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To cite this article: Hua Wang & Arvind Singhal (2018): Audience-centered discourses in communication and social change: the 'Voicebook' of Main Kuch Bhi Kar Sakti Hoon, an entertainment-education initiative in India, Journal of Multicultural Discourses, DOI: [10.1080/17447143.2018.1481857](https://doi.org/10.1080/17447143.2018.1481857)

To link to this article: <https://doi.org/10.1080/17447143.2018.1481857>



Published online: 21 Jun 2018.



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Audience-centered discourses in communication and social change: the 'Voicebook' of *Main Kuch Bhi Kar Sakti Hoon*, an entertainment-education initiative in India

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ABSTRACT

In a world where development is unequal and dominant discourses are strident, communication strategies that both listen and speak to the needs and aspirations of the marginalized are few and far between. In this article, we investigated *Main Kuch Bhi Kar Sakti Hoon (MKBKSH)*, an entertainment-education initiative in India that strategically utilized storytelling on television, radio and digital platforms to question and challenge hegemonic patriarchal discourses. In so doing, *MKBKSH* not only garnered a staggering audience of 400 million, it pioneered the use of an interactive voice response (IVR) system to invite feedback from diverse audience members and to track their engagement with the programme in real time. Our analysis documents 1.7 million calls from over 390,000 unique phone numbers. Given the high penetration of mobile telephony in India, and its uniquely invitational nature, the IVR system enabled women, youth and the less privileged, to access curated content, answer questions and share personal opinions and actions inspired by *MKBKSH*. The IVR's simple user interface and purposive use – akin to the 'voicebook' of the have-nots – hold important implications for the design, implementation and evaluation of large-scale, real-time communication and social change interventions.

ARTICLE HISTORY

Received 10 March 2018
Accepted 24 May 2018

KEYWORDS

Entertainment-education; gender equality; interactive voice response system; communication for development and social change; ICT4D

Introduction

Welcome to Pratappur, a village in rural India, entrenched deeply in the bowels of patriarchy. Meet Ravi, a father of two young girls, who openly berates his wife Seema in front of others. Her fault – she is pregnant with yet another girl. Forced into aborting her fetus, Seema dies unceremoniously on the operating table – all because of her inability to bear a male child. Meet Meethi, a 13-something teenager – with big eyes and bigger dreams – who, against her wishes, is married forcibly to an adult man. When her husband passes away in an unfortunate accident, Meethi becomes a child widow – a pariah in her in-laws' home. Ravi, Seema and Meethi are only but a few of the fictional characters of *Main Kuch Bhi Kar Sakti Hoon (MKBKSH) (I, A Woman, Can Achieve Anything)*,

a long-running melodramatic television and radio serial in India, that challenges deep-seated, dominant patriarchal norms: self-selective abortion, preference for male child, repeated pregnancies, child marriage, domestic violence and other manifestations of gender inequality.

The quest for gender equality, while still a distant dream in India, has been at the top of the United Nations' Millennium Development Goals (set in 2000) and Sustainable Development Goals (articulated in 2015) – initiatives to which India is a signatory. The Indian challenge is mammoth, and large-scale media interventions such as *MKBKSH* – with an estimated audience of 400 million, a third of the nation's population – are part of a national effort to address, question and tackle the dominant discourses of patriarchy (Das 2017). Preference for a male child has led to 63 million 'missing girls' in India (Jha et al. 2011; Tan 2011; *The Guardian* 2018). Some 2000 girls are killed every day in the womb or immediately after birth (Iyengar 2015). While India has significantly decreased the rate of child marriage from 47% in 2006 to 27% in 2016 (aided by the passage of the Prohibition of Child Marriage Act in 2006), a third of the child brides worldwide are still from India (UNICEF 2014). Further, one in three Indian women aged 15–49 has been a victim of domestic abuse (International Institute for Population Sciences 2007). To address such deeply rooted patriarchal norms, and to subvert the dominant cultural discourses of male privilege, needed are communication for development and social change interventions that include and engage all: women and men, young and old, rural and urban, poor and rich, illiterate and educated, the marginalized and mainstream (Shi-xu, 2015, 2016).

In this article, we investigate such an initiative. *MKBKSH* is an ongoing entertainment-education (EE) initiative launched in India on March 8, 2014 (International Women's Day) by the Population Foundation of India in association with Feroz Abbas Khan, a highly respected writer–producer–director of theater, film and television. *MKBKSH* leverages the power of storytelling across television, radio and digital platforms to challenge regressive social norms and promote gender equality, women's empowerment and related prosocial behaviors.

Two seasons of *MKBKSH* television and radio drama serial were broadcast over 29 months through national, regional and local networks.¹ *MKBKSH*'s protagonist is Sneha Mathur, a young doctor who returns to her home village of Pratappur leaving behind a lucrative medical practice in the city, after her younger sister Seema died while undergoing a forced abortion. *MKBKSH*'s plot is woven around Sneha's confrontation with the stark realities of rural life, and *MKBKSH*'s producers worked closely with content experts to accurately and realistically portray issues such as sex selection, child marriage, women and adolescents' health, and violence against women/girls. The on-air drama serial was strategically extended through social media and various on-the-ground campaigns, celebrity-led advocacy, and concerts and contests. Further, an interactive voice response (IVR) system was established for *MKBKSH* audience members to dial-in at no cost – from anywhere at any time, allowing them to record, in their own voice, their response to the television and radio serial. The IVR system, akin to a 'voicebook', represents a virtual goldmine: data analytics of 1.7 million audience-initiated calls; voice recordings of audience feedback to *MKBKSH*'s characters and storylines; and audience insights about their conversations, decisions and actions because of their engagement with *MKBKSH*. No communication for social change intervention,

anywhere in the world, has received such a high level of audience participation – in real time and at such a scale.

In this article, we investigate how audience members responded to *MKBKSH*'s television and radio serial across Season 1 and 2, focusing on the IVR data. To set the context – both conceptual and historical – we highlight the key attributes of *MKBKSH* as a multi-pronged EE initiative. We also describe the user-centered design elements of the IVR system, including how audience members answered questions and recorded their feedback. We then report our independent analysis of the 1.7 million IVR calls and present our major findings on the who, what, when and how aspects of the audience members' response. We conclude by discussing the value of non-textual, voice-centered platforms to capture the richness of audience response, as well as implications for how communication and social change interventions are designed, implemented and evaluated.

***MKBKSH*'s EE communication strategy**

The *MKBKSH* drama serial – both on television and radio – fall in the genre of programming that is commonly referred to as the EE communication strategy. The purpose of EE is to ethically, accurately and creatively embed health and social issues in entertainment programming to raise audience members' awareness, increase their knowledge, create favorable attitudes, shift social norms and change overt behaviors (Singhal and Rogers 1999; Sood, Riley, and Alarcon 2017; Wang and Singhal 2009). For five decades now, EE has been used in Latin America, Asia and Africa for health education and behavior change initiatives on a variety of topics, including family planning, HIV, girl's education and women's empowerment (e.g. Lacayo and Singhal 2008; Obregon and Tufte 2014; Singhal et al. 2004; Singhal and Rogers 1999; Wang and Singhal 2016). While the EE strategy has gained in use and generally engendered promising outcomes, it has been criticized by some for its 'top-down' transmission quality (Dutta 2006; Obregon and Tufte 2014). EE proponents counter by arguing that the purpose of EE is to show what is possible, i.e. to expand the solution space for audience members, and not to tell them what they should do.

In creating *MKBKSH*, its creative writer–producer–director, Feroz Abbas Khan, extensively read the EE literature, watched dozens of episodes of noted EE drama serials (e.g. *Soul City* and *Soul Buddyz* from South Africa), consulted one-on-one with expert EE researchers and global practitioners, and drew upon his own experience – spanning three decades – in theater and performing arts. Working closely with Population Foundation of India and subject matter specialists, and through insights gained on the dominant discourses of patriarchy from his own formative field visits, Khan's purpose was to create a crackerjack melodramatic serial – one that contained all kinds of plot twists and intriguing hooks while accurately and seamlessly portraying viable alternative solutions to social problems emanating from patriarchy. *MKBKSH*'s narrative thread was carried on the shoulders of the personable Sneha Mathur, who, against all odds, believes *Main Kuch Bhi Kar Sakti Hoon*, i.e. I, a woman, can achieve anything. Further, during its formative research, *MKBKSH* purposely adopted an asset-based positive deviance inquiry (Singhal 2013), one of the recent advancements in the EE design process (Singhal, Wang, and Rogers 2013), to enhance its narrative development and to model behaviors that were already working in local communities, which made the characters and plots more realistic and convincing (Anand and Batra 2016).

Furthermore, *MKBKSH* adopted a 360° approach across a wide range of communication platforms to reach massive and diverse audiences (Ramasubban 2016). *MKBKSH*'s flagship – the television drama serial – was broadcast on India's national network Doordarshan (DD-1) – 52 episodes in Season 1 from March to October 2014 and 79 episodes in Season 2 from April 2015 to January 2016. The 131 episodes of Season 1 and 2 have been subsequently re-telecast on Doordarshan in Hindi and dubbed in 11 regional languages, making *MKBKSH* an unprecedented multi-lingual intervention. An adapted version of *MKBKSH* was broadcast as a radio drama serial on 216 All India Radio stations with Season 1 running from May to November 2015 and Season 2 from February to October 2016. In 2017, *MKBKSH* was made available for free viewing on Star India's Hotstar, the premier digital app and platform for streaming entertainment programming that recorded upward of 30 million monthly visits from unique users. The narrative content and several corresponding issue-based campaigns were also made available through Mobile Vaani networks and community radio stations to reach rural areas that are considered 'media dark'. And, as noted previously, an IVR system created a 'voicebook' platform for *MKBKSH* audience members to interact with the programme in real time.

MKBKSH's IVR system

An innovative technology company, Gram Vaani, pioneered the IVR model with the Population Foundation of India to leverage India's vast mobile telephony infrastructure to reach rural residents, empower local communities, and enable prosocial actions (Moitra et al. 2016). A toll-free number was advertised during the *MKBKSH* broadcast that audience members could give a 'missed' call to receive a free callback and participate in different activities. Callers could provide feedback by pressing numeric keys and recording voice messages. This helped create six types of IVR data for our analysis (Figure 1). Although these callers are not representative of *MKBKSH* general audience, their unfiltered responses provide unique and invaluable insights.

IVR data analysis

We used 2017 Excel and SPSS V24 to clean, modify and analyze the IVR data; and Tableau Pro to generate the data visualizations. Our analyses focused on the call trends over time, key characteristics for sustainable audience engagement, and impact in targeted geographic areas. Audio recordings were transcribed and translated by a team of research assistants under the leadership of The Change Designers in New Delhi.

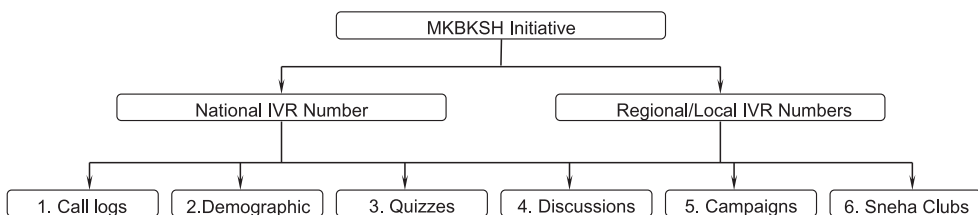


Figure 1. *MKBKSH*'s IVR system flow and data collection.

IVR major findings

IVR call logs

A total of 1,678,857 calls came from 390,710 unique phone numbers with the following breakdown: *MKBKSH's* Season 1 elicited 647,539 calls from 146,911 unique phone numbers and Season 2 elicited 1,031,318 calls from 341,084 unique phone numbers (Figure 2). The calls spiked around October 2015 when *MKBKSH's* promotional activities peaked with Bollywood celebrity Farhan Akhtar announcing his appearance as the epilogue-giver in Season 2, starting in episode 99. A pledge contest was subsequently announced in episode 102 with attractive prizes including an opportunity to meet Akhtar. Such star power attracted record call volumes in October and November 2015 (293,462 calls in two months).

The IVR caller participation followed the long-tail distribution where a very small group made significantly higher number of calls than most others. This is a common phenomenon for technology-facilitated social participation. Overall, 53% of the IVR participants called once, 26% called two or three times, and 21% called four or more times. However, the top 2% of most frequent IVR callers – some 7626 of them – represent *MKBKSH* fans in our analysis. They included 33 people who, on average, called at least once a day; 851 who, on average, called at least once a week; and 6742 who, on average, called at least once a month during the 29-month time period of the *MKBKSH* initiative. Interestingly, even within this small group of *MKBKSH* fans, the call frequency distribution followed the power law: the highest call frequency was 5290 times, followed by 23 callers with over 1000 times, and 1246 callers in the hundreds.

Our analysis showed that *MKBKSH* maintained a healthy balance between cultivating a fan base with repeated callers and attracting new callers to participate via the IVR system. A phone number was only considered new the first month it appeared in the call logs; it became a repeat when it appeared in subsequent months. The split between new and repeated phone numbers was 62% vs. 38% overall, 72% vs. 28% in 2014, 60% vs. 40% in 2015, and 52% vs. 48% in 2016. The percentage changes from 2014 to 2016 demonstrate that *MKBKSH* kept a steady pace at growing a community of fans who repeatedly called into the IVR system for more information and to offer feedback. Meanwhile, a substantial number of new phone numbers continued to be added to the pool, indicating the expanding involvement of *MKBKSH* audience members.

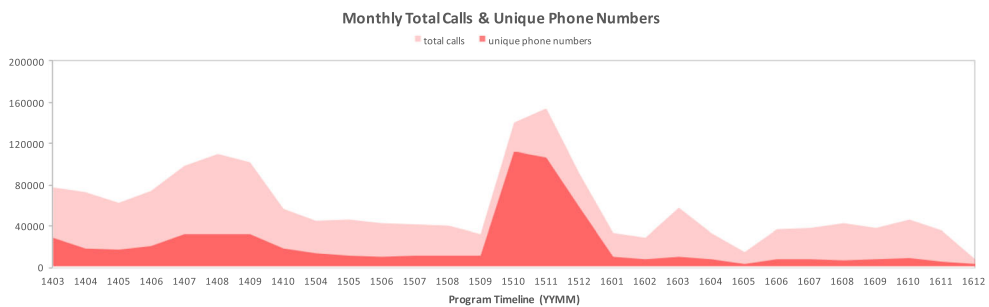


Figure 2. *MKBKSH's* overtime call trend by monthly total calls and unique phone numbers.

IVR caller demographics

One of the options for *MKBKSH's* IVR system was for the caller to participate in demographic surveys. Our analysis suggested that the *MKBKSH* initiative reached audience members in two of its priority states: Bihar and Madhya Pradesh. Of the 30,911 IVR calls made during *MKBKSH's* Season 1 in which the audience members provided information about their locations, some 78% of the calls came from the states of Bihar (42%) and Madhya Pradesh (36%; [Figure 3](#)). Other states in the geographic vicinity that also had high volumes of IVR audience participation included Uttar Pradesh, Rajasthan, Maharashtra and the National Capital Territory of Delhi. Collectively, the IVR callers hailed from 29 out of 36 India's states. There was negligible participation from small administrative territories such as Pondicherry, Daman and Diu, and Lakshadweep. Of the 57,542 IVR calls made during Season 2, in which the audience members provided information about their locations, 16% came from Bihar, 14% came from Madhya Pradesh and the other 70% came from other states that were not specified.

Our analysis showed equal participation from both women and men. Of the 75,711 IVR participants who indicated their gender, 52% were female and 48% were male. Of the 11,028 IVR participants from Bihar, 54% were female and 45% were male. Of the 9156 IVR participants from Madhya Pradesh, 51% were female and 49% were male. In addition, about two-thirds of the IVR callers were 20 or younger. Of the 52,160 IVR

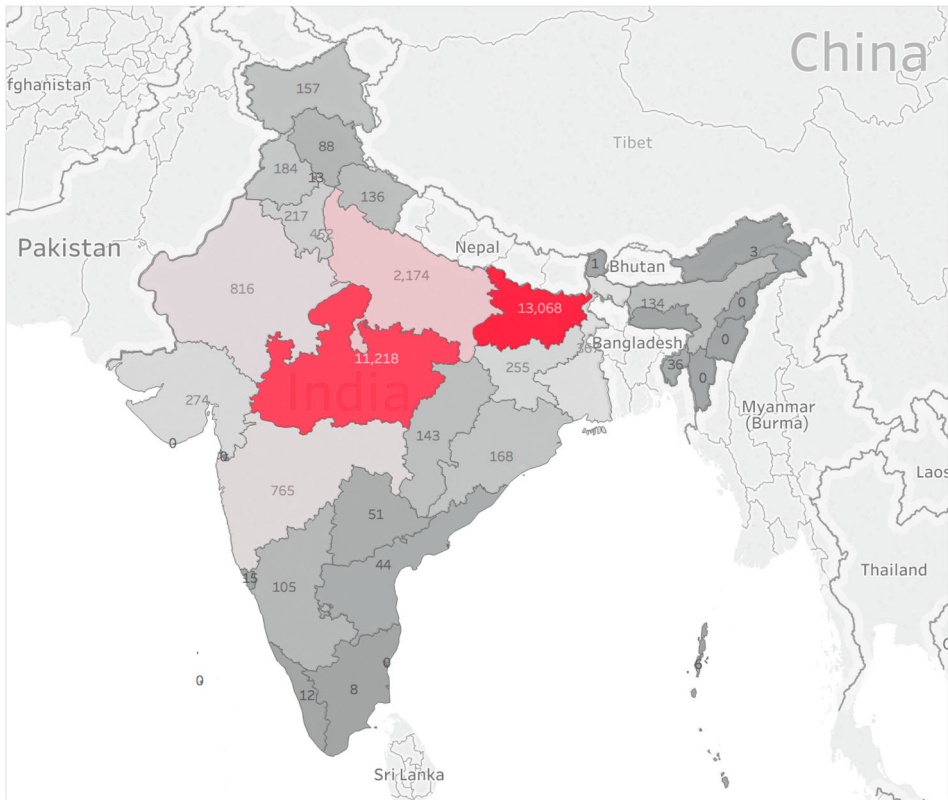


Figure 3. A filled map of *MKBKSH* IVR callers from various India's states during Season 1.

participants who indicated their age, 67% were 20 years old or younger ($M = 21.61$, $SD = 12.22$). Of the 6678 IVR participants from Bihar, 72% were 20 or younger ($M = 21.29$, $SD = 13.75$). Of the 5976 IVR participants from Madhya Pradesh, 64% were 20 or younger ($M = 21.98$, $SD = 12.41$). We also found that students and homemakers dominated the IVR calls. Of the 48,778 IVR participants who indicated their occupation, 65% were students and 10% were homemakers. Of the 7081 IVR participants from Bihar, 48% were students and 12% were homemakers. Of the 6243 IVR participants from Madhya Pradesh, 61% were students and 11% were homemakers.

Our analysis revealed slightly different characteristics about the *MKBKSH* fans we identified. Of the 7626 *MKBKSH* fans whose phone numbers could be matched with information provided in the demographic surveys, 55% watched the serial on television, 26% on the radio, 16% both TV and radio and 3% neither (meaning they had to rely on services such as Mobile Vaani and Community Radio Stations); 22% were from Uttar Pradesh, 16% from Bihar, 11% from Madhya Pradesh, 9% from Rajasthan, 8% from Maharashtra and 5% from West Bengal and the National Capital Territory of Delhi; 53% were male and 47% were female; their age ranged from 10 to 92 ($M = 19.87$, $SD = 7.94$); 69% were students, 18% were employed, 6% were housewives, 3% were farmers and less than 3% were unemployed.

IVR quizzes

Another option on *MKBKSH*'s IVR system was for the caller to participate in quizzes and answer questions related to the content of the serial. Our analysis showed that IVR callers were better at recalling facts directly related to the prosocial themes addressed in the serial than recalling the name of a person/place. Some 30% of the IVR callers during Season 1 and 50% during Season 2 chose to answer the single question quiz asked of *MKBKSH* audience members. A total of 169,235 callers answered the quizzes correctly (81%). Interestingly, the correct answer rate was much higher for the prosocial themed questions (85%) than the simple recalls of a person/place (69%).

A great majority of IVR participants answered questions correctly when they were directly related to the themes of public health and social justice: good moral values (94%), sanitation (94%), sex selection (91%), violence against women/girls (91%), prenatal–perinatal care (88%), gender equality (83%), child marriage (81%), family planning (80%), women's health (80%) and adolescent's health (79%). Each topic had multiple questions and the reported percentages represent the average scores.

IVR discussions

A main purpose for the use of IVR in the *MKBKSH* initiative was to reverse the typical top-down, one-way information flow of directed communication for development, and offer the audience a platform to raise their own voice through 'discussions' prompted by the in-house content as well as user-generated content by other audience members. Our analysis showed that, on average, the in-house content was longer, ranging from 8 to 455 seconds ($M = 185.43$, $SD = 149.52$) while the user-generated content was shorter, ranging from 2 to 212 seconds ($M = 50.83$, $SD = 35.68$); both were well received. [Table 1](#) shows the total number of content items, bookmarks, listeners, the highest listener count on a single item, and the percentage of content listened to its full length.

Of the 358 in-house content items that were made available on the IVR system, 56 items (16%) were listened by IVR participants over 1000 times. Of these, 55% were *MKBKSH* episodes/synopses, 32% were discussion leads/questions, and 13% were *MKBKSH* promos. However, some 35 categories needed to be employed to tag user-generated content items. Of these, eight categories were tagged over 100 times, including the high quality of *MKBKSH*, inspiration derived for prosocial actions, suggestions to the producers, the prosocial topics of ending child marriage and sex selection, and Man Against Rape and Discrimination (or MARD; an organization founded by *MKBKSH*'s celebrity epilogue-giver, Farhan Akhtar).²

Our transcription and analysis of the top 100 user-generated discussion items suggested that an *MKBKSH* fever was raging among its audience. There was a huge demand for doubling the duration of each episode, increasing the frequency of broadcast, and dubbing the programme in regional languages (eventually *MKBKSH*, both Season 1 and 2, were dubbed in 11 regional languages). The callers expressed deep gratitude and great admiration for having such a high-quality programme that entertained and enlightened them. They loved the serial for its fresh perspectives, inspiring characters, and a platform for their own voice. For example, an IVR caller said, 'Watching and listening to *MKBKSH* feels like my family members guiding me. We will never find a show like this again.'

Another caller from Lehri, Punjab recorded a poem, based on the learning from *MKBKSH*:

*A man is a real man
Only when he supports women
During their joys and sorrows
A real man helps women
In doing domestic chores
A real man respects women
And honor them in society
When he saves her
From abuse and mischief
Only then
Can he be a real man*

The IVR system helped many *MKBKSH* audience members to overcome their individual challenges and share their personal opinions about critical issues addressed in the drama serial. One such recording went as follows,

Greetings to everyone and so grateful to the creators of this serial. I am blind and have enjoyed listening to *MKBKSH* on the radio. I urge everyone in this country to take the time and listen.

Table 1. Comparison of *MKBKSH*'s IVR discussion content.

	In-house content	User-generated content
Total items	358	9636
Total bookmarks	7764	25,773
Total listener counts	201,856	1,239,765
Highest listener count	4570	4167
Content fully listened	30%	25%

This show honors women. Inspiring girls to progress is important for the nation to progress. No girls should be killed in the womb. Parents should ensure their daughter good education. Child marriage must stop.

Still, other IVR callers shared the specific actions they took as a direct result of watching *MKBKSH*. One such example was a woman from Madanpali, Chitrapur, and her message read,

Thank you, Sneha didi (sister) and your team! *MKBKSH* gave me a lot of courage. I am 20 years old and got married at 17. My father passed away five months after my marriage. Since then, my in-laws harassed me constantly. I fearlessly faced them and taught them a lesson that they would never repeat their actions ever again with anyone.

IVR campaigns

During the 29-month duration of the *MKBKSH* initiative, five issue-based campaigns were run on different platforms at different time periods to amplify the serial's reach and impact. These campaigns were launched around special events such as the World Health Day and themed around *Desh Ko Badalna Hai To Mard Ko Badlna Hoga* ('To change a nation, one must change its menfolk') – a campaign introducing Bollywood star Farhan Akhtar in Season 2; *Who's Your Favorite Character in MKBKSH* and *Why* (Season Finale); *Kishor Ka Shor* ('The voice of the youth'), inviting adolescents to ask sensitive questions about sexuality and health; and *Narrate Your Story*, encouraging callers to share their stories of trying to make a difference (akin to Dr Sneha's efforts in *MKBKSH*). Table 2 provides details on each of the five campaigns, the number of items made available on the IVR system, the number of callers who listened in, the total number of times heard, total duration of content heard (in seconds), and the nature of the content heard (i.e. opinion, information and experience sharing). Taken together, a total of 7335 user-generated content items were shared via IVR that attracted 624,042 participants to listen 1,125,370 times for 1,001,244 seconds (or 278 hours). Most of them were to express opinions, some provided information, and a few shared personal experiences. Other than one person talking, many of these items took on a novel format such as poetry (214), stories (67), songs (56) and interviews (41).

These five campaigns to amplify *MKBKSH*'s reach and impact were run mainly through the national IVR system (88%) with the remaining 12% orchestrated on the Mobile Vaani networks in Bihar (8%), Jharkhand (3%) and Madhya Pradesh (1%). The geographic areas of these campaigns were reported by IVR callers from 78 districts in eight Indian states, particularly callers from the impoverished states of Bihar and Jharkhand. There were slightly more male participants (54.5%) than female participants (45.5%). But the user-generated

Table 2. *MKBKSH*'s issue-based campaigns on IVR.

	Campaign time periods	# of items	# of listeners	# of times heard	Duration heard	Nature of the content		
						Opinion (%)	Information (%)	Experience (%)
1	2014/06–2014/12	1334	42,878	66,311	32,675	43	40	5
2	2015/04–2016/02	2869	220,784	390,666	346,170	78	13	5
3	2015/09–2016/02	309	15,464	45,535	80,227	50	25	11
4	2016/02–2016/09	2534	313,445	566,416	352,833	96	2	1
5	2016/11–2016/12	289	31,471	56,442	189,339	91	3	1

content was overwhelmingly positive (97%) as opposed to neutral (2%) or negative (1%). There were seven prosocial issues highlighted in the user-generated content of the campaigns: gender-based violence (1850 items), gender equality (1541 items), child marriage (304 items), sexual and reproductive health (282 items), substance abuse (241 items), women and children's health (232 items) and family planning (112 items).

IVR Sneha groups

To complement on-air broadcast with on-the-ground actions, *MKBKSH* partnered with 10 non-governmental organizations in the states of Bihar and Madhya Pradesh to infuse *MKBKSH* viewing/listening with 738 community outreach groups: 202 groups in three districts of Bihar and 536 groups in five districts of Madhya Pradesh. These groups were called Sneha groups, named after *MKBKSH*'s protagonist Sneha Mathur. The geographic areas of 1239 IVR participants whose unique group ID could be matched with the designated locations of these groups covered: Gaya, Bihar (3); Patna, Bihar (473); Chatarpur, Madhya Pradesh (111); Jabalpur, Madhya Pradesh (476) and Ratlam, Madhya Pradesh (176).

The facilitators of these 738 Sneha groups were trained to use a variety of supplementary *MKBKSH* materials for education and discussion at these group meetings. Figure 4 shows how much each type of materials was used and how much they were perceived to be useful. The illustrative comic book was the most popular and effective tool, followed by picture cards and short films. The role play activity and game book were the least favorable. Some 10% of the IVR callers were exposed to multiple materials and found them to be helpful.

A total of 1614 participants in 249 unique Sneha groups shared their experience via the IVR system (42% in Bihar, 58% in Madhya Pradesh). In terms of frequency of their monthly meetings, 58% reported having more than two meetings a month; 39% reported having one or two meetings a month, and 3% reported that they did not meet in the last 30 days. In terms of their own *MKBKSH* viewing/listening frequency, 25% reported weekly, 66% reported sometimes and 8% admitted that they had not watched the show. Here we see the value of those Sneha groups in expanding *MKBKSH* outreach beyond viewers and listeners. The prosocial themes discussed at these Sneha group meetings included: age at marriage (39%), delaying first pregnancy (19%), family planning (16%), preventing sex selection (6%) and more than one of these topics (21%).

Our analysis suggested that the *MKBKSH* initiative spurred interpersonal conversations and prosocial actions by the Sneha group members. These represent the positive

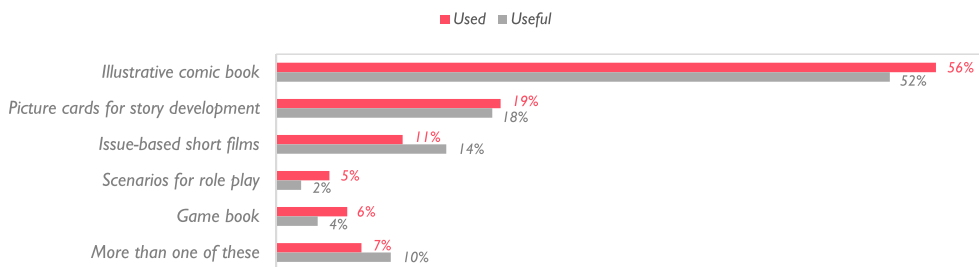


Figure 4. *MKBKSH*'s Sneha group response to the Supplementary Educational Materials.

behavioral change outcomes that EE programmes aim to accomplish through role modeling and narrative engagement. When asked whom they had talked to about the issues they discussed during these meetings, 48% reported talking to family, 37% reported talking to friends and 13% talked ASHAs (Accredited Social Health Activists) – the frontline health workers. When asked what actions they had taken as a result of these group meetings and discussions, 39% reported having adopted family planning methods, 34% reported having opposed sex determination and selection; 15% reported having tried to stop child marriage and 11% reported having contacted frontline health workers.

Discussion

Implications of MKBKSH

Our independent analysis of the IVR data over a 29-month period of the *MKBKSH* initiative (spanning both Season 1 and 2) provided strong evidence of real-time audience engagement, sustainable growth of a fan community, as well as prosocial actions spurred by the serial's inspiring characters and storylines. This pioneering use of the IVR system effectively leveraged the high penetration of mobile telephony in India, giving voice to all and especially less privileged audience members. It added an innovative component to *MKBKSH's* 360° approach that bridged communication at the macro and the micro levels, complementing the on-air mass media broadcast with localized community networks and on-the-ground activities. These thoughtful and coordinated efforts attracted 1.7 million calls from more than 390,000 unique phone numbers across 29 out of 36 India's states. While these numbers are staggering in absolute terms, they, by themselves, represent a drop in an ocean that is India – a country of 1.3 billion people. Nevertheless, there is no denying that the IVR callers represent a highly involved and unique subset of the *MKBKSH* audience, and their uniqueness provides us important insights about how fan communities engage with EE discourses.

Although technology-centered EE platforms often appeal more to middle-aged, urban elite audiences, our analysis of *MKBKSH's* IVR data indicated rather equal participation among women and men, high involvement of youth, more participation from students and homemakers, and expansive coverage in priority states like Bihar and Madhya Pradesh. The IVR system was also instrumental in reaching 'media dark' areas through Mobile Vaani networks and Community Radio Stations. The IVR system provided *MKBKSH's* audience a wide range of accessible options to participate by listening to the curated content, answering questions and recording their own voices. The IVR callers fared better in recalling the *MKBKSH* prosocial themes than the name of a person/place in the serial; they responded strongly to user-generated content on the moderated discussion forum; they collectively spent hundreds of hours tuning in to hear other audience members' opinions on issues featured in the *MKBKSH* issue-based campaigns; and a substantial number of *MKBKSH's* Sneha group members reported engaging in prosocial conversations and actions.

In summary, the IVR system played a critical role in the effectiveness of the *MKBKSH* initiative as a communication for development and social change intervention. Not only did it provide timely and authentic, user-generated feedback for programmatic improvement, its use as a real-time tracker of audience engagement represents a trendsetter in the practice and research on EE and development communication.

Implications for communication and social change

In a world where development is unequal, marginalization is rampant, and dominant discourses are strident, Obregon and Tufte (2014) call for media and communication strategies that both listen and speak to the needs and aspirations of the have-nots, giving them voice and an equal opportunity to participate, interact, and contribute. The IVR system has the advantages of cost-effectiveness, standardized instructions, caller confidentiality, data quality, user monitoring, longitudinal assessment and access to the hard-to-reach population groups (Corkrey and Parkinson 2002). These technological advantages were demonstrated by the *MKBKSH* initiative. What was unique and with added value about the IVR system used for the *MKBKSH* initiative is its innovative approach of leveraging the Mobile Vaani networks and the community radio stations to include the underprivileged, the poor and the marginalized as part of the large-scale, real-time audience engagement for EE as well as communication for development and social change (c.f., Riley, Sood and Robichaud, 2017; Schukoske 2015).

Our examination of the IVR data from Season 1 and 2 yielded insights and recommendations for the implementation of IVR as ICT4D and for social change initiatives like *MKBKSH*. First, given the high volume of repeated calls on the IVR system and the various types of information collected from individual callers at different points in time, at least two standard questions should be introduced in the system protocol to generate a unique identifier for each caller. Such is vital to facilitate merging different datasets for analysis and help distinguish different individuals who may share the same phone line to call into the IVR system. In our analysis, we removed the duplicates manually to the extent possible and used the unique phone number to link various types of data.

Second, the creators of *MKBKSH* became familiar with the notion of ‘markers’ – distinctive elements of a message such as a new term or a novel behavior that can be easily identifiable and attributed to the intervention to help reframe and rescript the focal health and social issues (Singhal 2013). An example in *MKBKSH* was *Saathiya*, meaning ‘a trusted friend’, a term that was used to rebrand the national peer educator programme included in several IVR quiz questions. Another example was *Mastbandi*, meaning ‘pleasurable constricted flow’, a play on word for *Nasbandi*, the common term referring to male vasectomy (technically, ‘closing of pipes’). It is equally important to incorporate markers in the entertainment programming as it is to include them in the evaluation questions on IVR to provide solid evidence.

Last but not the least, IVR as a form of ICT4D and mHealth, is increasingly adopted for health behavior change interventions (Danaher et al. 2015). Such a powerful technological platform should not be limited to content delivery and message recording. We could capture behavioral outcomes such as interpersonal conversations and prosocial actions through self-report like it was done in *MKBKSH*. It can be even more effective to directly connect the IVR system with health-seeking behaviors such as making appointments with community healthcare providers and adhering to medical prescriptions.

Implications for alternative multicultural discourses

Our study of audience response to *MKBKSH* through the IVR system leads us to call for more multicultural and audience-centered discourses in the design, implementation and evaluation of large-scale, real-time communication and social change interventions.

In particular, our research questions dominant hegemonic discourses in programme evaluation. Our focus on the audience-driven IVR voice data questions the notion that knowledge creation is fundamentally a scientific enterprise, involving empirical observation, quantitative analysis and rational reflection (Conquergood 2002). Our research questions the notion that knowledge is best created when carefully drafted questionnaires are administered to carefully selected samples, taking before–after snapshots in pre-determined frames (Dura, Felt, and Singhal 2014). Further, our research questions the notion that proper expression of this knowledge is only its codification in print (Singhal and Rattine-Flaherty 2006).

The IVR system employed in *MKBKSH* offers an alternative audience-centered discourse in programme evaluation: It (1) offers a fundamentally democratic platform, i.e. open to all – the young and old, men and women, urban and rural; (2) frees constraints of geographic distance, i.e. practically accessible from anywhere; (3) values socio-economic equality, i.e. available at no cost with few barriers to participate; (4) signifies an invitational approach, i.e. selection is not based on fulfilling sampling criteria; (5) embraces all temporal dimensions, i.e. it can be accessed at any time and all the time throughout the entire process and (6) allows people to participate in non-textocentric ways by recording personal opinions and stories in their own vernacular.

Programme evaluation rubrics could benefit from user-friendly, user-defined, voice-centered, non-textual metrics of measurement (Dura, Felt, and Singhal 2014; Singhal and Devi 2003). Democratic, invitational, non-textocentric methods – such as those presented by the IVR open up a legitimate space for different epistemologies so that ‘meanings that are masked, camouflaged, indirect, embedded, or hidden in context’ (Conquergood 2002, p. 146) may be concretized and brought to light.

In conclusion, what implications might our study hold for scholars, practitioners and evaluators of communication and social change? Our study of the IVR data in *MKBKSH* points to the importance of creating a communicative platform whereby multiple discourses, expressed in multiple forms, can find utterance, combating hegemony and ethnocentrism in points-of-view (Shi-xu, 2015, 2016). Research processes and protocols must be pluralistic, speaking to the diverse constituencies of programme planners, interventionists and audience members, especially of the marginalized, the vulnerable and the disadvantaged.

Notes

1. Season 3 of *MKBKSH* is in production in 2018.
2. Farhan Akhtar’s Foundation, MARD – in association with Population Foundation of India and the Bill and Melinda Gates Foundation – presented a ‘Lalkaar’ (‘Challenge’) concert in Mumbai in November, 2017 to emphasize the message – ‘Enough is Enough’ – with respect to intimate partner violence, calling for immediate action to end domestic violence. The live concert was attended by Bollywood Superstar Shah Rukh Khan and several thousands of fans, and its Facebook feed was subscribed by millions. Here we see the value of *MKBKSH*’s partnership with celebrities like Farhan Akhtar who, in their own right, are strong advocates for challenging dominant discourses of patriarchy. *MKBKSH*’s celebrity advocates included, among others, Bollywood personalities such as Sharmila Tagore, Shabana Azmi, Javed Akhtar and Soha Ali Khan.

Acknowledgements

This research owes a debt of gratitude to many individuals and institutions, including colleagues at the Population Foundation of India: Poonam Muttreja, Alok Vajpeyi, Abhijit Mali, Sanghamitra Singh

and Tanushree Sengupta; Feroz Abbas Khan, the creative genius and soul of *Main Kuch Bhi Kar Sakti Hoon*; colleagues at Gram Vaani: Aaditeshwar Seth, Sangeeta Saini, Sayonee Chatterjee, Kapil Dadheech and Rohit Jain; The Change Designers: Anu Sachdev, Pallavi Jain and their team of research assistants; Sixiao Liu at the University at Buffalo, The State University of New York; and colleagues at Lady Irwin College: Sarita Anand, Anshul Singhal, Neha Sharma and Sunaina Batra Dua. The content of this article is solely the responsibility of the authors.

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Disclosure statement

No potential conflict of interest was reported by the authors.

References

- Anand, S., and S. Batra. 2016. From real to reel: Enriching edutainment through stories of positive deviants. *Journal of Creative Communications* 11: 154–60.
- Conquergood, D. 2002. Performance studies: Interventions and radical research. *The Drama Review: A Journal of Performance Studies* 46, no. 2: 145–56.
- Corkrey, R., and L. Parkinson. 2002. Interactive voice response: Review of studies 1989-2000. *Behavior Research Methods, Instruments, & Computers* 34: 342–53.
- Danaher, B.G., H. Brendryen, J.R. Seeley, M.S. Tyler, and T. Woolley. 2015. From black box to toolbox: Outlining device functionality, engagement activities, and the pervasive information architecture of mHealth interventions. *Internet Interventions* 2: 91–101.
- Das, K. 2017, March 5. *Anything is possible! How DD show on sexuality and women's rights became most watched India TV show.* <http://www.mid-day.com/articles/how-dd-show-on-sexuality-and-women-rights-became-most-watched-indian-tv-show/18046195>.

- Dura, L., L.J. Felt, and A. Singhal. 2014. What counts? For whom? Cultural beacons and unexpected areas of programmatic impact. *Evaluation and Program Planning*. doi:10.1016/j.evalprogplan.2014.01.001.
- Dutta, M. 2006. Theoretical approaches to entertainment education campaigns: A subaltern critique. *Health Communication Action* 20, no. 3: 221–31.
- International Institute for Population Sciences. 2007. *National family health survey (NFHS-3): 2005-06*. <https://dhsprogram.com/pubs/pdf/frind3/frind3-vol1andvol2.pdf>.
- Iyengar, R. 2015, April 22. Indian minister says 2,000 girls are killed across the country every day. *Time*. <http://time.com/3830874/2000-girls-killed-every-day-india-minister/>.
- Jha, P., M.A. Kesler, R. Kumar, F. Ram, U. Ram, L. Aleksandrowicz, D.G. Bassani, S. Chandra, and J.K. Banthia. 2011. Trends in selective abortions of girls in India: Analysis of nationally representative birth histories from 1990 to 2005 and census data from 1991 to 2011. *The Lancet* 377: 1921–28.
- Lacayo, V., and A. Singhal. 2008. *Popular culture with a purpose! Using edutainment media for social change*. Den Haag: Oxfam-Novib.
- Moitra, A., V. Das, G. Vaani team, A. Kumar, and A. Seth. 2016, June. Design lessons from creating a mobile-based community media platform in rural India. *Proceedings from ICTD'16*, Ann Arbor, Michigan, USA. doi:10.1145/2909609.2909670.
- Obregon, R., and T. Tufte. 2014. Rethinking entertainment-education for development and social change. In *The handbook of development communication and social change*, ed. K. G. Wilkins, T. Tufte, and R. Obregon, 168–88. Maldon, MA: John Wiley.
- Ramasubban, R. 2016. *Shifting deeply rooted gender norms using an entertainment-education transmedia initiative*. Population Foundation of India Case Study Series. <http://mkbksh.com/wp-content/uploads/2015/01/MKBKSH-Case-Study.pdf>.
- Riley, A.H., S. Sood, and M. Robichaud. 2017. Participatory methods for entertainment-education: Analysis of best practices. *Journal of Creative Communications* 12: 62–76.
- Schukoske, J. 2015. Harnessing the power of new ICTs for rural women in India: NGO roles. In *Empowering women in developing countries: ICT applications and benefits*, ed. F. Legoh and S. Kapur, 121–38. New Delhi: Daya Publishing House.
- Shi-xu. 2015. Cultural discourse studies. In *The international encyclopedia of language and social interaction*, ed. K. Tracy, C. Ilie, and T. Sandel, 1–9. Hoboken, NJ: John Wiley & Sons. doi:10.1002/9781118611463/wbielsi012.
- Shi-xu. 2016. Cultural discourse studies through the Journal of Multicultural Discourses: 10 years on. *Journal of Multicultural Discourses* 11, no. 1: 1–8. doi:10.1080/17447143.2016.1150936.
- Singhal, A. 2013. *A creative brief to design entertainment-education television serial drama in India*. New Delhi: Population Foundation of India.
- Singhal, A., M.J. Cody, E.M. Rogers, and M. Sabido. 2004. *Entertainment-education and social change: History, research, and practice*. Mahwah, NJ: Erlbaum.
- Singhal, A., and K. Devi. 2003. Visual voices in participatory communication. *Communicator* 37: 1–15.
- Singhal, A., and E. Rattine-Flaherty. 2006. Pencils and photos as tools of communicative research and praxis: Analyzing Minga Peru's quest for social justice in the Amazon. *International Communication Gazette* 68, no. 4: 313–30.
- Singhal, A., and E.M. Rogers. 1988. Television soap operas for development in India. *Gazette* 41, no. 3: 109–26.
- Singhal, A., and E.M. Rogers. 1999. *Entertainment-education: A communication strategy for social change*. Mahwah, NJ: Erlbaum.
- Singhal, A., and E.M. Rogers. 2001. *India's communication revolution: From bullock carts to cyber marts*. New Delhi: Sage.
- Singhal, A., H. Wang, and E.M. Rogers. 2013. The rising tide of entertainment-education in communication campaigns. In *Public communication campaigns*, ed. R. Rice and C. Atkin, 321–33. Thousand Oaks, CA: Sage.
- Sood, S., A.H. Riley, and K.C. Alarcon. 2017. Entertainment-education and health and risk messaging. In *Oxford research encyclopedia of communication*, ed. R. Parrott. New York: Oxford University Press. <http://communication.oxfordre.com/view/10.1093/acrefore/9780190228613.001.0001/acrefore-9780190228613-e-245>.

- Tan, E.L. 2011, May 24. Up to 12 million girls aborted in India over last 30 years: Study. *Reuters*.+ <https://www.reuters.com/article/us-india-abortions-girls/up-to-12-million-girls-aborted-in-india-over-last-30-yearsstudy-idUSTRE74N2C020110524>.
- The Guardian*. 2018, January 30. More than 63 million women 'missing' in India, statistics show. <https://www.theguardian.com/world/2018/jan/30/more-than-63-million-women-missing-in-india-statistics-show>.
- UNICEF. 2014. *Ending child marriage: Progress and prospects*. <https://data.unicef.org/resources/ending-child-marriage-progress-and-prospects/>.
- Wang, H., and A. Singhal. 2009. Entertainment-education through digital games. In *Serious games: Mechanisms and effects*, ed. U. Ritterfeld, M. J. Cody, and P. Vorderer, 271–92. New York: Routledge.
- Wang, H., and A. Singhal. 2016. *East Los high*: Transmedia edutainment to promote the sexual and reproductive health of young Latina/o Americans. *American Journal of Public Health* 106: 1002–10. doi:10.2105/AJPH.2016.303072.