

# Role of ICT in Technologically Empowering Women in Unorganized Sector: A Study on Women Belonging to Raipur City

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**Abstract-** Empowerment in literal sense is gaining control over one's life and claiming rights as well as taking control over decisions regarding self and surrounding. Technological empowerment refers to having access to the technological resources, gaining full control over its usage and share in the perceived benefits. Information and Communication Technology (ICT) as defined by UNESCO is any form of technology that is used to transmit, process, store, create, display, share or exchange information by electronic means. For defining limits in this study, mobile phones as form of technology has been selected as ICT tool to study its role on empowering women in unorganized sector.

## CONCEPT

In an attempt to improve the living standards or quality of life of people across globe, the manifest agenda of the modern world is to equip people with enhanced innovative technologies that enables human beings to attain greater capacity to make this world a place for every individual. Information and Communication Technology commonly known as ICT is one of the key components of modern advanced technology. As defined, "Information and Communication Technologies [ICTs] are technological apparatus and resources to create, circulate, store, bring value-addition and manage information" (Arrawatia and Meel 2012). Arrawatia and Meel mentions that ICT consist of a variety of components that are part of every individual's life in modern world that includes "telecommunications, television and radio broadcasting, computer hardware, software and services and electronic media etc." (Arrawatia and Meel 2012, 99). It is evident from the booming cities that technological advancements with simplified processes assisted with powerful ICT tools have helped in "the formation of new sorts of economic activity, employment openings, improvements in health-care delivery and other services, and the augmentation of networking, participation and advocacy within society" (Arrawatia and Meel 2012, 99). In their article on relation between ICT tool and women empowerment, Arrawatia and Meel have mentioned the existence of three different sorts of women empowerment. According to them, women empowerment is manifested in the political, social and economic spheres of everyday life. They

## INTRODUCTION

This study majorly focus on developing an understanding on trends in usage of mobile phones among women from unorganized sector and charting out ways in which the identified ICT tool has influenced their daily functioning. The study also seeks to understand the effectiveness of the ICT tool in their sector of employment. It proposes to take into account the bottlenecks associated with the current usage trend.

Broader framework of the study includes pragmatic paradigm with a descriptive research design having mixed method approach. Data collection to be carried out through interview schedule from the identified respondents selected on purposive sampling basis.

The outcomes of the study will present a comprehensive picture about role of ICT in technologically empowering women and exploration of bottlenecks will bring to the fore the issues to be addressed for promotion of ICT as tool for social and economic development.

conclude with the remark that adequate resources need to be allocated in order to maximize the accessibility of ICT tools to the women with a hope to develop and nurture “women entrepreneurs” across India.

It is important in the backdrop of greater goal of improvement in quality of life of women that is planned to be achieved through penetrating the usage of ICT tools to the remotest possible, we must understand the concept of empowerment. “Empowerment refers to the ability of people to control their own destinies in relation to other people in society” (Mason 2005). In absence of any universal definition, definition of women empowerment has been postulated by various academician, practitioners or institutions in many dimensions. Empowerment is simply known as “empowerment is the process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes.” (World Bank 2016).

Considering mobile phones as primary ICT tool, a survey conducted in Bolivia, Egypt, India and Kenya in collaboration with Cherie Blair Foundation for Women (CBFW) and GSM Development Fund; found that 9 in 10 women feel safer because they own mobile phones as mentioned in its executive summary that “from India to Senegal to Kosovo, women are using the power of mobile phones to unlock economic opportunities” (GSM Development Fund 2013). It highlights the significance of mobile phone with relation to safety, security and economic opportunity that women perceive themselves on owning it. A study about impact of mobile phones on the status of women in India by Dayoung Lee asserts women status based on four proxies of the same as: domestic violence, autonomy, son & total children preferences and economic independence. The study found that “mobile phones significantly decrease tolerance for wife beating and husband’s control issues and increase women’s autonomy in mobility and economic independence; and no significant effects on women’s son preferences and total number of desired children or on measures of autonomy in other key decisions” (Lee and Jayachandran 2009, 18). She asserted in her conclusion that “Rapid expansion of mobile phones in the developing world has far reaching

socioeconomic consequences” (Lee and Jayachandran 2009, 27).

### RESEARCH OBJECTIVES

The specific objectives of this study are as following:

1. To understand the demographic profile of women working in unorganized sectors in Raipur city.
2. To understand the usage pattern of ICT tool (i.e. mobile phone) and bottlenecks present influencing empowerment of women.
3. To suggest and recommend measures to improve the use of ICT for women working in unorganized sector.

### RESEARCH METHODOLOGY

This study is based on pragmatic paradigm to understand the usage pattern, trends and ways mobile phone technology as an ICT tool has in the lives of women working in various unorganised sectors. The descriptive research design has been used in this study; aiming at comprehending and highlighting the recent trends related to usage of ICT tool (i.e. Mobile Phones) by the women working in unorganized sector and its prevalence on their day to day functioning.

#### Universe of the Study

The study has been carried out in the Raipur city of Chhattisgarh; every working women in the unorganized sector composed the universe of the study who has been residing in Raipur District of Chhattisgarh for more than 3 years.

#### Sampling:

Purposive sampling technique was used for the selection of 80 respondents. Following inclusion criterion was followed for the selection of the sample:

- a. between age group of 15-50 years
- b. working in the unorganized sector
- c. resident of Raigarh, Chhattisgarh for more than three years

#### Tools of Data Collection

Data from the respondents have been collected through semi-structured interview schedule. The interview schedule had combination of close as well as open ended questions. The Interview Schedule

consists of mentioned broad areas on which data from the respondents were collected: Personal profile, Socio-Demographic background,

Perceptions regarding ICT, Prevalence and use of Technology, problems regarding ICT usage.

FINDINGS OF THE STUDY

1.Age Group of the Respondents

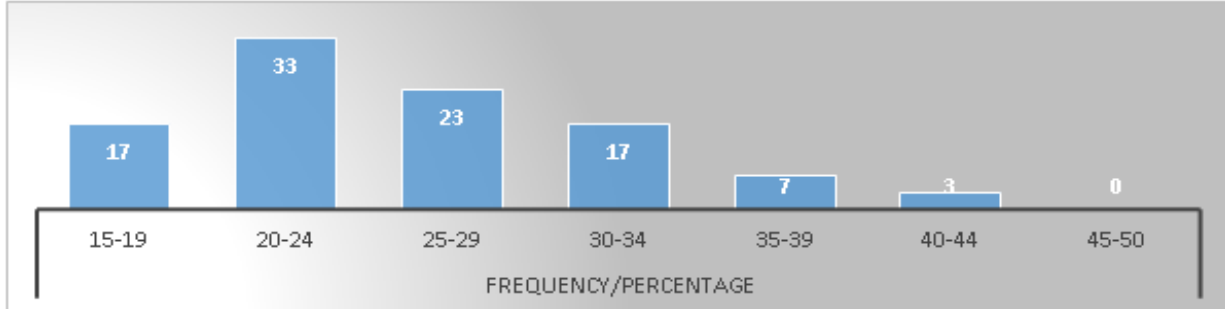


Fig-1

The sample taken for this study shows that 17% of the respondents belonged to the category of 15-19 age group, 33% belonged to 20-24 age group, 23% belonged to 25-29 age group, 17% belonged to age

group of 30-34, 7% belonged to 35-39 age group and only 3% belonged to 40-44 age group whereas no women above age group of 40-44 were found in the identified sample.

2.Marital Status of the Respondents

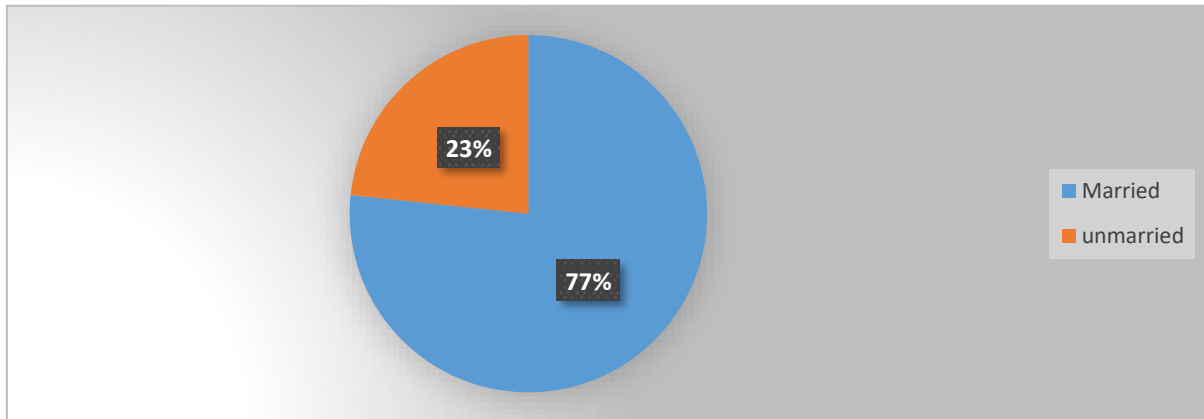


Fig. 2.

The demographic profile of the sample shows that out of 80 sample selected for the study, 77% women were married and 23 % of them were unmarried.

3.Educational Qualification of the Respondents

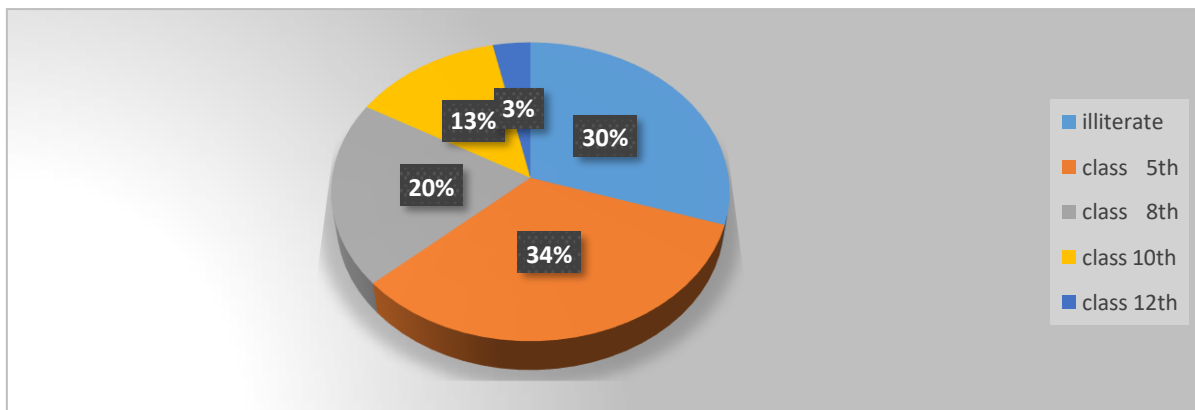


Fig. 3.

As far as educational qualification of the respondents is concerned, a majority of them are class V passed which constitutes 34% of the total sample, 30% of them were illiterate and 20% were class VII passed, whereas 13% of them were class X passed, while only 3% of them have studied up to class XII.

4. Employment Type of the Respondents

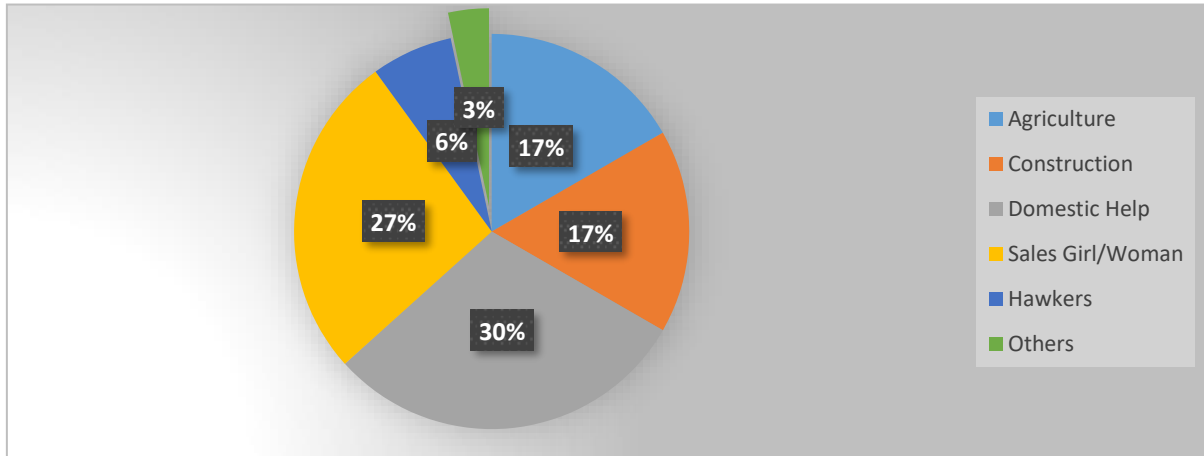


Fig. 4.

The collected sample had respondents with a variety of employment engagements; mainly in the unorganized sector as selected on the basis of the pre-determined inclusion criterion. The sample consisted of 30% women/girls engaged in domestic help, 27% as sales girls/women, 17% were engaged in each agriculture and construction sector; merely 6% were engaged as hawkers and 3% as helpers in other unorganized sectors.

5. Monthly Income of the Respondents

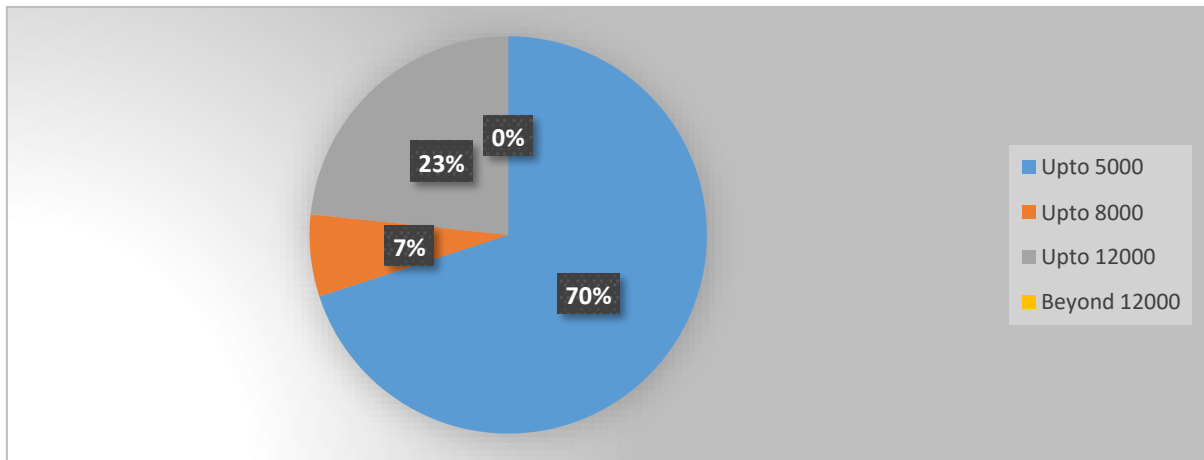


Fig. 5.

The data on the monthly income of the respondents revealed that women selected for this study mainly belonged to low income groups with not a single respondent earning more than twelve thousand rupees a month while working in the unorganized sector. A majority of 70% of the women earn up to Rs. 5,000 per month, 7 % of them earn up to Rs. 8,000 monthly. From the total respondents 23% of them were earning up to Rs. 12,000 a month.

Person Bought Mobile Phones for the Respondents

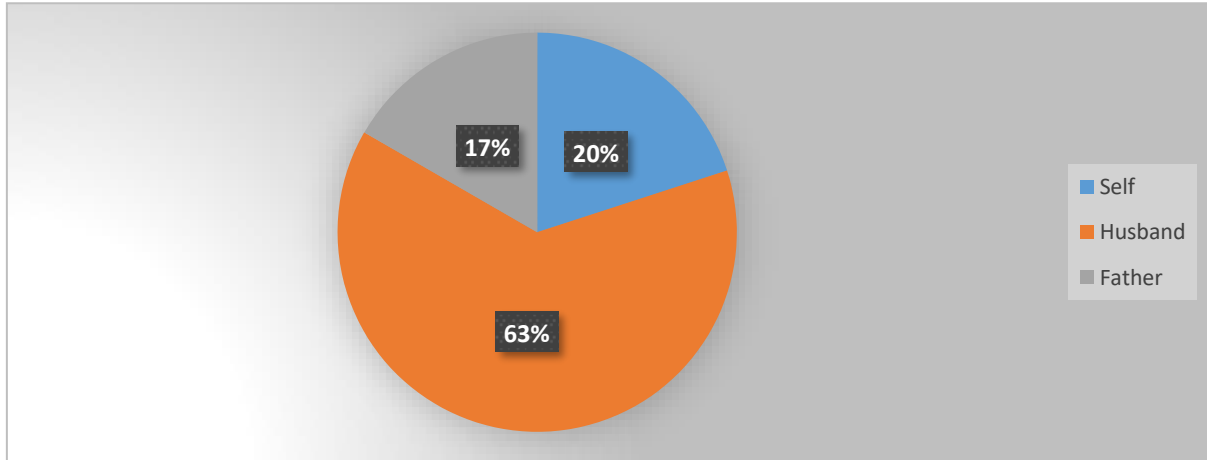


Fig. 6.

It was interesting to notice that 20% of the women had herself managed to buy mobile phones on their own. That means they were independently taking their decisions and arranging finance to purchase mobile phone of their choice. Of the total 80 respondents, a large section of it were given mobile phones either by their husband or father which constitutes 63% and 17% respectively.

6.Language Used in the Mobile Phone

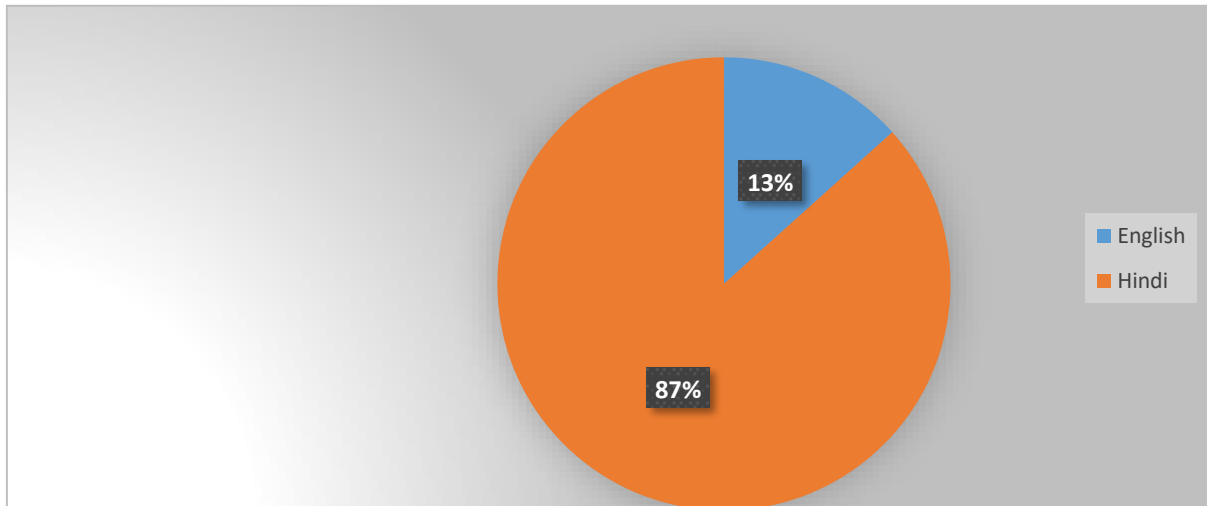


Fig. 7.

The data on language selected in the mobile phones showed that a majority of the respondents had put Hindi as the interface language in the mobile phones while only 13% of them had their mobile phone's language set to English. It is necessary to keep in mind that most of the applications in the smart phones cannot be viewed in a preferred language other than English.

### 7. Average Daily Hours Spent on Mobile Phones

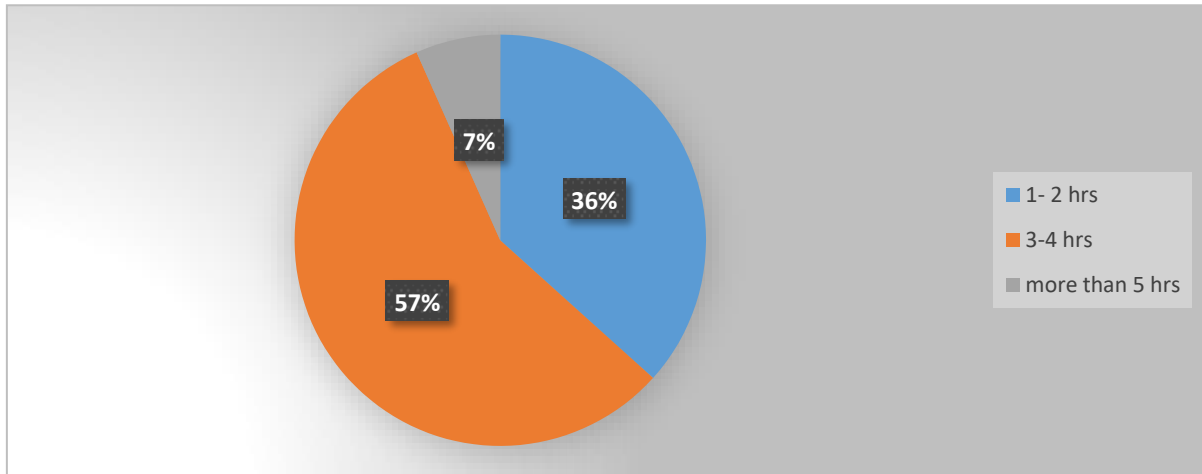


Fig. 8.

The data related to usage pattern revealed that on an average 36% of the total sample spends around 1-2 hours daily on mobile phones for different communication, information, and entertainment related tasks could be intermittently, while 57% of them spends around 3-4 hours daily on mobile phone for various purposes. Around 7% of the total sample had reported using mobile phones for more than 5 hours for various work related or personal reasons.

### 8. Average Monthly Expenditure on Mobile Phones

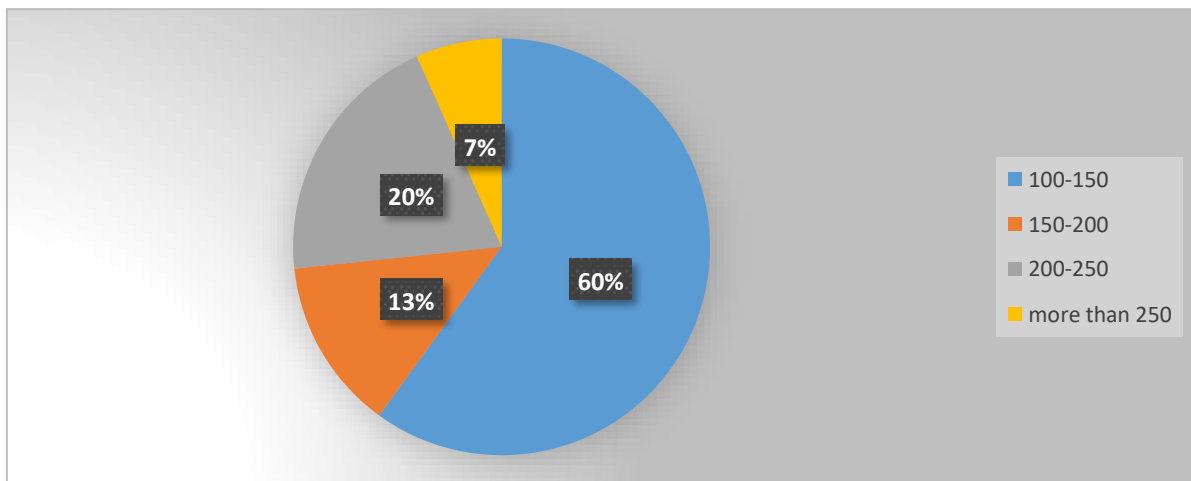


Fig. 9.

The data regarding monthly expenditure to run the mobile phones and associated needs shows that around 60% of the total sample spend between Rs. 100 to 150, 13% of them make expenditure between Rs. 150 to 200, while 20% of them spend between Rs. 200 to 250 and only 7% make monthly expenditure more than Rs. 250 as per their usage of the mobile phone for various purposes.

9. Self-Perceived Benefits of the Having Mobile Phones

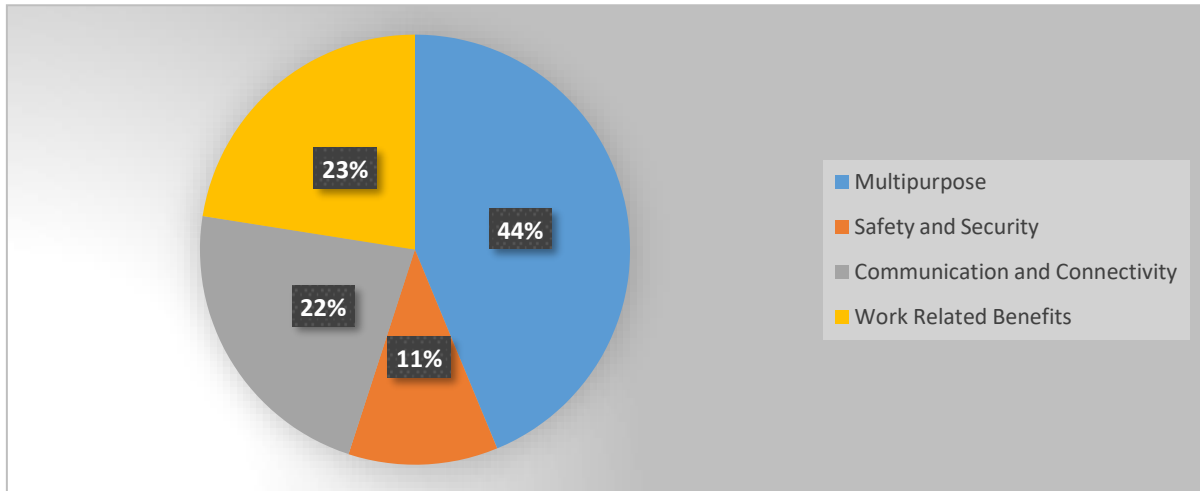


Fig. 10.

The women reported various benefits of owning the mobile phones. 23% of them reported that mobile phones assist a lot in their work they are engaged in, 22% find it relevant to establish communication and connectivity with near and dear ones, 11% believes that having mobile phones keep one safe and secure as it help in reaching out to the most needed in hours of crisis. 44% of the total respondents believed that mobile phones offer a range of benefits which compels them to own it on priority basis.

10. Self-Perceived Contributions of Mobile Phones in Daily Lives

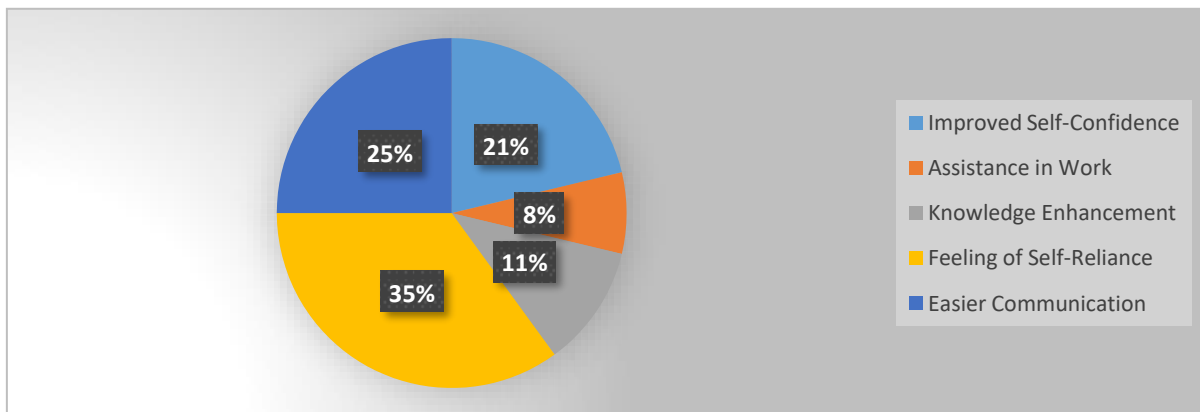


Fig. 11.

It was one of the most important aspects of the study to find out what women feel about owning mobile phones. According to the data, majority of the women feel that owning mobile phones develop the sense of self-reliance which constitutes around 35% of the total sample, 25% of them feel that having mobile phones has made communication lot easier than earlier, 21% believe that ownership of mobile phones bring self-confidence as they get to operate it on their own and learn every new thing that comes with its functioning. Meanwhile, 11% of the respondents were of the opinion that mobile phones enhances their knowledge regarding a variety of issues and affairs and 8% of them have made mobile phones integral part of their lives as it assist them in their work as well.

11.Ability to Use Video-Calling Facility in the Owned Mobile

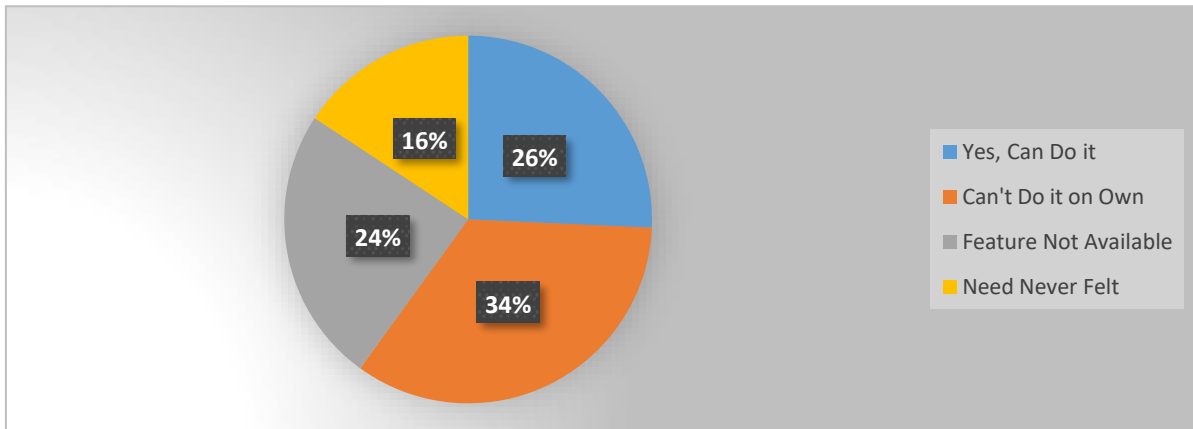


Fig. 12.

Of the total respondents, 26% of them have the ability to make video calls from the phone, while 34% are dependent on others place a video-call from their phones. 24% reported that either they don't have the video-calling feature in their phones or they don't have internet connection or mobile data in it to be aware of its process. 16% reported that they hardly came across any situation in life to place a video-call, therefore, they don't know how it is done.

12.Assistance in Learning the Functions/Operations of Mobile Phone

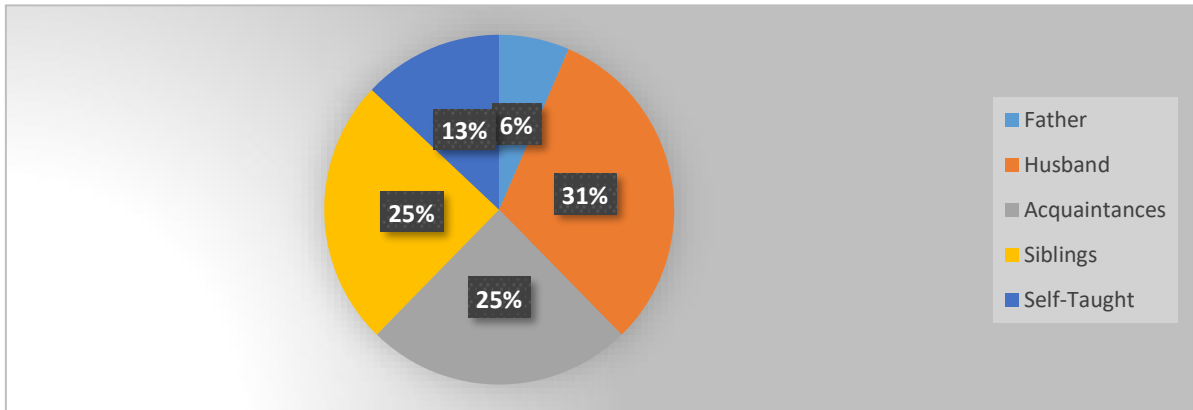


Fig. 13.

In an attempt to know, who the respondents rely on to learn the functions of mobile phones; data drawn from sample of 80 women working in unorganized sector shows that 31% women/girls learn the key functions of mobile phone from their husband. Each 25% respondents believe that acquisition of basic functioning requirements are assisted by their siblings or acquaintances. While 6% of them reported that they seek their father's help regarding the functioning of the mobile. And 13% of the respondents were of the view that they have self-taught the ability to perform various tasks on their owned mobile phones.

13.Barriers in Usage of the Mobile Phone or Acquiring Skills related to its Functioning



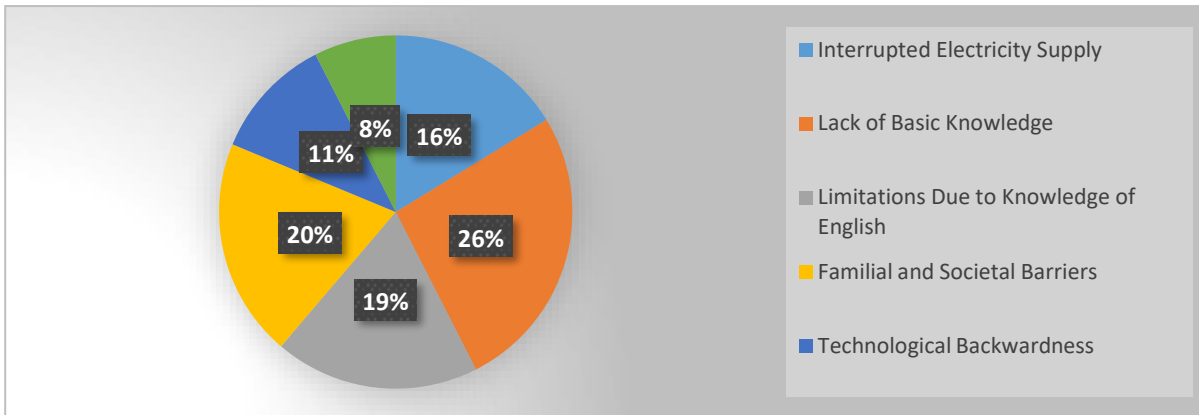


Fig. 14.

On inquiring about the barriers faced by them in daily lives that stops them from becoming technologically empowered, the women reported the above mentioned factors for the same. It presented mixed response with a variety of views regarding the hindrances that act as bottlenecks in the way of making women technologically empowered and flowing with the pace of the modern and progressing world. 26% of the women believe that lack of basic knowledge or may be their low educational level act as major hindrance in the way of accepting the technological advancements of the modern world. 20% believe that social and familial sanctions on women restrict their freedom which is manifested in many ways. Various social impositions bar them from freely engaging in various daily activities. Mobile phones too fall in that category which are seen as uncommon for women in today’s world.

19% from the respondents feel that in order to understand the functioning and operation of mobile phones or any new technology, one must be equipped with the knowledge of English language as every device has it as the interface language. The lack of English language hinders in the way of engaging fully in the fast developing and advancing world. Interrupted power supply is another major hindrance in places where it affects the normal functioning of the device that completely runs on electricity. 16% of the respondents believe that disruptions in power supply or untimely power cuts make it difficult for one to keep arranging for running of such devices especially mobile phones.

From the sample, 11% were of the opinion that

states/districts with technological backwardness have less inclination towards all gadgets or technologies. They prefer to remain aloof of any new technology, especially the older generation. Simultaneously, 8% women feel that they themselves lack motivation to acquire any new skill.

Analysis

It is visible from the collected data on the age categories of the respondents that most of the working women belonged to the age categories of 20-24 and 25-29; it composes more than 50% of the total sample identified on the basis of purposive sampling. Girls between age group of 15-19 years were also found working in unorganized sector but hardly any women beyond age 45 years was found working anywhere. The sample consisted a variety in terms of age group. Almost two-third of the sample contained married women. Low educational attainment was common among majority of them consisting a large chunk of illiterate women who lack to secure a job in organized sector due to low or almost no educational attainment. A very small percentage of the sample had their educational attainment up to secondary and senior secondary level.

The sample for this study consisted of people belonging to a variety of unorganised sectors that provided them with the employment opportunity. A large share of the workforce was found to be engaged as domestic help. Unorganized sector employment involves women working in retail sector (small scale) and as labourers in construction which is common in growing/developing cities. Also, the sample

consisted women employed in agriculture sector as well as engaged as hawkers selling different commodities through stalls or small shops/establishments. In terms of earning, it was seen that almost two-third of the women working in unorganized sector earns less than Rs. 5,000/- a month. Some also manage to earn a monthly income up to Rs. 12,000/- but hardly any of them from the sample had monthly earning beyond that. It is evident from the data that women largely depend on their acquaintances to take decisions involving expenditure for commodities, that too; for things which have equal importance in lives of both men and women. As seen, in this case, that more than two-third of them were given mobile phones by their father or husband and only 20% of them exercise their control over their decisions on matter relating to expense to be made on self or on commodities for themselves. It is clear that acquaintances play key role in permitting/restricting women, the access to Information and Communication Technology (ICT) tools.

Knowledge of English language has a greater importance in this era of fast-paced technological advancements where series of innovations are profoundly influenced by the most common language across globe i.e. English language to be used as interface for global market and greater accessibility. Women working in unorganized sector having low educational attainment lacks the knowledge of English language, thus, restricting their accessibility to tools like mobile phones, tablets, iPads etc. This study reflects the similar phenomenon as majority of them with low or no educational attainment; prefer to change its default language from English to Hindi for ease of access. A very small percentage of women have retained English language as interface in their mobile phones otherwise rest of them composing around 87% has changed it to Hindi.

It is important for this study to know the frequency at which an ICT tool is required and used on a daily basis by women working in the unorganized sector in order to understand the significance it has in their lives either for professional or personal reasons. It has reflected from the data that more than 50% of the women reported using mobile phones on an average of 3-4

hours on daily basis. For different purposes, be it of personal or professional nature; mobile phones have become an integral part of lives of every individual. Also, in certain circumstances; the profession itself be it organized or unorganized demands greater usage of mobile phone on daily basis; it appeared from the data that showed that a small percentage of people uses mobile phones for more than 5 hours on daily basis. Based on its requirement, a fixed monthly expenditure on mobile becomes necessity for proper functioning and active use of it for various purposes. More than 50% of the women reported making an expenditure between Rs. 100/- to Rs. 150/- to keep mobile phones functional. One-third of the sample has reported that expenditure between Rs. 150/- to Rs. 250/- happens on monthly basis depending on the frequency of its requirement relating to make voice calls and internet pack recharges. A small fraction also exist that make monthly expenditure on mobile phones for more than Rs. 250/- to meet various purposes relating to it.

A mixed response noticed on inquiring about the self-perceived benefits of owning mobile phones from women working in unorganized sector. A lot of them came up with different self-realized worth of owning mobile phones in their lives. The broad categories of benefits or purposes that mobile phones serve are safety & security ensured from having mobile phones that allow their near and dear ones to be available in hours of crisis, communication & connectivity with the loved ones and work related benefits by making use of mobile phones to meet the professional needs. Almost half of the sample reported multiple benefits of owning the mobile phones.

On being asked about what specific contribution mobile phones have made in their personal lives, women reported a variety of self-perceived contributions of the same. Knowledge enhancement, assistance in work, feeling of self-reliance, improved self-confidence and easier communication are amalgams of the self-perceived contribution that mobile phones have made in lives of women working in unorganized sector.

In order to understand their operational capabilities and functionality with respect to mobile phones, one of the key features (i.e. video calling) of this

era was identified to know their level of competence in it. It was found that ability to place a video call is present among 26% of the women who were part of the sample for this study. More than two-third were not acquainted with this competence owing different reasons like; not finding any circumstances in which video call was ever required by them, not owning a mobile phone that supports this feature or absence of internet package in it as well as not well-versed with the process involved in it. Thus, it shows that there exist various reasons that restrict their operational capabilities despite owning a mobile phone completely. In this backdrop, women despite owning their own mobile phones look towards different people around them to seek assistance in this regard. Their husband, siblings and other acquaintances are the most proximate people who extend support to educate about different functioning of the mobile phones. But the data also shows that a small percentage has self-taught the basic functioning of the mobile phones and hardly depend on anybody.

Since, this study also has focus on understanding the hindrances or bottlenecks present in the way of women towards being technologically equipped and digitally empower; it has been found there are certain personal, infrastructural, educational, social, financial and cultural barriers that act as ones. Interrupted power supply, lack of knowledge of English, technological backwardness, no or low level educational attainment, lack of personal motivation to acquire new skill, societal and cultural barriers are majorly reported reasons behind restricting women to engage themselves in instilling new or brushing skills related to use of ICT tools on more frequent basis. Mobile phones being the most simple and accessible ICT tool that has reached the hands of millions has the potential to digitally empower women that will ultimately lead to greater potential of adding more tools in future. Only if, identified bottlenecks are addressed properly; digital empowerment movement can achieve its goal to enable every women have access and ability to productively utilize mobile phone as an important ICT tool of the modern world.

## SUGGESTIONS

On the basis of aforementioned findings, this study suggests and recommends following measures that need to be taken to achieve the goal of digital empowerment in context of women population of the country.

- Organizations working for digital empowerment must scale their operation to reach almost every individual woman to teach importance of ICT in everyday lives.
- Sessions must be organized in collaboration with local bodies present in the cities to ensure that people in general understand importance and near future that rely heavily on ICT.
- Digital empowerment of women is possible only when infrastructural facilities associated with it are improved by government intervention. Central and State Government must focus on development keeping in mind the technological advancements of the modern world and ensure all facilities which are its functional pre-requisites available to every citizen without any discrimination.
- Higher educational attainment can ensure greater ease in accessibility and competence to operate with minimal or almost no assistance basis, therefore, overall education must be promoted among children, youth and adult.
- There must be proliferation of organizations who keep digital empowerment as their prime mission.
- State and District level authorities must plan and execute training sessions on use of ICTs to promote greater inclusion of such tools in their lives.
- Institutions must move towards completely paperless process and become more digital alongside educating people to have hassle-free access to a wide range of services.
- ICT tool developers or programmers should also focus on becoming more user-friendly by simplifying their interface.
- Schools must ensure well-planned sessions on use of ICT and students must have access to common facilities for hands-on-experience.

- Local institutions must be encouraged to provide low-priced short-term training on different ICT tools.

### CONCLUSION

It obvious that mobile phones have become the integral part of lives of every individual. Women working in the unorganized sector seem to have intermediate level of requirement for any specific ICT tool, but mobile phones being most basic of it; need to have greater accessibility and elementary operational competence to make the most of it in their daily lives. It is evident from this sample based study that women largely depend on others, mostly acquaintances; in matters relating decision of owning an ICT tool, assistance in operating it, and lack educational and language capabilities to fully own and operate it without any dependence on others. No doubt, that level of self-confidence and self-reliance increases with the ownership of mobile phones. Certain identified social, cultural, personal, educational, and infrastructural barriers that hinder the availability, affordability and accessibility of women to ICT tools must be addressed with proper mechanism keeping in mind the greater goal of women empowerment.

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