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USE OF MOBILE TECHNOLOGY AND MEDIA AMONG WOMEN IN UTTAR PRADESH'S BACKWARD DISTRICTS

Abstract:

Hypothesis: Uttar Pradesh, the most populous and considered backward state of India, is witnessing increased mobile usage and positive trends towards mobile and social media usage amongst women and for women's health and safety in the districts covered by the study.

Abstract: With every 6th Indian hailing from the state of Uttar Pradesh, in the vibrant scenario of Digital India it becomes important to assess the penetration and acceptance of mobile usage among women in the State. The study goes on to assert that State and private run mobile helplines are transforming lives of women across India's most populous and underdeveloped state of Uttar Pradesh known for its high maternal mortality rate, low levels of literacy and an inherent gender bias against women. The paper is based on the doctoral research of the author across four most backward districts of Central Uttar Pradesh. These include the districts of Barabanki, Rae Bareilly, Gonda and Sitapur, all extremely backward areas of Uttar Pradesh, the state under review. The study covers over 500 respondents and tries to ascertain the knowledge and use of mobile helplines created for women's health and safety in the state.

Research Methodology: Primary quantitative data from the research is used to derive conclusions in the study.

Keywords:

Digital Media, Mobile usage, Women, Uttar Pradesh Backward Districts

1. INTRODUCTION

The exponential growth of digital communication has impacted almost every section of society. The question thus arises whether the use of communication can contribute to social change and transformation?

In the present scenario, the foundations of society are constantly questioned and challenged. In response, a series of actions, which to date have had a fairly minor implementation in the developed world, are now emerging with a strong component of creativity and innovation. Communication is one such area which, like other modern developments, possesses the potential to contribute to locally-owned reforms and sustainable change and development at various levels in society.

Strategies based on bottom-up information flows the benefits and effects of which flow upwards are potentially necessary in developing societies as they are based on the extensive knowledge of all variables that may affect even the most minor elements of the system.

The growing emphasis on participatory and horizontal communication — such as stakeholder dialogue and bottom-up or consultation processes — have created spaces in which people can provide meaning to and claim their ownership of social change. Such spaces allow people to not only be heard, but also to reshape limits and the social and/or cultural norms that contribute to impacting power relations in a society. This then results in contributing to empowerment and social change.

Situations exemplifying this are easily evident all over the world in different contexts. The application of similar methodologies in very different scenarios and backgrounds can be seen all over the world in similar or different contexts. The common point is an extensive use of internet communication networks that enhance the implication and interaction that takes place among the members who end up constituting the projects be they developmental, infrastructural or societal. This participative methodology helps to define and propose consensus-based approaches, where communication becomes the key to involve people and impact the urban/ rural context where it is implemented.

Communication develops into a mechanism of both localization and internationalization, making access to communication indiscriminately free and reachable for everyone. Open communication is understood almost as a guarantee of equity and fairness, and a path the progress.¹

2. LITERATURE REVIEW

“Women’s progress is human progress”

The Johns Hopkins University School of Advanced International Studies (SAIS) in 2014 held its Conference on Global Women in Leadership, which examined ways in which technology was providing new opportunities for women. The conference, entitled *“Technology in Action: Changing the Way Women Live and Work,”* also focused on how women were taking advantage of the fact that technology is not only improving service delivery, but playing a major part in advancing their empowerment.

In her keynote address at the conference, Kathy Calvin, CEO and president of the United Nations Foundation, stressed that, while the modern world was shrinking, opportunities were getting bigger. She also pointed out that that technology was a specific tool that provided opportunities to women. Technology, she averred, had paved the way for greater democratization and revolutionized services, from banking and finance to education and health. Ms Calvin also opined that the world was witnessing a power shift leading to ordinary citizens now proposing solutions: Bottom-up change was happening today more than ever. Technology, she felt, was the solution that would continue to empower girls and women and, for that reason, was vital for the future. Women’s progress was in fact human progress, Calvin emphasized.

Adding to this opinion, Dr. E. William Colglazier, science and technology adviser to the U.S. Secretary of State, stated that individual empowerment would accelerate owing to poverty reduction, global middle class growth, greater educational attainment,

widespread use of new communications and manufacturing technologies, and health care advances.

While transformative technology was not limited to information and communication technologies (ICTs)—it also included developments including new mobile technologies. Mobile phones and tools he felt had become popular worldwide, as in Africa. For example, M-Pesa, a mobile platform that had revolutionized access to banking in rural areas, was often quoted as a success story. Panelists at the event also cited initiatives like MAMA (which provided important information through text and voice messages to pregnant women), and M-Farm (which informed rural farmers of market prices for their crops, alerts them of good prices for inputs, and connects them to buyers), as important innovations for women.

These mobile technologies, he averred, could also offer women a stronger voice and more control, particularly in business. A report funded by ExxonMobil and the Cherie Blair Foundation argued that mobile phones with added services were the best tools for women's empowerment and for increasing women business owners' productivity. In fact, the survey argued that women micro-entrepreneurs believed in mobile solutions to challenges: 82 percent of women entrepreneurs surveyed were willing to pay for added services through mobile phones.

Importantly, panelists at the event noted that there was still a substantial ICT gender gap in developing countries. While mobile phone penetration was very high in Africa at almost 80 percent, women in sub-Saharan Africa were on average 23 percent less likely to own a mobile phone, according to a GSMA report. The report also noted that one critical obstacle to women's access to mobile phones was affordability: Expensive ICTs were reserved for use by men, and women tend to get second-hand phones. Technology was viewed as a tool for men, so it seemed that culture and attitudes toward ownership of productive assets were still impediments to women's access to technology. ²

A FEW CASE STUDIES

a. Oxfam Pink Phones Project in Cambodia:

Oxfam's pink phones project in Cambodia has given mobile phones to women in rural communities so they can access vital farming information, such as crop prices and weather, to help improve their livelihoods.

Women in Kampong Thom province, in central Cambodia, can use the pink phones provided by Oxfam to get information that helps them plan when to harvest, and this goes a long way towards protecting livelihoods and securing them a better future. The phones also enable the women to buy bigger plots of land, sell more vegetables, save money,



and make improvements to their homes. Before the project, women weren't in a level position with the men in relation to selling their crops and seeking better prices.³

**b. GSMA mWomen Programme
Global Development Alliance**

A new three-year partnership between U.S. Agency for International Development (USAID), the Australian Agency for International Development (AusAID), the GSMA and Visa Inc. is working to help increase mobile phone ownership among women in developing countries. Called the “*GSMA mWomen Programme Global Development Alliance*”, through which the partnership will operate, will enable women to access information, networks and services (e.g. banking, education) to improve their lives.

U.S. Secretary of State Hillary Rodham Clinton, who made the partnership announcement along with Australian Foreign Minister Kevin Rudd, has said that “investing in women’s progress in the most direct and effective way to invest in progress economically and socially globally.”⁴

c. Impact Pathways to erase Gender Gap in Communication

“Despite the rapid growth in mobile telephony in low and middle-income countries in recent years, women are 21% less likely than men to own a mobile phone. This has given rise to a mobile phone ‘gender gap’, where there are 300 million fewer female mobile subscribers than male subscribers in low- to middle income countries. As a result, women are less likely to reap the benefits of using mobile phones, such as gain economic opportunities and to empower themselves at the household level, community level and beyond.” (GSMA)

There are many barriers faced by women in developing countries face in owning and effectively using mobile phones, which not only affects them in their daily lives but also affect the market. GSMA’s estimates say that market opportunities associated with closing the mobile phone gender gap are substantial: Additional revenues for MNOs are estimated to cross over \$13 billion!

Thus GSMA has developed an impact pathway as a tool to help conceptualize a project and analyze the assumptions behind it, as a logical framework. ⁵

d. Kutch Speaks

Indian women's NGO Kutch Mahila Vikas Sangathan (KMVS) is using mobile technology in rural India to increase grassroots women's IT literacy and skills to generate information on issues of concern in their communities, and to strengthen local elected women's capacities as decision-makers and evoke gender responsiveness in their panchayats. This initiative is part of the KMVS programme ‘Making women's voices and votes count – An ICT-based intervention in India’, supported by the UN Women Fund for Gender Equality, which is enabling the representation of excluded women's concerns in local governance processes.

Under the initiative a representative of KMVS and one of the grassroots women's associates from the programme train the audience to become ‘content creators’ based on three or four real-life scenarios. The audience then generates, shares and analyses the ‘infocapsules’ using voice messages and a simulated platform. Finally, the two representatives from the programme show how elected women can use that information,

respond to messages, interact with their peers about local issues and problems and subsequently use the information to make effective their political roles.

This experience showcased the pedagogic possibilities of community media and interactive voice-response systems-based informational messages for building the capacities of elected women and women's collectives at the grassroots level, to effectively engender the local governance agenda.⁶

e. Panic Buttons on Cells for Safety

According to the Global Gender Gap Report 2015 of the World Economic Forum, India was ranked 108 out of 145 countries, the government said, adding it was an improvement from the 114th position in 2014. Union Minister, Mrs. Maneka Gandhi has said the government had set up 10 women crisis centres and planned to increase them to 660 in all districts. The centres provide free medical, legal and police help to women and their activities are monitored daily, she said. Soon, all cell phones would be equipped with a panic button to assist women in distress; she said adding that both existing and new cell phones will be covered under this plan. Elaborating on measures taken by the government on women's safety, the minister for women and child development told the Lower House of the Indian Parliament, "Every cell phone will have an in-built panic button. Now, all new cell phones will be made with panic buttons. But in case of all old cell phones, you can go to the person who owns the company or the dealer and they will adjust it for you. If a woman is in trouble, she can just press the button on the cell phone and she will immediately get help." Sources said if the button was pressed for more than a few seconds, it would call a pre-determined number, fed by the user earlier. The WCD and the telecom ministries have begun working on the proposal which is likely to be completed in the next six months.

The minister was addressing concerns expressed by house members on lack of safety for women and growing crime. The government admitted that the condition of women in India was not good and asserted that a number of steps had been taken to empower them and tackle the challenges facing them, which will result in women doing "much better" in a couple of years. The minister cited measures, including having special police volunteers

in every village, women's helplines in states and panic buttons in mobiles, being taken in this regard.⁷

3. RURAL MOBILE USAGE IN INDIA

With every 6th Indian hailing from the state of Uttar Pradesh, in the vibrant scenario of Digital India it becomes important to assess the penetration and acceptance of mobile usage among women in the State. The study goes on to assert that State and private run mobile helplines are transforming lives of women across India's most populous and underdeveloped state of Uttar Pradesh known for its high maternal mortality rate, low levels of literacy and an inherent gender bias against women. The paper is based on the doctoral research of the author across four most backward districts of Central Uttar Pradesh. These include the districts of Barabanki, Rae Bareilly, Gonda and Sitapur, all extremely backward areas of Uttar Pradesh, the state under review. The study covers over 500 respondents and tries to ascertain the knowledge and use of mobile helplines created for women's health and safety in the state.

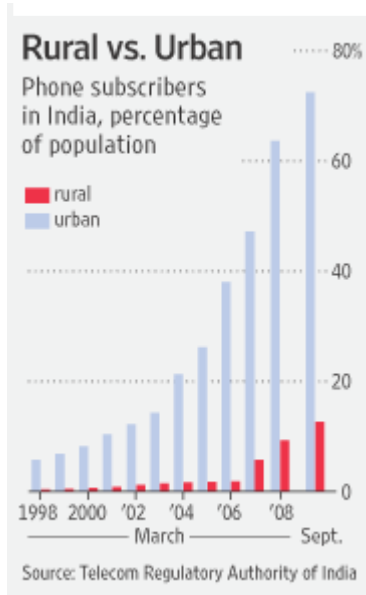
According to latest reports of the IAMAI, The number of mobile Internet users in India is expected to grow over 55 per cent to 371 million by June this year, driven by strong adoption in rural parts of the country, industry body IAMAI said. Mobile Internet user base in the country has steadily increased from 238 million in June last year to 306 million at the end of December 2015, a report by Internet and Mobile Association of India (IAMAI) - IMRB International said.⁸

Of the 306 million internet users, 219 million users are from urban part of the country. The user base saw a growth of 71 per cent year-on-year. On the other hand, the user base in rural India went up 93 per cent from December 2014 to reach 87 million at the end of December 2015. In rural India, 52 per cent said they used Internet for entertainment, 39 per cent for social network, 37 per cent communication, one per cent for online shopping and 0.4 per cent for online ticketing.⁹

As far back as 2009, there was a growing demand for cell phones from rural India, even at a time when demands in other countries was falling owing to the economic slowdown. Even amid the global economic slowdown, one Indian industry continues to boom: selling cellphones to the rural poor. Economists had slashed Indian economic growth forecasts for the year and the stock market was in the doldrums. But cellphone companies were signing millions of new subscribers a month, making India the fastest growing mobile-phone market in the world. There was no sign of a slowdown yet: new subscriptions in January 2009 reached a record 11 million.

The increased demand for cellphones was being generated mainly from rural consumers, who typically earn less than \$1,000 a year. These buyers hadn't been affected by plunging

Source: Telecom Regulatory Authority of India 2010



stock and real-estate prices or tighter bank lending since they typically don't own land and don't borrow. A large majority of them don't have access to regular landline phone, so once cellular coverage came to their towns or villages they scrambled to get their first phones.¹⁰

The penetration of claimed internet users in rural India has grown from 2.6% in 2010 to 4.6% in 2012, a CAGR of 73%. Meanwhile, the penetration of active internet users has grown from 2.13 percent in 2010 to 3.7% in 2012.¹⁰

There were 143 million social media users in India as on April 2015. The report stated that the top four metros continue to account for almost half of the social media users in urban India.

The report further stated that 61% of these users access social media on their mobile device.

Usage of social media in rural India had grown by 100% during the first quarter of 2015 with 25 million users residing in that belt, according to a report. Meanwhile urban India registered a relatively lower growth of 35% with the total number of users at 118 million as on April 2015, stated the 'Social Media in India 2014' report by the Internet and Mobile Association of India (IAMAI) and Indian Market Research Bureau (IMRB) International.¹⁰

"The fact that almost two-thirds of the users are already accessing social media through their mobile is a promising sign. With the expected increase in mobile traffic the number of users accessing social media on mobile is only bound to increase," the report added.

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4. HYPOTHESIS

Uttar Pradesh, the most populous and considered backward state of India, is witnessing increased mobile usage and positive trends towards mobile and social media usage amongst women and for women's health and safety in the districts covered by the study.

A review of literature led to the question whether the exponential growth in mobile usage is transcending the gender gap in communication or not in India's largest state of Uttar Pradesh. As the size and demographics of the state are impossible to encompass in one study, the researcher selected four most backward districts of Central Uttar Pradesh known for their poor development indices using the District Development Indices ¹¹, UNDP's Human Development Report ¹² and the Govt. of India's Planning Commission Uttar Pradesh: State Development Report (Vol I & II) ¹³

The researcher then embarked on an extensive 18 month survey (Interview Schedule) covering 500 respondents with mobile connections across the four selected most back districts of Central Uttar Pradesh namely Barabanki, Sitapur, Gonda and Rae Bareli to assess the usage patterns, awareness, gender gap in communication and examine whether there was a possibility to further propagate the awareness of social schemes and benefits of the same in areas related to Health, Education, Development, Women's Empowerment and Safety, Benefits of Government Outreach Initiatives and other such initiatives through use of social media applications.

Two villages were selected from each district and personal interviews conducted through a rigorous interview Schedule to ascertain the same. For this paper we use certain hand-picked variables from the doctoral research study of the scholar to ascertain whether there is sufficient awareness and usage of mobiles among rural women so as to empower them to reap the benefits of schemes instituted especially for women to positively impact their health and safety.

5. RESEARCH GAP, LIMITATIONS AND SCOPE

As far back as 2009 there were clear trends emerging of growing demand of mobile phones from rural areas. However no concrete data/research was available on usage patterns, preference of mobiles over traditional communication tools etc. A clear research gap was thus visible with a need to study how the most powerful communication tool in recent times was impacting rural Uttar Pradesh.

The study is limited to rural mobile users in the four most backward districts of the Central Uttar Pradesh. It does not attempt a comparative study of the before and after effects of introduction of mobiles. However if the study can effectively prove substantive usage of mobiles in these areas, it would be safe to say that the results of the study can be applied to the entire state and considered applicable for all populations across the state.

6. RESEARCH DESIGN AND METHODOLOGY

6.1: Type of Research:

Unlike basic research, a form of social science research which is designed to add to one's knowledge and understanding of a social research, applied research is the path adopted here as practical results are produced which can be put into practice for policy making, aid in prompt and effective information disseminations and assist consultative process through its applicability. This descriptive study would make use of quantitative data analysis by addressing respondents through an Interview Schedule and collect and analyze their responses.

6.2: Method of Data Collection:

Secondary data in the form of Census 2011¹⁵ and District Development Indices¹² were the two main reports used for data collection and build sampling structure. Primary data

was collected through the Interview Schedule put across to over 500 respondents in eight villages of four most backward districts of Central Uttar Pradesh.

A Structured Interview Schedule was used to ascertain responses from over 500 respondents across the four districts as a pilot study indicated the use of the same against a questionnaire for the largely rural population covered under the research. Also a need was felt to include a female interviewer to conduct interviews with women folk in rural areas as there were barriers to men communicating with women in the rural areas covered under the study. (Interview Schedule attached as Appendix A)

6.3: Research tool & Reason for its Selection:

An Interview Schedule was selected as the best tool to collect this data as a large number of the rural respondents under study were not literate with Social media being the independent variable and all other factors dependent on the use of Social Media and affected by the same serving as dependent variables to the study.

6.4: Development of Research Tool:

The research tool was constructed keeping in mind the core areas of Health, Education, Information Dissemination and Consultative Process, Rural Helplines, Women's Empowerment, Rural Employment Schemes, Agricultural Facilities, Monitoring of government and non-governmental helplines and services and ascertain acceptability of the same if traditional information dissemination was replaced by mobile technology and SMS/IVRS.

6.5: Verification and pre-testing:

Verification and pre-testing of the Interview Schedule was done on a selected sample to ascertain drawbacks and feasibility of the same. This yielded some significant results such as the need for the Interview Schedule to be in local language. It was also found that the males conducting the Interview Schedule met with many barriers in communicating with rural female population, thus it was felt advisable to include a female

during the conduct of the same in villages. Verification and pre-testing was conducted on a small sample of prospective respondents. Need was felt to use the Interview Schedule in local language considering that most of the respondents belonged to rural areas and care had to be given to include local parlance to make the same easily understandable by them.

A need was felt to include a woman in the team conducting the Interview Schedule since access to women respondents was difficult for male interviewers, talking to strange men is still a social taboo in rural hinterlands of the state. There was also a need to induct a local resident with the interviewer to make way for easy access to respondents

6.6: Sampling:

Since the research was aimed to find out acceptability and penetration of mobile usage multi-stage purposive sampling was carried out of respondents using mobiles in the said areas to derive at a reasonable sample base for the study.

Stage I: Four Most Backward Districts of Central UP (Gonda, Sitapur, Rae Bareli and Barabanki) were selected based upon the District Development Indices of Uttar Pradesh categorizing various districts of the state as developed, backward and most backward. These were selected through random sampling (Fish Bowl Method).

Stage II: Selection of one Tehsil of each District carried out through Random Sampling (Fish Bowl Method.)

Stage III: Selection of one Block in each Tehsil of each district again through Random Sampling.

Stage IV: Selection of two villages from each block one from the highest populated villages and another from the lowest populated villages through Random Sampling –Fish Bowl Method. Incorporating the findings from the pretesting stage, an Interview Schedule was worked out to gather responses from respondents across the four selected most backward districts of Central Uttar Pradesh. The 52-variable questionnaire sought to seek data regarding mobile usage acceptance and growth in areas relating to Health, Education, Micro-Finance, Rural Development etc.

Care was kept to include women in the team of surveyors who effectively overcame the barriers to communication accosted by their male counterparts while attempting to seek responses from rural women during the verification of Interview Schedule.

6.7: Coding:

Data thus collected through the 52 variable Interview Schedule was coded using IBM software Statistical Product and Service Solutions (or Statistical Package for the Social Sciences) better known as SPSS to scientifically analyze the collected data. Widely used for statistical analysis in social science, SPSS is also used by market researchers, health researchers, survey companies, government, education researchers, marketing organizations, data miners and others. The original SPSS manual (Nie, Bent & Hull, 1970) has been described as one of "sociology's most influential books" for allowing ordinary researchers to do their own statistical analysis. Instead of Open-Ended Questions, Fixed-Alternative Questions were used mostly following simple dichotomy and thus requiring basic skills and eliminating any chance of bias or misrepresentation of data.

7. DATA ANALYSIS & INTERPRETATION OF FINDINGS

The first factor that came to light was the problem of non-uniformity in usage which largely was dependant on factors like Age, Gender, Literacy/Education and Caste, which plays a great role in social and economic empowerment still in many areas of India. It was found that 42% of women in Uttar Pradesh were using mobiles the figures for males in the same category was around 54%.

Q. 1. What do you use mobiles for ?

Purpose	Males (%)	Females (%)
Calling	23	18
Calling and SMS	58	64
Calling, SMS and email	1	0

Calling, SMS , email & FB	9	7
Calling SMS email FB & Whatsapp	9	11

Source: Research Data Collection from 4 Most Backward districts of Uttar Pradesh, India by the researcher as part of doctoral research study

Interpretation of data: One can easily see that when it comes to usage, both men and women seem to be using mobiles almost equally with women rating just a tad lower than men when it comes to using mobiles for calling / SMS (in which the latter, known to be frugal in their usage—are more adept) Surprisingly women seem to lead over men where whatsapp usage is concerned. This could also be that very often they take the help of male/ literate female members of the family to assist them in using their mobiles.

Q. 2: How frequently do you use mobiles?

Usage	Males (%)	Females (%)	Total (%)
Frequently	52	58	53
Infrequently	48	42	47

Source: Research Data Collection from 4 Most Backward districts of Uttar Pradesh, India by the researcher as part of doctoral research study

Interpretation of data: Where frequency of usage was concerned, women seemed to be making headway in the same over males. Social restrictions on mobility may be a factor here tilting the scales for mobile usage in favour of the female gender. This also reflects the gender disparity that one often encounters in rural hinterlands with women being more confined with limited access to resources and means of communication and men dominating the social thus more likely to resort to mobiles to contact their near and dear ones over men who have freedom of mobility on their side.

Q. 3 How comfortable are you with the use of mobiles?

Ease of Use	Male (%)	Female (%)	Total (%)
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Very Comfortable	35	35	35
Moderate comfort	48	48	48
Uncomfortable	17	17	17

Source: Research Data Collection from 4 Most Backward districts of Uttar Pradesh, India by the researcher as part of doctoral research study

Interpretation of data: This is one of the most positive results obtained—showing no variation in the two gender’s comfort with mobile usage.

Q. 4: Do you find mobiles an affordable means of communication?

Financial Viability	Male (%)	Female (%)	Total (%)
Cheap	18.5	19.2	18.6
Affordable	55.2	40.4	52.6
Expensive	26.3	40.4	28.8

Source: Research Data Collection from 4 Most Backward districts of Uttar Pradesh, India by the researcher as part of doctoral research study

Interpretation of data: The responses were studied on three parameters—whether mobile usage was perceived as Cheap/ Affordable/ Expensive by the user. More women than men found mobiles a cheap means of communication. In the second category, asked if mobiles were an affordable medium of communication again it was 55.2 % males who said they found it a cheap means of communication, whereas over 40% of women found it a moderately affordable medium. Among the respondents, 26.3% men said they found it an expensive means of communication whereas 40.4% female respondents said mobiles were an expensive means of communication.

Q. 5: Perceptions on usefulness of mobiles?

Usefulness of Mobiles	Male (%)	Female (%)	Total (%)
Beneficial	36.4	25	34.4
Moderately Beneficial	5.0	7	5.2

Not Beneficial	0.2	0	0.2
Cannot say	56.4	64	57.8

Source: Research Data Collection from 4 Most Backward districts of Uttar Pradesh, India by the researcher as part of doctoral research study

Interpretation of data: There was a commonality of perception on the usefulness of mobiles with males scoring a 41.4% in favour and women voting 32% in favour of mobiles being a useful means of communication. The analysis was stymied by the large number of 'undecideds' (56% in men and 64 in women) who could not decide either way. Only a negligible percentage posted in the negative against mobiles and their usefulness.

Q: 6: Are you aware of the 1090 Women's Helpline?

Awareness of 1090	Males %	Females%	Total %
Yes	61	54	60
No	39	46	40

Source: Research Data Collection from 4 Most Backward districts of Uttar Pradesh, India by the researcher as part of doctoral research study

Interpretation of data: For a helpline that has been operational just a little over three years, the response in favour of 1090 was remarkable. 61% males and 54% females admitted to knowing about this helpline which is ensuring a prompt crackdown on gender offenders and eve teasers and providing victims hassle free access to justice.

Q. 7: Would you like information on government schemes through mobile SMS/ IVRS?

Mobile SMS	Males	Females	Total
Yes	94.2	88	93
No	5.8	12	07

Source: Research Data Collection from 4 Most Backward districts of Uttar Pradesh, India by the researcher as part of doctoral research study

Interpretation of data: This is again one of the most positive results obtained—with over 94% males and 88% females saying aye to being given information about government schemes for their benefit on their mobiles clocking the total to a whopping 93% aggregate.

Q. 8: Are you aware of the government free ambulance scheme on Helpline 102/108?

SMS/IVRS	Males (%)	Females (%)	Total (%)
Yes	99.8	100	99.8
No	0.2	0	0.2

Source: Research Data Collection from 4 Most Backward districts of Uttar Pradesh, India by the researcher as part of doctoral research study

Interpretation of data: Again a whopping majority of both men and women said aye to knowing about this very handy helpline operational in the state to provide free door to door access to health services for people in the state, especially those from the underprivileged sections of society. There is almost 100 % awareness of the same in both men and women

Q. 9: Are you aware of the Police Helpline 100?

Helpline 100	Males (%)	Females (%)	Total (%)
Yes	99.5	100	99.6
No	0.5	0	0.4

*Source: Research Data Collection from 4 Most Backward districts of Uttar Pradesh, India
by the researcher as part of doctoral research study*

Interpretation of data: A near 100 % response across the two genders shows that where it comes to their security, the state's public is quick to adapt to helplines that ensure their safety and wellbeing.

Q. 10: What according to you is the best communication tool?

Best Communication Tool	Males (%)	Females (%)	Total (%)
Personal Interaction	42.7	35.9	41.4
Mobile Helpline/SMS	40.0	44.9	40.8
Folk methods or PA Systems	0.5	0	0.6
Pamphlet/Wall Writing	1.2	3.5	1.6
Email/Website	15.6	15.7	15.6

*Source: Research Data Collection from 4 Most Backward districts of Uttar Pradesh, India
by the researcher as part of doctoral research study*

Interpretation of data: This was the trickiest of all the questions asked—to ascertain whether traditional preference for personal interaction is giving way to new media and its usage. Data derived clearly indicates that while Personal Interaction remains a hot favourite, other forms of communication using Mobiles Helpline/ SMS/ Emails and Websites have overtaken the same where it comes to most preferred communication tools. 44.4% men and 39.4 % (Total 43%) women voted in favour of traditional means of communication thus giving a clear majority to Modern Digital Communication tools (55.6% Men/ 50.6% Women and a total aggregate of 56.4% in favour)

8. CONCLUSION

Detailed analysis of data goes on to prove the following points:

1. Women are equally sensitized to the benefits of mobile usage and very adept at handling the same and also various applications that smartphones offer to mobile subscribers today.
2. The research study conclusively proves the hypothesis that Mobile Media Penetration has resulted in a positive Social and Behavioural change among the rural population. Calling and SMS through mobiles have replaced traditional means of communication with over 50% majority.
3. Mobile communication can serve as a catalyst for rural development and targeted intervention through an integrated approach customized to suit the need of the sector, for both women and men. There is sufficient mobile penetration across both genders, even in the most backward districts of the state, to allow for a combined outreach endeavour with maximized impact through mobile helplines. Despite low literacy, simple IVRS messages and text messages can be directly/ indirectly used for targeted intervention in rural societies.
4. There is large scale acceptance for mobile communication and Information Dissemination and Consultative Processes can be accelerated through targeted intervention through usage of select consumer databases by SMS/IVRS which can be an effective means to bridge the information and access gap.
5. Most respondents have affirmed that they are open to the idea of being directly approached through mobile messaging/ calls /IVRS /Texts as this is the most efficient, swift and assured means of communication. Even women, who do not have independent access to phones, say that they have easy, unfettered and open access to mobiles owned by male members of the house.
6. There is a huge gap in information dissemination. Traditional communication mediums pale in comparison to the prompt efficient and direct contact that can be made through mobiles and this in today's day and age, is the best means of communication. In fact there is sufficient penetration of mobiles in the state to underscore the need to draft a state policy of the effective use of mobiles as a means of communication and information dissemination and take forward the consultative dialogue between the government and the public using mobiles as a cheap and effective means of communication.

9. RECOMMENDATIONS

- i.a .There is sufficient mobile penetration even in the most backward districts of the state to allow for integrated approach through mobile phones. Simple SMS/IVRS messages can be used for targeted intervention in rural areas.
- ii.b. Most respondents have affirmed they are open to being contacted through mobile messaging/calling/IVRS as this is the swiftest, efficient and assured means of communication.
- iii.c. Apathetic attitude of government departments and their approach to information dissemination has created a huge gap between target audience and information providers. Efficient use of mobile technology can effectively bridge this gap.
- iv.d. A state policy can be envisaged to improve outreach and efficacy of government schemes using mobile phones

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