

Profile Centric Community Awareness and Engagement for Adolescent Girls : An Empirical Study on Early Marriage in India

*Charru Hasti*¹
*Sonal Arora*²
*Amit Mehndiratta*³
*Mahim Sagar*⁴
*Harish Chaudhry*⁵

Abstract

Early marriage is a pernicious practice traditionally observed even today in several countries, with a fifth of the global female population getting married by 18 years of age. The custom has far-reaching adverse effects on the girls' physical, mental, and socioeconomic welfare and their future progeny. Therefore, it is critical to disseminate the right messages to the communities of girl children to deter them from letting their daughters marry early. A study was carried out in 2019 that involved the design, execution, and evaluation of a volunteer-driven technology-enabled communication intervention to emphasize the importance of education in securing a girl's future and to discourage girl child marriage. Seven hundred and eight-six residents of the sub-district of Todaraisingh in Tonk, Rajasthan, participated in the study. A strong positive cognizance of the personalized communication was empirically confirmed. Furthermore, a high influence of cognitive response and sympathy towards the communication was found on the evaluative judgment of the participants that strongly influenced the intention to spread positive word of mouth and behavioral intention.

Keywords : Child marriage, communication efficacy, Rajasthan, behavioral intention

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The world has seen a gradual decline in gender-based disparities over the last decade (Dorius & Firebaugh, 2010 ; Kleven & Landais, 2017), yet significant efforts are still required in achieving gender equality as a sustainable development goal. One of the issues related to this inequity is the dominance of the

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¹ *Project Consultant and Doctoral Scholar (Corresponding Author)*, Indian Institute of Technology Delhi (IIT Delhi), Hauz Khas, New Delhi - 110 016. (Email : charru.h1@gmail.com)

² *Research Scholar*, Indian Institute of Technology Delhi (IIT Delhi), Hauz Khas, New Delhi - 110 016. (Email : bsz188605@dbst.iitd.ac.in)

³ *Associate Professor*, Centre for Biomedical Engineering, Indian Institute of Technology Delhi (IIT Delhi), Hauz Khas, New Delhi - 110 016. (Email : amehndiratta@cbme.iitd.ac.in); ORCID iD : <https://orcid.org/0000-0001-6477-2462>

⁴ *Professor*, Department of Management Studies, Indian Institute of Technology Delhi (IIT Delhi), Hauz Khas, New Delhi - 110 016. (Email : mahim@dms.iitd.ac.in); ORCID iD : <https://orcid.org/0000-0002-1987-095X>

⁵ *Associate Professor*, Department of Management Studies, Indian Institute of Technology Delhi (IIT Delhi), Hauz Khas, New Delhi - 110 016. (Email : hciitd@gmail.com)

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child marriage practice, especially in African and Asian countries (UNICEF, 2019). Any formal marriage or informal union between a child under the age of 18 and an adult or another child is defined as child marriage (UNICEF, 2019). A reduction in a girl's risk of marrying in childhood has been observed globally but at an unassuming rate. As per United Nations Children's Fund (UNICEF) data, 68 in every 1,000 girls below 15 years of age are married off in India. Traditionally, in rural and semi-rural regions of India, the cohabitation of the girl child with husband, called '*gauna*,' does not co-occur with their marriage and is rather delayed until puberty (Banerjee, 1998 ; Castilla, 2018). That, however, also does not conform to the minimum legal age of marriage. According to the latest National Family Health Survey-4 (NFHS - 4) 2015–16, in Rajasthan alone, 35.4% of the women in the age band of 20 – 24 years got married before the legal minimum age of 18 years, and 6.3% of the girls of age 15 – 19 years were already mothers/pregnant. Implications of early marriage include deterioration of key health indicators and increased burden of disease. Educating decision-making individuals in a community is essential to reduce the prevalence of early marriage, but such communication programs and the assessment of communication have been only a few in India in terms of awareness and engagement of the participants. This paper elaborates on a communication study on child marriage carried out by us and the assessment of its efficacy in terms of attitudinal and behavioral outcomes.

Review of Literature

Evidently, there are multiple reasons why the early marriage practice is still so prevalent. The underpinnings of child marriage practice lie in social and religious norms (Kohno et al., 2019 ; Modak, 2019 ; Steinhaus et al., 2019), lack of education (Modak, 2019; Paul, 2019b) as well as economic characteristics and cultural influences (Modak, 2019; Mulenga et al., 2018; Stark, 2018). At the same time, the repercussions of child marriage are multi-faceted. Child marriage adversely affects the health and security of a woman (Grose et al., 2020; John et al., 2019; Mlambo et al., 2019; Nour, 2006; Tenkorang, 2019). It also limits her autonomy and uptake of health services (Bessa, 2019; Godha et al., 2016; Sekine & Carter, 2019), her schooling and education (Blum et al., 2019; Male & Wodon, 2018; Sekine & Hodgkin, 2017), health and education of her children (Chari et al., 2017; Islam et al., 2018; Nguyen et al., 2019; Paul et al., 2019; Paul, 2019a; Sunder, 2019) especially due to early childbirths (Wodon et al., 2019) and increased economic burden and poverty (Onagoruwa & Wodon, 2018; Wodon, 2018).

Over the years, various programs have been carried out, and both government and non-government organizations have taken initiatives by administrations, policy makers, and other organizations around the world to bring down the cases of child marriages against social norms (Brahma et al., 2019; Gaffney-Rhys, 2011; Kalamar et al., 2016; Stark et al., 2018). The evaluation of these programs and interventions has been done in terms of change in awareness, perceptions, and behavior (Kalamar et al., 2016). The evaluation outcomes provide insights for improvement in the efforts for accomplishing complete eradication of the child marriage process. Most of the interventions have focused on empowering girls through the right information, social mobilization, and/or skill training (Chae & Ngo, 2017; Kalamar et al., 2016). Other interventions have focused on community approaches to influence the attitudes and decisions of family and other members of the community towards child marriage. The methods of interventions vary, including incentivization, livelihood training, informal education, personal communication, and community conversations. In India, laws to enforce the minimum age of marriage have elicited some reforms to reduce cases of child marriages.

Moreover, programs and other initiatives directly addressing the child marriage issue in India have been limited, as has been their evaluation (Kalamar et al., 2016 ; Malhotra et al., 2011). This necessitates designing and running experimental programs that must be tested to generate positive responses and high intention to act against the early marriage practice. As one of the first in Rajasthan, we have carried out a six-month communication-based intervention for prospective parents and for the parents of children up to the age of 18 years to encourage them to educate the girl child and discourage child marriage. This intervention was carried out in four villages and

a town of Todaraisingh administrative division of Rajasthan. The study's objective is to evaluate the efficacy of the intervention themed around girl child marriage on awareness, attitude, and intention of the participants.

Methodology

Study Design and Participants

We recruited 786 residents of four randomly chosen villages of Todaraisingh, namely Bassi, Bhasoo, Ratwai, and Surajpura, and the town of Todaraisingh in Tonk district of Rajasthan for the study. The communication intervention was carried out for a period of six months, from July – December 2019. An approval from the Institute Ethics Board committee was taken to perform the intervention, and an informed consent was taken from individual participants of the study. Through expert corroboration, it was decided that communication on child marriage theme would be relevant for a married female of age 18 – 45 years with a child of age group 3 – 18 years ; and for a male of age 21 years or above, which is the legal minimum age of marriage for males. The individuals of these profiles met the study's inclusion criteria and had a role in the decisions taken in a household or the community. So, purposive sampling was used to select an individual with a specific demographic profile. This approach was appropriate to allow recruitment of the residents of Tonk, Rajasthan on the basis of the attributes, including age, marital status, and age of children. Members of a household were visited, and after due consent and meeting the inclusion criteria, they were engaged in the intervention.

Study Procedure

A group of local women volunteers was hired to carry out the intervention process through an appropriate selection process. The women volunteers were selected on the basis of location, gender, qualification, convenience of using smartphones, communication skills, and ability to travel on a daily basis. The minimum education level of the field volunteers was graduation for them to grasp the subject and explain it to the target respondents. They were then trained and were provided support material, including a training manual to carefully execute the entire communication and data collection process. The manual was prepared with the help of experts. Over a period of six months, they visited households ; took consent of individuals for participation after explaining them the objectives of the study ; asked them a set of demographic questions ; showed them a communication video ; and then surveyed them for evaluation of the communication's effect on their awareness, attitude, and behavioral intention on the topic. Such exposures were made a minimum of three times to the same participant once a week, iterating the complete process. Krugman (1982) explained that it is important to have a minimum of three exposures for a viewer. Two communication videos in Hindi were selected from a repository produced by UNICEF, distributed by a video reference library, HealthPhone, and made publicly available.

Both these videos were 60-second stories with a message that real fathers focus on giving their daughters good education and get them married only after they turn 18. The videos were chosen owing to their relatability to the selected audience. Refer to the screenshot of the slogan that appears at the end of both the videos (Figure 1). The blurbs applauded the fathers who thought they could secure their daughters' future by educating them rather than by marrying them off before 18 years of age. The communications based on familial relationships and cognitive engagement are considered identifiable by the public (Aggarwal & Shefali, 2019; Chatterjee & Kundu, 2020; Nandi et al., 2019; Trehan & Gupta, 2015) and are effective when mapped to their normative perceptions (Srivastava & Mahendar, 2018). The storyline of the two differed slightly to retain the interest of the viewer. A video was shown weekly with the two videos shown on alternative weeks for four weeks to the same participant. Since the intervention required multiple visits, the participants were incentivized in the form of small utility items such as hair bands, mini wallet pouches, pocket diaries, and pens. The logic of mapping the

**Figure 1. Snapshot of the Commemorating Slogan
of the Communication Video**



Source : UNICEF

demographic profile with the video and questionnaire was built into a web-based application installed on tablets and distributed to the volunteers for the study.

Intervention and Communication Efficacy Measure

The intervention aimed at assessing the effect of communication on awareness, message recall, positive affective response, message recognition, cognitive response, involvement, intended behavior, and intention to recommend the key message to others. The intervention included around 40 minutes of an interactive one-to-one session by a volunteer with a participant at the latter's residence. The volunteer and participants spoke the same languages. Their interaction commenced with the volunteer explaining the goal and duration of the study and taking digital consent from the individual for participation using the tablet-run application. The volunteer then sought responses to demographic questions related to the participant, including age, marital status, highest attained educational level, presence of children in the household, and children's age group. These responses were recorded in the tablet device application. The application was programmed to test if the respondent's profile matched the inclusion criteria and displayed the communication video on success. Soon after the video was over, the immediate responses to the questionnaire were taken. This questionnaire was designed to measure communication efficacy. It included qualitative questions to initiate a discussion and quantitative questions based on pre-established measurement scales of marketing. These included a single-item scale for positive affective response by Yi (1990), five-item scales for cognitive response – sympathy and empathy by Escalas and Stern (2003), three-item scale for informativeness by Pham and Avnet (2004), six-item scale for ease of understanding by Stout and Rust (1993), seven-item scale for evaluative judgment by Burke and Edell (1986) picked from a pool of words used in the construction of the Reaction Profile Scales by Wells et al. (1971), three-item scale for intention to recommend by Maxham and Netemeyer (2002, 2003), and seven-item scale for intended behavior by Murukutla et al. (2012).

Analysis and Results

Participant Profile

Seven hundred and eight-six (786) residents of the sub-district of Todaraisingh in Tonk, Rajasthan, participated in the study between July and December 2019. A summarized respondent profile is given in Table 1.

Table 1. Respondent Characteristics

	Percentage %
Gender	
Female	88.2
Male	11.8
Age (years)	
Below 21	1.5
21 – 30	31.9
31 – 45	64.6
46 – 60	1.5
61 and above	0.4
Education	
Illiterate	29.0
Literate with no formal education	7.6
Upto 5th Class	9.0
Upto 8th Class	24.3
HSC/SSC	9.6
Diploma/Polytechnic	.9
Graduation	11.8
Post-Graduation	7.6
Marital Status	
Unmarried	3.3
Married	96.7
Widowed/Separated	-
Presence of children	
Yes	92.2
No	7.8
Average Number of Children per Participant	
	2.12

The interviews were targeted at married men of age ≥ 21 years (with or without children) and married women in the age band of 18 – 45 years with children in the age band of 3 – 18 years. The inclusion of men and women parenting young children was important because the communications talked not only about following the legal age of marriage for a female child but also providing education and nurturing childhood. Participant interactions were conducted not restricting to age or gender-based quota. Most of the survey participants were women (88.2%) by natural fall, and men constituted 11.8% of the sample. People in the age band of 31 – 45 years constituted 64.6% of the sample. The next largest age group was 21 – 30 years comprising of 31.9% of the survey participants.

Twenty-nine percent (29%) of the survey participants were illiterate, 24.3% had received education up to the eighth standard, 9.6% had completed schooling, 11.8% were graduates, and 7.6% were post-graduates. Looking separately at the male and female audience, the education status of men was much better than women; there were only 2% illiterates among men in comparison to women, where 32.7% of women were illiterate. The number of graduates among men was 32.3%, while only 9.1% of the women were graduates. The majority of the women had studied up to the 8th standard only (24.9%).

Among the respondents, 99.3% of the women were married, and 77.4% of the men were married ; 92.2% of the participants had children in the age band of 3–18 years. On average, the number of children of a participant was 2.12, and 83% of the participants had children in the age band of 3 – 18 years.

Proposed Associations Among Various Behavioral Measures

The respondents expressed their views about the communication and intention to follow, recommend, and monitor ideal practices on child upbringing and marriage. The influence of affective and cognitive evaluation of the communication on respondents' recommendations and behavioral intention is analyzed using multiple regression analysis. It is hypothesized that each of the behavioral measures, namely cognitive response to the communication and sympathy felt towards the characters shown in the story, respectively impact an individual's judgment of communication on the issue of child marriage (H1). Additionally, it is also proposed that empathy felt towards the characters shown in the story and ease of understanding of the content impact an individual's judgment of communication on the problem of child marriage (H2).

Subsequently, the study tries to assess whether the judgment of communication has an impact on the intention to spread positive word of mouth about the communication (H3).

The intention to recommend has a relationship with behavioral intention. The behavioral intention in this study has been tested in five different directions, which include the intention to raise the topic within the family, intention to raise the topic among friends and neighbors, intention to make arrangements within the house for everyone to follow the recommended practices, intention to follow the instructions themselves, and to remind others. So, we further hypothesize that the intention to spread a positive word has an impact on the intended behavior (H4) to raise the topic of child marriage among family members, friends, and neighbors; to make arrangements in the house for others to follow the message; to follow the instructions given the communication themselves; and to provide a timely reminder to the target group.

Outcomes of the Intervention

The efficacy of the communication is evaluated by examining the influence of individuals' cognitive and affective responses on their judgment of the content of the communication, the effect of judgment over the intention to recommend the message to others, and the effect of intent to recommend the message on their intended behavior. Through the analysis, it is interpreted that cognitive response (COG) and sympathy (SYMP) have a significant impact on evaluative judgment (EJ) of the communication (significant at 99% confidence interval). On the other hand, empathy (EMP) and ease of understanding (EOU) do not significantly impact evaluative judgment. So, H2 cannot be supported statistically. Table 2 depicts the regression analysis indicating the influence of cognitive and affective evaluation on an individual's judgment about communication. The cognitive factors include overall cognitive response, ease of understanding, and involvement. The affective response includes sympathy and empathy felt by the individual towards the characters and their circumstances. The influence of cognitive response is stronger on evaluative judgment (EJ) than the influence of sympathy towards the characters and situation. The

Table 2. Regression Coefficients for the Dependent Variable – Evaluative Judgment (EJ) of Communication

Dependent Variable	Unstandardized Coefficients		Standardized Coefficients		
	<i>B</i>	Std. Error	Beta	<i>T</i>	Sig.
(Constant)	2.640	.213		12.417	.000
Cognitive Response	.347	.052	.269	6.670	.000
Sympathy	.103	.030	.146	3.412	.001
Empathy	.013	.013	.037	1.011	.313
Ease of Understanding	.006	.012	.017	.503	.615

Table 3. Regression Coefficients for the Dependent Variable – Intention to Recommend Acquaintances to Send Their Daughters to School and Not Marry Them Before 18 Years of Age (INT_POS)

Dependent Variable	Unstandardized Coefficients		Standardized Coefficients		
	<i>B</i>	Std. Error	Beta	<i>T</i>	Sig.
(Constant)	4.316	.215		20.101	.000
Evaluative Judgment	.115	.044	.094	2.626	.009

Table 4. Regression Coefficients for the Dependent Variable – Intended Behavior of Raising the Topic in Family (BEH_FAMILY)

Dependent Variable	Unstandardized Coefficients		Standardized Coefficients		
	<i>B</i>	Std. Error	Beta	<i>T</i>	Sig.
(Constant)	4.383	.120		36.517	.000
Intention to Spread Positive Word	.110	.024	.158	4.472	.000

Table 5. Regression Coefficients for the Dependent Variable – Intended Behavior of Raising the Topic with Friends and Neighbors (BEH_FRIENDS)

Dependent Variable	Unstandardized Coefficients		Standardized Coefficients		
	<i>B</i>	Std. Error	Beta	<i>T</i>	Sig.
(Constant)	3.755	.178		21.128	.000
Intention to Spread Positive Word	.214	.036	.207	5.909	.000

elements of the cognitive response include : (a) I found the video to be believable and realistic, (b) The message conveyed in the video is easy to follow, (c) The content of the video is attention-grabbing, and (d) The message shown in the video is clear. These elements were taken from the scale by Stafford et al. (2002) for measuring cognitive attitude towards an advertisement.

The findings support our hypothesis H1. Therefore, people who rated the communication better on sympathy and cognitive response have a higher score of evaluative judgment on the communication.

The second step is to understand the impact of the evaluative judgment on intention to spread positive word of mouth. Table 3 indicates a strong influence of evaluative judgment on intention to spread positive word of mouth (t - value = 2.626). This is in support of hypothesis H3, which is significant at the 95% confidence interval.

Subsequently, hypothesis H4 is verified to ascertain the impact of intention to spread positive word of mouth on the behavioral intention of action at different levels. The different levels of action are : discussion with family (BEH_FAMILY), discussion with friends and neighbors (BEH_FRIENDS), making arrangements to provide education to a girl child in one's house (BEH_ARRANGE), following the recommended practices themselves (BEH_SELF), and sending reminders to other people (BEH_REMIND). The output of regression analysis of intention to spread positive word of mouth with the behavioral intention of the action is shared in Tables 4 – 8.

A beta value of .158 and t - value of 4.47 (Table 4) indicate that the intention to spread positive word of mouth has a bearing on intention to raise the topic in the family too.

A beta value of 0.207 and t - value of 5.909 (Table 5) indicate that the intention to spread positive word of mouth has a bearing on intention to raise the topic among friends and neighbors.

Table 6. Regression Coefficients for the Dependent Variable – Intended Behavior of Making Arrangements for Education of Girls at Home (BEH_ARRANGE)

Dependent Variable	Unstandardized Coefficients		Standardized Coefficients		
	<i>B</i>	Std. Error	Beta	<i>T</i>	Sig.
(Constant)	4.714	.133		35.371	.000
Intention to Spread Positive Word	.041	.027	.054	1.504	.133

Table 7. Regression Coefficients for the Dependent Variable – Intended Behavior of Following the Instructions Shown in the Video (BEH_SELF)

Dependent Variable	Unstandardized Coefficients		Standardized Coefficients		
	<i>B</i>	Std. Error	Beta	<i>T</i>	Sig.
(Constant)	3.728	.174		21.368	.000
Intention to Spread Positive Word	.241	.036	.235	6.777	.000

Table 8. Regression Coefficients for the Dependent Variable – Intended Behavior of Giving Timely Reminders to the Parents of Girl Child Less Than 18 Years of Age (BEH_REMIND)

Dependent Variable	Unstandardized Coefficients		Standardized Coefficients		
	<i>B</i>	Std. Error	Beta	<i>T</i>	Sig.
(Constant)	3.353	.180		18.605	.000
Intention to Spread Positive Word	.304	.037	.283	8.260	.000

The intention to spread a positive word does not necessarily impact the intended behavior of making arrangements for the education of a girl child in the house (Table 6). This may be impacted by other external factors such as the absence of money or a good educational institution in the vicinity.

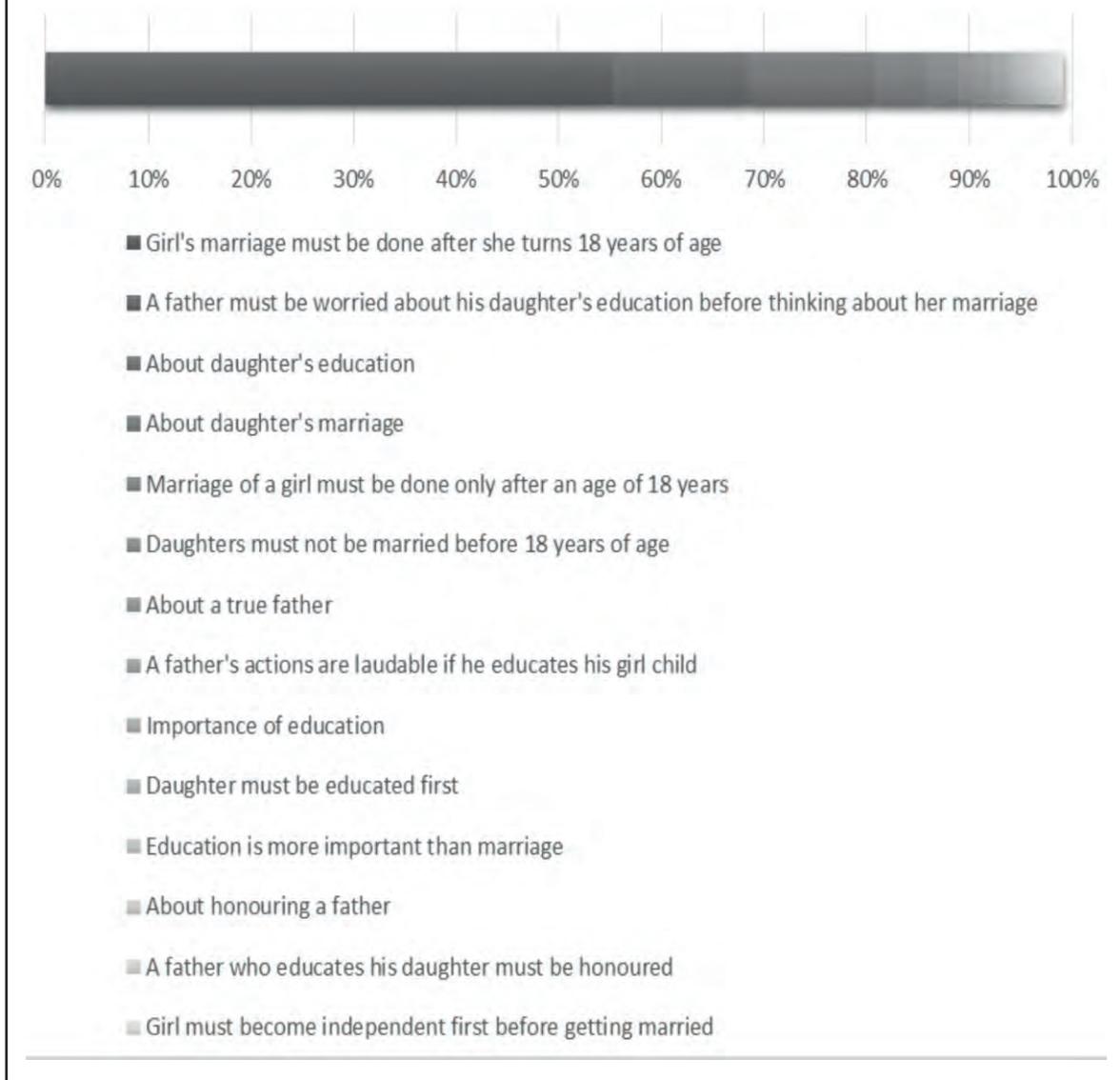
A beta value of 0.293 and *t*-value of 8.260 (Table 8) indicate that the intention to spread positive word of mouth has a bearing on intention to send timely reminders about the legal age of marriage for people.

Looking at Tables 4 – 8, the intention to spread positive word of mouth is seen to have a significant impact on the behavioral intention at every level. The *t*-values in the range of 4.472 to 8.206 support hypothesis H4 in all aspects except one. Intention to spread a positive word (INT_POS) has a much stronger influence on BEH_REMIND than BEH_FAMILY (*t*-value 8.260 vs. 4.472). However, both are seen as being positively impacted by INT_POS. INT_POS also influences the intention to guide others with a strong *t*-value of 8.260.

To understand the association of the strong influence of the communication with the novelty of its exposure, the participants were asked about the awareness about any campaign or communication on child marriage theme in the past, and 88% of the participants reported to have never seen any such communication earlier.

Furthermore, the field volunteers also reported whether each participant was able to recall the elements as well as the story of the communication on a scale of 1 (*strongly disagree*) to 5 (*strongly agree*). For 98% of the participants, the volunteers strongly agreed/agreed that participants recalled all the elements of the communication. For 100% of the participants, the volunteers strongly agreed/agreed that the participants were able to recall the message of the communication.

Figure 2. Unaided Recall of the Communication : Frequency Percentages of Recalled Messages



The qualitative analysis of the unaided recall of the communication shows that 55% said the communication talked about daughters' marriage after they turned 18 years old, 13% said the communication explained that a father must be worried about the daughter's education before thinking of her marriage, and 12% recalled that the communication talked of daughters' education. The percentages of the frequency of the recalled messages are shown as a stacked column chart in Figure 2.

Discussion

There have been programs and interventions carried out along with their evaluation worldwide to reduce child

marriages, but the efforts have been limited in India (Chae & Ngo, 2017 ; Kalamar et al., 2016 ; Walker, 2012). Furthermore, most of these interventions were associated with policy making, law enforcement, education and skill training of the young girls involving assessment based on several behavioral outcomes such as the age of girls' marriage and the number of girls married below 18 years of age among many. Unlike these interventions, the focus of our study is on communicating with the cohorts of Todaraisingh, Rajasthan that included the parents, potential parents, and other household elders who had a say in decision making within a family, such as decisions regarding marriage (Paul, 2019a ; Santhya et al., 2010). Additionally, this six-month-long study was targeted to assess the effect of the communication based on the participants' responses captured after a minimum of its three exposures. The profile-driven study is assessed in terms of various behavioral constructs not measured in other such interventions, including an evaluative judgment of the communication, ease of understanding, empathy and sympathy towards the characters of the video, positive word of mouth, intention to follow the practices, and intention to recommend others. The communication is effective in incurring a positive intention among participants to discuss with their families and friends about the issues related to the girl child, including the importance of the child's education and the appropriate age of her marriage. The results have shown positive influences of specific cognitive and affective responses on the evaluative judgment of an individual along with the high content recall of the specific communication.

The educational intervention is considered successful in influencing the intentions of individuals to discuss the issue of child marriage and the importance of education with their families, friends, and neighbors. However, spreading positive word of mouth is not necessarily associated with the intended behavior of making arrangements for the education of a girl child in the house. This could possibly be caused by the social resistance and traditional practices prevalent in the rural places of Rajasthan for generations, which is an addressable area for future research. However, we could infer that the communication was effective in generating awareness about the issue, in creating high intention among household elders to take right decisions about their female children, and in developing high intent for recommending others about the importance of educating daughters and the appropriate age of their marriage, with the intention being observed as a precursor for activism.

Managerial and Theoretical Implications

This study contributes to the existing research by investigating specific metrics for assessment of communication on the social theme of girl child marriage in terms of content and effect on the attitude and behavior of the target community. Additionally, the process, as well as outcomes of this study, may be helpful in suggesting the communication program designers and managers of social programs to create a relatable, believable, engaging, and clear communication for high cognitive response, evoking sympathy towards the girl children among the target cohorts in context of the issue of early marriage of adolescent girls.

Such communications will positively affect the behavioral intentions of individuals so that they follow the conveyed messages themselves by focusing on the education of their girl children rather than marrying them off at an early age. Additionally, a well-designed communication would also make them engage in discussions on the issue among their family members and friends. Furthermore, the emphasis on the communication being profile-centric would help make it relevant to the community.

Concluding Remarks

Historically, poor health, poverty, and dearth of education have been the causes as well as the consequences of the practice of child marriage. To address this issue in the Indian context, many efforts have been made in terms of policy making and law enforcement, but such measures have not been able to eradicate the practice altogether. Less efforts are evident that have brought behavior change towards the issue of early marriage among rural

communities in India. This research has focused on testing the effect of a profile-centric communication-based intervention based on pre-established measurement scales of marketing and communication.

Directly approaching the specific cohorts of people in selected regions of Todaraisingh, Rajasthan on a one-on-one basis using personalized and volunteer-driven communication proved to be effective in generating a high behavioral response. Such a study, when scaled up, may contribute in bringing a social change in decisions regarding marrying minor girl children. Moreover, existing rural programs initiated by the State governments channelized through accredited social health activists (ASHA) may be complemented and evaluated by similar methods of communication to help in this transformation.

Limitations of the Study and Suggestions for Future Research

The study has been conducted in Rajasthan. The influence of communication for a social cause may have varying effects across differing communities and cultures. Thus, the scalability of a communication must be verified in terms of efficacy. Further research may also consider delineating the metrics for assessing the association of the communication's elements such as its storyline, message, content, and language with the behavioral characteristics of an individual or a community. Transforming the intentions to behavioral change beyond the scope of this research is a long-term process, and the factors that enable this transformation should be considered in future research.

Authors' Contribution

Ms. Charru Hasti and Prof. Mahim Sagar conceptualized the study and supervised the data collection. Under the supervision of Prof. Mahim Sagar, Charru performed the literature review and did the technical writing of the paper. Under the supervision of Prof. (Dr.) Amit Mehndiratta, Ms. Sonal Arora performed the data cleaning and data analysis. Prof. Harish Chaudhry conducted the interpretation of the outcomes of the study after deliberations with the other authors.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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About the Authors

Charru Hasti is an M.Tech. from IIT Bombay. She is a technologist with more than 12 years of interdisciplinary experience in industry, teaching, and research. Her current areas of research interest include modern information systems, systems thinking, system dynamics modeling, and innovations in public health communication.

Ms. Sonal Arora is a Research Scholar in not-for-profit marketing at Indian Institute of Technology, Delhi. She completed her Masters in Business Administration from ICFAI Business School, Gurgaon, and has served the industry for 10 years.

Prof. (Dr.) Amit Mehndiratta is an Associate Professor at the Centre for Biomedical Engineering at IIT Delhi. He received his D.Phil. in Engineering Science from the University of Oxford, the UK, in 2013. Prof. Amit is a fully qualified medical doctor with an MBBS from Dr. MGR Medical University, Chennai, India, and a Master's in Medical Technology from Indian Institute of Technology Kharagpur. Over the last several years, Prof. Amit has been involved in doing extensive research in clinical radiology and biomedical imaging.

Prof. Mahim Sagar is a Professor of Marketing at Indian Institute of Technology Delhi. He is working in the area of consumer-based and community-driven marketing/branding of public and private goods/services. While developing these research agendas, he and his team focused on multiple streams like marketing/branding of public goods/services and the challenges encountered in marketing public policy, ethical branding, not-for-profit marketing, social marketing, and product management & business models.

Prof. Harish Chaudhary (Ph.D., IITD) is an Associate Professor in the Department of Management Studies, Indian Institute of Technology Delhi, for the last 30 years. His areas of interest are marketing, entrepreneurship, and school education. He has conducted over 100 training programs for school leaders on management imperatives for educational institutions in India and abroad and numerous workshops for teachers on academic leadership in schools.