people being equipped with advanced digital skills. The study depicts that a large segment of men completed college-education whereas the majority of females remain illiterate or have completed just their schooling-education. So, males possessed a sound knowledge on the usage of mobile phones owing they obtained a highest education which contains a good English language based skills.

There is a connection between adequate financial viability and ownership of a mobile phone. Based on empirical data, the respondents are broadly segregated into three major categories, viz. agriculturists, non-agriculturists and non-earners or dependents. Agriculturists include both farmers and agricultural wage labourers whose income completely relies upon seasonal earning and is just enough to fulfil their survival needs. Non-agriculturists include business people and employees of both public and private sectors, can somehow afford the cost of mobile phones. The final category is non-earners and dependents, who require others' support to meet their necessities.

**Table 1: Educational qualification**

S.No	Educational Qualification	Male	Female
1	Illiterate	0	5.3%
2	Schooling	36.8%	68.4%
3	College	63.1%	26.3%
	Total	100%	100%

As per the data shown in Table-2, a vast number of women are engaged in agriculture whereas men are more or less equally engaged in these two economic activities of agriculture and non-agriculture. They stated that agriculture does not provide them with a sufficient and regular earning but non-agricultural economic-activity provide them with a better and sufficient earning. Hence, men earn a better economy as they are largely engaged in non-agricultural activity, which shows an economic shift for men from agriculture to non-agriculture, whereas for women, they are largely engaged in agriculture and allied activities and living on an unassured and irregular income.

**Table 2: Economic Activities of Respondents**

S.No	Livelihoods	Male	Female
1	Agriculturist	47.3%	71.1%
2	Non-Agriculturist	29%	7.9%
3	Non-Earners	23.7%	21.1%
	Total	100%	100%

**5.2 Income and type of occupation:**

The monthly earnings of a household engaged in agriculture and allied activities is just Rs. 5000 and below. But it is Rs.5000 and above, sometimes up to Rs.15, 000 for

households engaged in non-agricultural activity. Therefore, a large segment of males have engaged in non-agricultural activity and earning a better income that enhances their financial affordability and purchasing power.

**Table 3: Income and Type of occupation**

S.No	Below Rs.5000	Rs.5000-10,000	Rs.10000-15000	No earning	Total
Agricultural category	47.3%	11.8%	0	0	59.2%
Non-Agricultural Category	0	13.2%	5.3%	0	18.4%
Not-working	0	0	0	22.4%	22.4%
Total	47.3%	25%	5.3%	22.4%	100%

**5.3 Mobile phone**

**5.3.1 Owning a mobile phone**

Ownership of a mobile phone is determined by a few prominent factors noticed in the study, viz. income, education and gender. It is noticed that at least one person in a family owns a mobile phone, which is considered a positive sign towards the digitalization process. Males dominate in these three elements of better income, higher education and higher-social status. Therefore, a large segment of them owned mobile phones and are also able to access diversified services online through mobile phone. For instance, concerning gender-bias, a male child in a family possessed a mobile phone whereas a female who is older than him, pursuing a college education still relies over her brother’s mobile phone if she wants to access her educational related information online.

**5.3.2 Type of mobile phone**

The Internet and other sophisticated services only pertained to a few mobile phones, i.e. smartphones, whereas for feature phones, such advanced services are absent. Generally, low and middle income people cannot afford the price of a smartphone. But, economically affordable people can purchase/own this type of mobile phone. As per table-4, the data reveals that a huge number of females only possess feature phones which have limited services, whereas males possess smartphones which contain diversified and advanced digital services. Therefore, their accessibility to diversified digital services through a smart-phone is associated with gender bias.

**Table 4: Mobile-Phone Type**

S.No	Type of Phone	Male	Female
1	Feature phone	23.7%	31.6%
2	Smart Phone	73.7%	39.5%
3	No Mobile	2.6%	28.9%
	Total	100%	100%

**5.3.3 Type of mobile phone and income**

There is a firm association between income level and ownership of a smartphone. Households whose income level per month is Rs.5000 and below largely owned feature phones, whereas few households who earn above Rs.5000 per month possess smart phones. But a few families owned feature phones regardless of their earnings range between Rs.10, 000 to Rs.15, 000 per month. Hence, it is confirmed that there is an association between income level and the type of phone usage. But, owners of these phones are largely males only.

**Table 5, Income and Type of Mobile Phone**

S.No		Feature Phone	Smart-Phone	No Mobile
1	Below Rs.5000	22.4%	18.4%	10.5%
2	Rs.5000-10000	0	25%	0
3	Rs.10,000-15,000	3.9%	1.3%	0
4	No earning	1.3%	11.8%	5.3%

**5.3.4 First preference in the usage of a mobile phone**

Not only ownership of a mobile phone, but how people access this device under a first preference is considered a note-worthy-aspect. They all agreed that they access this device exclusively to make calls to others under the first preference.

**5.3.5 Second, Preference in the usage of mobile phones**

Nearly three-fourths of men and below half of women respondents under second preference access mobile phones for various services that include WhatsApp, SMS, YouTube, Online Banking, Facebook, and News. Among them, respondents from both genders mostly avail WhatsApp service. In specific, men mostly rely on the services of WhatsApp, SMS, and Online Banking; and for women, such services include WhatsApp and YouTube as per Table-6. It also indicates that men are more active in being engaged in digitalization service than females. Once, a large percentage of villagers utilized Paytm service to transfer money online. Over a period of time, this service is disappeared. Now, they rely on a digital person who pays hand-cash to people who approach him with an ATM card, in order to reduce physical visits to banks. For this service, he also charges a meagre amount of money. It is another step in digitalization of the villagers.

**Table 6: Second Preference regarding the usage of mobile-phone**

S.No	Type of Phone	Male	Female
1	None	18.4%	55.3%
2	SMS	18.4%	0
3	WhatsApp	28.9%	13.2%
4	Facebook	7.9%	0
5	YouTube	7.9%	21.1%
6	Online banking	15.8%	5.3%
7	News Channels	2.6%	5.3%
	Total	100%	100%

**5.3.6 Entertainment**

Entertainment is a part and parcel of everybody’s lives, especially, the lives of young people. It has no boundaries and is present everywhere in the world. In this regard, people in this village consider movies, songs and news, games as their primary entertainment elements. As per the

table-7, men are largely engaged in entertainment than women, and men mostly with songs that are followed by movies, news, and games, respectively. For women, a foremost entertainment element is songs. Females are just a meagre proportion in this regard due to limited access to smartphones. A few women respondents stated that their partners don't allow them to be engaged with this entertainment activity for a longer period because it is a part of their security purpose.

**Table 7:** Accessing to entertainment service on mobile phone

S.No	Type of Phone	Male	Female
1	Movies	55.3%	10.5%
2	Songs	78.9%	39.5%
3	News	44.7%	13.2%
4	Games	28.9%	0

### 5.3.7 Duration of the entertainment per day:

A large proportion of both men and women allocate two hours each per day approximately to this activity. In that context, the difference is that about 60% of men allocate one to two hours a day, while such women stood at just 26.3% as per Table-8. So, it is confirmed that men largely allocate more than two hours a day. The stumbling block for uneven engagement of women in this regard is their dependency on their husbands' or male-persons' mobile phones.

**Table 8:** Duration of the entertainment per day

S.No	Type of Phone	Male	Female
1	Less than one hour	23.7%	23.7%
2	One to two hours	57.9%	26.3%
3	Two to four hours	5.3%	0
4	None	13.2%	50%
	Total	100%	100%

### 5.3.9 Mobile phone can simplify access to several online services:

A prominent fact is that mobile devices can offer several services online, which include money transfer to pay bills, listing songs, watching movies, accumulating knowledge, applying for jobs and so on. Regarding access to mobile-based online services, almost all respondents, including 89.5% of men and 94.7% of women, stated that mobile can simplify access to various online services, and they are availing such services from their homes itself.

A meagre proportion of respondents, i.e. 10.5% of men and 5.3% of women held negative perceptions towards this device usage. According to them, this online service sometimes causes unexpected expenses for its users. That further drives them into a debt trap. But, overall, they all hold a positive perception towards these mobile based online services.

## 5.4 Government Digital Programmes:

### 5.4.1 Awareness of Mee-Seva Centres:

Almost all respondents are aware of the Mee-Seva center, excepting three male-respondents (7.9%). In the case of the mee-Seva app, respondents, i.e. 13.2% of men and 7.9% of women are aware of the app but not availing its service.

People usually approach these centres to access diversified online services. As per empirical data procured from the field, they have so far obtained a few services, in connection to Aadhar cards, caste and income certificates, withdrawing money, land documents, pensions, Jandhan Accounts and gas connections. An immense proportion of respondents from both genders approached these centres to obtain just two services; - Aadhar card and caste-income certificates, which are followed by the remaining services, respectively as per Table-9. As it is a mandatory service of the government, there is an absence of gender bias in this regard.

**Table 9:** Purpose of visiting Mee-Seva

S.No	Type of Phone	Male	Female
1	Aadhar	44.7%	50%
2	Certificates (caste and Income)	39.5%	23.7%
3	Withdraw Money	10.5%	21.1%
4	Land documents	2.6%	2.6%
5	Pension	0	2.6%
6	Jan Dhan's Account	7.9%	7.9%
7	Gas Connection	2.6%	0

### 5.4.2 Biometric Service:

Nowadays, biometric systems have become a mandatory digital method for everybody to follow if they want to access certain services, viz., SIM card, gas connection, subsidised rice from PDS shops, bank accounts, and so on. They all agreed that they so far availed the service at least once, mostly at PDS shops. On the contrary, a small proportion of women (5.3%) have no such an experience yet. In this context also, there is absence of gender inequality as it is a mandatory service.

## 6. Discussion

Gender bias appears in one or another form in society and is currently visible even in technology usage, which is basically a neutral aspect. The study noticed three prominent elements dominating over access to digital services through mobile phones, viz., economy, education and gender. Males are comparatively a dominant group in these elements in terms of being largely engaged in non-agricultural activities, having acquired a higher level of college education and holding a higher social position in society. These elements determine ownership over smartphones and access to various online services through mobile phone.

## 7. Conclusion

Gender bias is a common phenomenon in every society due to inherent patriarchal norms, but shocking fact is that it has penetrated every fields of society, even in the digital world, which is a gender neutral element. This non-material phenomenon determines materialized aspects. So, there is a need to dwindle or wipe out inequality, which has roots in non-material phenomena if society desires for equality among people, especially gender equality regarding to ownership of the devices and access to digital services.

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