

Countering violence against women by encouraging disclosure: A mass media experiment in rural Uganda*

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Abstract

Violence against women (VAW) is widespread in East Africa, with almost half of married women experiencing physical abuse. Those seeking to address this issue confront two challenges: some forms of domestic violence are widely condoned, and it is the norm for witnesses to not report incidents. Building on a growing literature showing that education-entertainment can change norms and behaviors, we present experimental evidence from a media campaign attended by over 10,000 Ugandans in 112 rural villages. In randomly assigned villages, video dramatizations discouraged VAW and encouraged reporting. Results from interviews conducted several months after the intervention show no change in attitudes condoning VAW yet a substantial increase in willingness to report to authorities, especially among women, and a decline in the share of women who experienced violence. The theoretical implication is that interventions that affect disclosure norms may reduce socially harmful behavior even if they do not reduce its acceptability.

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Introduction

Thirty-five percent of women worldwide have experienced physical or sexual violence by an intimate partner or non-partner sexual violence (WHO 2013). Permissive attitudes towards such violence are widespread in many contexts, among both women and men. As with other socially harmful behaviors, prominent attempts to counter violence against women (VAW) aim at changing people's views on whether it is acceptable to engage in such behavior.¹

Social psychologists, however, have long suggested that value judgments are deeply rooted (Staats 1967) and slow to change (Doob 1947). Indeed, recent evidence suggests, that shifting attitudes around social issues can be difficult. Scacco and Warren (2018), for example, find that an intervention designed to foster positive social contact between Christian and Muslims in Nigeria did not reduce prejudicial attitudes. Similarly, Paluck (2009) and Paluck and Green (2009) find that an ethnic reconciliation soap opera in Rwanda had little effects on inter-group attitudes. And although there is some evidence that NGO-led campaigns that involve extensive on-the-ground mobilization efforts may succeed in reducing the acceptance of VAW (e.g. Abramsky et al. 2014, 2016), such multi-faceted campaigns are prohibitively expensive to bring to scale in developing regions. In a pilot study (Redacted citation), we found no evidence that a lighter touch intervention in the form of education-entertainment videos that portrayed VAW as unacceptable altered viewers' attitudes towards such violence.

Socially harmful behaviors arise as a result of a combination of factors that may include permissive attitudes but also strategic considerations. As a consequence, changing attitudes may be neither a necessary nor a sufficient condition for changing behavior. Some of the interventions mentioned above, for example, were successful at curbing socially harmful behaviors despite their failure to change attitudes. We distinguish between attitudes, which are rooted in moral value judgments, on the one hand, and perceptions of norms, in the form of expectations about the behavior of others, on the other hand. The conviction that it is morally unacceptable to beat one's wife, for example, is distinct from the expectation that the victim will not report the violence to the authorities.

In this paper, we focus on expectations around disclosure as an alternative lever to prevent

¹Other behaviors that have been addressed through campaigns which seek to reduce the behavior's acceptability include discrimination and stigma towards disadvantaged groups (Thornicroft et al. 2016; Gronholm et al. 2017), electoral corruption (Vicente 2014), female genital mutilation (Berg and Denison 2012; Freymeyer and Johnson 2007), HIV transmission (Wagman et al. 2015), and poor hygiene (Galiani et al. 2012).

socially harmful behavior. Many harmful practices are observable only for the individuals directly involved and, possibly, a small number of bystanders. This problem is especially severe for VAW, which typically happens in the home. Even in a context where communities and authorities see violence as unacceptable and would sanction perpetrators or otherwise intervene, they will be incapable of doing so if victims and bystanders do not come forward. Ethnographic and survey evidence suggests that women in East Africa and beyond are reluctant to report experiences of violence (McCleary-Sills et al. 2016). We show that such reluctance may be linked to the expectation of ostracism by a community that, though opposed to certain forms of violence, tends to be skeptical of witnesses' motivation for coming forward. One alternative pathway to violence reduction, therefore, is to reduce expectations about whether victims and bystanders will face social sanctions for coming forward, so as to encourage disclosure of violent incidents.

To understand whether expectations around disclosure are amenable to change through interventions that can be scaled easily, we designed an experiment in rural Uganda. In light of recent randomized trials on the topics of corruption (Blair et al. 2017), HIV (Banerjee et al. 2017), and ethnic conflict (Paluck and Green 2009), mass media dramatizations of social problems, or “education-entertainment,” are believed to be a promising and scalable way to bring about normative and behavioral change. We present new experimental evidence illustrating mass media’s potential as well as its limitations. Ugandan villagers were exposed to a placebo-controlled education-entertainment campaign designed to convince audiences that VAW is deplorable and to encourage viewers to speak out if they see it. The campaign comprised 670 film screenings in 112 villages, attended by over 10,000 adults. We measure outcomes through seemingly unrelated surveys conducted two and eight months after the conclusion of the media campaign.

Our video intervention had no statistically significant effect on general attitudes about VAW, such as whether husbands ever have legitimate grounds for hitting their wives. At the same time, we do find substantial changes in expectations around disclosure and respondents' willingness to report VAW to formal or informal authorities. In the control group, two-thirds of women believed they would face social sanctions for reporting incidents of VAW; our campaign reduced this belief by eighteen percent. Women became substantially more willing to report incidents of VAW to local authorities and agents of the state, as well as to family members. Moreover, men and women became more likely to believe that their fellow community members would intervene to stop VAW.

In the communities where we screened our anti-VAW campaign, this apparent erosion of a norm against speaking out coincided with a decrease in violence: we estimate the probability that women in a household experienced violence over a six-month period following our films decreased by five percentage points, effectively preventing violence in hundreds of households. The theoretical implication is that it is possible to bring about a meaningful change in outcomes by changing expectations around disclosure to local authorities, without bringing about a broad change in core attitudes.

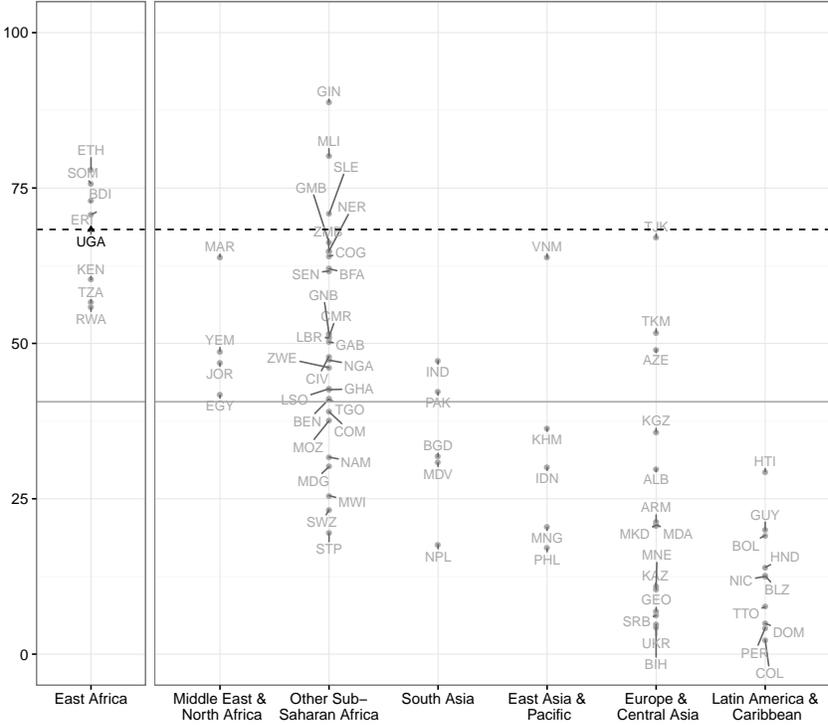


Figure 1: Average percentage of women who state that it is acceptable for a man to hit his wife in at least one of five scenarios, by country. Scenarios include: when she argues with him, burns the food, goes out without telling him, neglects the children, or refuses to have sex with him (DHS 2015). Points show percentages by region and country, solid line shows average for all countries in sample, dashed line shows mean for Uganda.

Studying violence prevention in Uganda has the potential to advance our understanding of how to curb socially harmful behaviors in important ways. Sub-Saharan Africa is the region with the highest reported prevalence of intimate partner violence (WHO 2013). Almost one-third of rural Ugandan women in the 2011 DHS survey report that they had been punched with a fist, kicked or dragged, strangled or burnt, or threatened with a knife or other weapons.² According to the 2018

²These figures from the 2011 DHS are calculated using variables *D105a-f*, and *j*; these rates would be higher if

Human Development Report, around 50% of Ugandan women 15 years and older have experienced violence by an intimate partner (UNDP 2018). This places Uganda in the top tercile of the worldwide distribution of countries in terms of the prevalence of VAW. Understanding how to prevent VAW in this set of countries is of particular policy relevance. As typical for such contexts, Ugandans tend to hold conservative views about gender roles (Tsai et al. 2017), and Uganda ranks 126th on the UNDP’s 2017 global ranking of countries on gender equality.³ Furthermore, as depicted on Figure 1, permissive attitudes towards VAW are widespread among women in Uganda, even in comparison to other countries in Sub-Saharan Africa. Our finding that violence prevention strategies can succeed by changing norms without changing attitudes, even in a context where barriers to prevention appear so high, suggests disclosure-centric approaches may be effective in other contexts where VAW is widespread.

The rest of this paper is organized as follows. In section 1, we summarize theoretical perspectives on how to address socially harmful behavior including VAW. In section 2, we discuss ways in which norms of non-disclosure may contribute to the prevalence of VAW in Uganda and beyond. Section 3 describes our messaging campaign, and section 4 presents the experimental research design. Section 5 summarizes our key results: no apparent changes in core attitudes about VAW or gender hierarchy more broadly; statistically significant shifts in perceived norms, especially those having to do with whether allegations of VAW are likely to be taken seriously; significant increases in willingness to report to authorities, especially among women; and a decline in the share of women who report experiencing intra-household violence. We address alternative explanations, such as social desirability bias, and present a series of robustness checks in the appendix. Section 6 concludes by discussing how the results obtained here might generalize to other domains of behavior and inform our theoretical understanding of the conditions under which media interventions are able to change perceptions of social norms around disclosure.

1 Reducing Harm Through Changes in Attitudes and Norms

A common approach to countering socially harmful behavior is to target value judgments that are hypothesized to enable that behavior. Campaigns to reduce discrimination, for example, seek to undermine prejudicial attitudes toward outgroups (Thornicroft et al. 2016; Gronholm et al. 2017),

one were to include as well questions concerning emotional and sexual abuse.

³<http://hdr.undp.org/en/composite/GII>

and governments attempt to discourage female genital mutilation by convincing citizens that such behavior is morally unacceptable (Berg and Denison 2012; Freymeyer and Johnson 2007). Similarly, prominent approaches to reducing VAW are premised on the idea that substantial and enduring change requires a shift in views on the legitimacy of VAW in particular and in opinions about gender equality more generally (Abramsky et al. 2014, 2016; Wagman et al. 2015).

Yet, to the extent that attitudes towards socially harmful practices are rooted in deep-seated values developed during formative childhood years (Brooks and Bolzendahl 2004), changing them may require intensive interventions. Those attempts that have shown success in reducing the social acceptability of VAW, for example, tend to consist of intensive community-wide campaigns. The SASA! campaign (Abramsky et al. 2014, 2016) in Uganda, for example, brought community members and leaders together to reduce acceptance of power abuses within the home and was successful in reducing both the social acceptability of VAW and its incidence. Wagman et al. (2015) present similar success in an intensive outreach campaign directed at men and boys. Putting aside questions about the precision with which these studies have isolated effects,⁴ such intensive interventions are difficult to scale beyond the neighborhoods where they have been attempted.

Findings on whether comparatively less resource-intensive approaches such as media campaigns can change the acceptability of VAW are mixed. Jensen and Oster (2009) provide evidence that the introduction of cable television reduced the acceptability of VAW in India. Evidence from communally deployed education-entertainment campaigns in Mexico (Arias 2018) also suggests that such campaigns have the capacity to reshape attitudes. Yet, in a pilot study conducted in 2015, we found that an education-entertainment campaign that sought to convey that VAW is both illegal and morally unacceptable did not significantly alter views on gender equality and the legitimacy of such violence when participants were interviewed two months later (Redacted citation).

Permissive attitudes, however, are only one potential obstacle and changing them may be neither a necessary nor a sufficient condition for the prevention of socially harmful behaviors. Psychologists have long argued that attitudinal change does not necessarily result in behavioral change (Festinger 1964). In a 1969 review of the social psychology literature on attitude-behavior consistency, Wicker

⁴Prior randomized trials have assigned very small numbers of geographic clusters to treatment or control, which makes it difficult to reliably estimate the sampling variability associated with the estimated treatment effects. An exception is Holden et al. (2016), which largely reports nulls. Like the Holden et al. study, this one overcomes power limitations faced in previous work by randomizing among more than 100 geographic clusters.

concluded that “it is considerably more likely that attitudes will be unrelated or only slightly related to overt behaviors than that attitudes will be closely related to actions” (65, cited in [Regan and Fazio 1977](#)). In line with this assessment, work on corruption suggests, for example, that there can be stark disparities between attitudes towards and willingness to engage in socially harmful behavior ([Miller 2006](#)). This literature also finds that a strong predictor of the willingness to pay bribes is the expectation that many others will also do so ([Dong et al. 2012](#); [Corbacho et al. 2016](#)).

A large body of work in psychology suggests that such perceptions of social norms—expectations about the behavior of others—can influence behavior irrespective of the private attitudes that individuals hold. The notion that individuals consider how they will be affected by the behavior of others when choosing how to act is also central to political economy approaches that treat observed outcomes as the result of strategic interactions between utility maximizing individuals ([Greif et al. 1994](#); [Olson 2009](#); [Young 2001](#)). Results from work on costly punishment, for example, demonstrate that expectations of social sanctions play a key role in preventing socially harmful behaviors such as insufficient contributions to public goods ([Fehr and Gächter 2000](#)).

When it comes to socially harmful behavior that is difficult to observe, expectations about *disclosure* become especially important. Communities as well as state actors will find it difficult to take action against harmful practices that occur in the private sphere, such as VAW in the home, unless victims or witnesses who happen to overhear an incident disclose what they know. In places where witnesses are reluctant to come forward, even socially harmful behavior that is widely condemned may persist. Where potential perpetrators expect witnesses to stay quiet, they may come to believe that they can act with impunity. Moreover, as we argue below, the willingness of victims and witnesses to disclose may also arise from expectations about how communities will react to disclosure.

Contrary to attitudes, such expectations about the behavior of others may not be rooted in deep-seated value judgments but rather in *beliefs* about the world. Such beliefs may be updated in the face of new information. [Corbacho et al. \(2016\)](#) find, for example, that a flyer that presented Costa Ricans with the information that paying bribes was increasingly common doubled the rate at which individuals expressed willingness to engage in corruption. Beliefs may be especially malleable if people are uncertain about how others would behave in a situation with which they have little prior experience. Someone may, for example, have never reported a case of VAW before, which leaves

open the possibility that she or he may be wrong about whether others would be sympathetic to disclosure. In short, to the extent that beliefs are more amenable to change than deep-seated value judgements, it may be easier to reduce socially harmful behaviors by targeting perceptions of norms rather than attitudes.

2 Violence Against Women and Norms of Non-Disclosure

The UN definition of VAW comprises a wide range of physical and emotional abuse that can occur within the private or public spheres ([United Nations General Assembly 1994](#)). This paper focuses primarily on physical violence inflicted by intimate partners within the home. The literature on this kind of violence draws from a wide array of disciplines (e.g., health, gender studies, psychology, criminology, sociology, political science, anthropology, law) and has identified various factors that may contribute to its prevalence.

[Heise \(1998\)](#) groups these into four levels. First, there is a body of work that focuses on individual-level factors such as childhood experiences, social dominance orientations, and beliefs about gender hierarchy that impel men to commit assault or rape ([Claes and Rosenthal 1990](#); [Gottman et al. 1995](#); [Babcock et al. 2000, 2005](#); [Hotaling and Sugarman 1986](#)). Second, individual predispositions of this kind are embedded within the social environment defined by the daily interactions of the victim and perpetrator. [Heise \(1998, 265\)](#) dubs this environment a “microsystem.” In the context of East Africa, this environment often features male control of wealth and autocratic authority over family decisions; it may also feature economic pressures or substance abuse, especially alcohol abuse ([Kantor and Straus 1987](#)). This microenvironment is, in turn, embedded within a broader ecology of social structures that is termed “exosystem” by [Heise](#). The exosystem includes neighborhood networks and broader community structures in which women may be socially isolated ([Baumgartner 1993](#)), especially from others who could assist them if they were assaulted, while men may be surrounded by peers who encourage or model VAW ([Miedzian 2002](#)). Finally, these contributing factors operate within a broader cultural sphere, what [Heise \(1998\)](#) calls the macrosystem, with defined gender roles in which masculinity is tied to aggression and dominance, while women are viewed as subordinate and subject to physical chastisement. One countervailing aspect of the macrosystem is the legal system that may allow for divorce or proscribe domestic violence. These rules, when they are enforced, potentially change a perpetrator’s calculus of the risks involved in

violence.

Here, we focus on factors at the intersection of Heise’s micro- and exosystem—expectations of perpetrators, victims, and others in the community about whether and why witnesses disclose what they know about incidents of VAW and about what happens to those who come forward. In Uganda, as in many places, people are reluctant to disclose information about violence in the home (on non-disclosure of violence elsewhere, see Felson and Paré 2005; Felson et al. 1999; Nero 1990; Sable et al. 2006; Tuerkheimer 2017). When asked what they would do if they learned that their cousin had been severely beaten, three-quarters of the respondents in our 2016 midline survey said they would prefer to merely express sympathy to her rather than alert the LC1 chairperson. Just one in ten respondents would be willing to report this type of incident to the police.

To some degree, such reluctance to disclose may be linked to views on the legitimacy of VAW: witnesses who see VAW as acceptable may simply see no reason to report it. Yet, even in a context as conservative as Uganda, certain forms of violence are perceived as unacceptable. Tsai et al. (2017), for example, find that VAW is perceived as justified by a majority of Ugandan respondents when the woman is framed as having intentionally contravened gendered standards of behavior, but only by a small minority when her behavior is described as unintentional. This affirms our qualitative fieldwork that suggests violence is condoned only when it is seen as serving some “pedagogical” end. Further, in surveys we conducted in 2016 among rural Ugandans, thirty-one percent of respondents said that a husband is justified in beating his wife when she “disobeys.” When asked whether they meant that she should be slapped or beaten with more force than that, only five percent of those who initially said that beating was justified endorsed normatively more severe violence. The overwhelming majority of our respondents do not condone violence more forceful than slapping and it appears likely that most would be in favor of intervention to limit such violence. In fact, eighty-eight percent of respondents in the control group of this study stated other people should intervene to stop violence if they learn of a husband beating his wife every evening.

Reluctance to disclose may also be linked to macro-level factors, such as the absence of authorities who can help those who come forward. Disclosure may seem futile if law enforcement and judicial systems are difficult to access or so low in capacity that successful intervention seems unlikely. Police posts are sparsely distributed in rural Uganda. Our 2017 survey found that seventy-five percent of rural respondents see police on patrol in their village less often than once per week, and more than

forty percent see them less than once per month.

Rural areas, however, are not completely without authorities that villagers could turn to in order to address violence in their community. Each village in Uganda is headed by an LC1 chairperson. Formally, the LC1 chairperson presides over the Local Council, which sets and implements policy for the village, and leads the Local Council Court, which has jurisdiction over civil law matters including cases of domestic violence. LC1 chairpersons regulate village life in ways that seem more similar to ‘informal social control’ (Schwartz and DeKeseredy 2008, 183) than to formal acts of law enforcement. For instance, an LC1 chairperson may levy sanctions against violent offenders or intervene on behalf of women at risk. Although Ugandan village leaders are often characterized as socially conservative, our survey data suggest that LC1 chairpersons (N=55) are in fact significantly more opposed to VAW than the general population (eighteen percent of LC1 chairpersons and thirty-one percent of all villagers endorse the view that a husband has a legitimate reason to beat his wife if she “disobeys”). A similar role is played by *Nabakyalas*, or representatives of women in the village, who in our surveys almost never endorse VAW. Victims of or bystanders to violence may thus seek help from village leaders, even where access to formal police is limited or police are distrusted.

An important reason why even witnesses who condemn violence and who have access to sympathetic authorities may be reluctant to come forward about violence, we believe, is that they expect to be socially sanctioned for doing so. In what might be thought of as a norm of *non-disclosure*, both women and men in our sample expect to be branded a “gossip” and scolded by their communities if they come forward about violence. Women expect especially high reputational and physical costs for disclosing information that may incriminate men: fifty-six percent of women indicate that they would be labeled a gossip were they to disclose that a neighbor beats his wife. The fear of being accused of spreading rumors and subsequent ostracism featured prominently in the open-ended comments that respondents in our survey in Uganda volunteered when explaining their reluctance to share information with their community about a hypothetical violent incident. Being labeled a “gossip” may even result in physical harm. When asked whether various kinds of behavior make it justifiable for a man to beat his wife, respondents in our 2015 survey were most acceptant of VAW in response to “gossiping.” Even compared to infidelity, a greater proportion of people consider “gossiping” admissable justification for VAW.

What may be the origin of such a norm against disclosure? One underlying factor may be that

reports of VAW are difficult to verify. Where community members underestimate the prevalence of VAW, this leaves scope for doubt about the motivations of those who come forward. In our survey, community members indeed do not appear well-informed about the prevalence of VAW in their village (excluding their own household).⁵ In line with this idea, our survey evidence suggests that respondents are more willing to report hypothetical incidents of VAW if they are primed to think that the incident has also been observed by others who may be able to confirm the report (see Section F.1 of the Online Appendix for details).

Uganda thus appears to be a promising context in which to explore the potential for a mass media campaign to reduce violence. While such a campaign may change attitudes, it does not need to. Even though permissive attitudes towards VAW are widespread in Uganda, certain forms of violence are seen as wrong, and people believe one should come forward about it. Nonetheless, they are reluctant to do so for fear of being labeled a “gossip.” The belief that false accusations are common is widespread even beyond Uganda, especially when it comes to sexual violence (Ferguson and Malouff 2016; Wheatcroft and Walklate 2014). Since such beliefs are difficult to verify through direct experience, they may be amenable to change through a campaign that portrays those who report as speaking the truth. Ultimately, such a campaign may reduce VAW by altering perpetrators’ expectations about whether they can act with impunity, and thereby reduce violence.

3 A Mass Media Campaign to Counter Violence Against Women

Our anti-VAW media campaign consists of three short video vignettes screened during the intermission at film festivals held in video halls (*bibanda*) across a broad swath of rural Uganda (see Figure 2 for a map). Each vignette is between four and a half and eight minutes long. While an overarching narrative runs through the three vignettes, each can also be understood as a self-contained story in isolation from the other two. The narrative of the videos is outlined in Section E.3 of the Online Appendix, and they can be viewed at this address: http://tiny.cc/Uganda_VAW_media_campaign. The film festival comprised six films shown one per week over consecutive weekends, from July 30 to September 4, 2016 in each of the 112 communities where the study took place (see Figure 3 for a timeline).

⁵We asked both men and women about the frequency with which assaults occur in their community and asked follow up questions about assaults against women. Within the same location, men’s and women’s reports are weakly correlated, and both are weakly correlated with a separate battery of questions, described below, which asks women about incidents occurring within their household. See Tables 31 and 32 in F.3 of the Online Appendix.

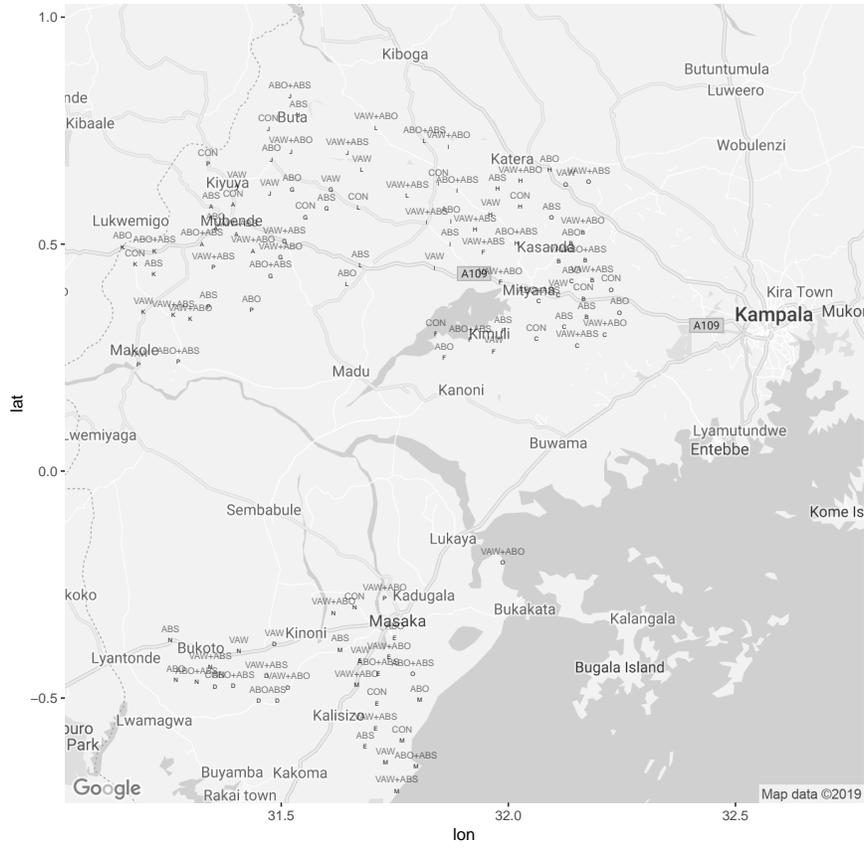


Figure 2: Clusters Included in the Study.

Letters indicate blocks within which random assignment occurred, while labels indicate the treatment condition to which the village was assigned.

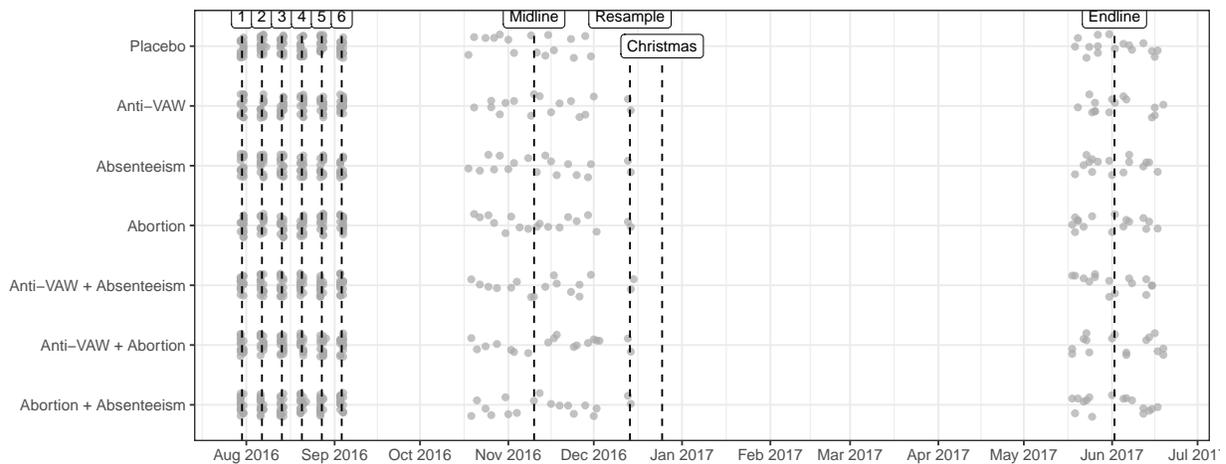


Figure 3: Timeline of media campaign, midline and endline surveys.

Points represent unique visits to villages, either to screen films or to collect data. The Y axis indicates the different treatment conditions, the X axis is ordered by date. The film screenings numbered 1-6 featured the following Hollywood films, in order: Pirates of the Carribean; Slumdog Millionaire; Spy; The Fast and the Furious 7; Creed; and Oz The Great and Powerful.

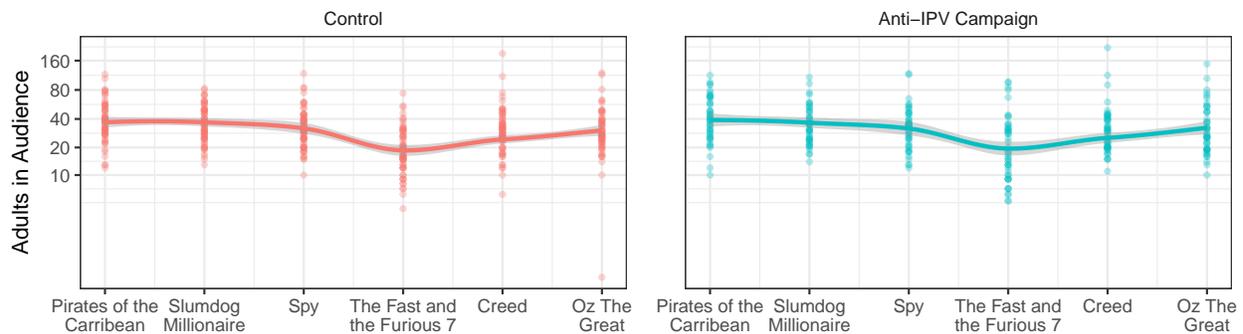


Figure 4: Adult attendance of screenings by treatment status.

The horizontal axis presents the films in chronological order. The vertical axis reports the number of adults attending a screening. Points represent a single screening, lines represent LOESS-smoothed average over time and confidence interval. Left panel reports only screenings in control villages, right panel reports attendance in villages assigned to anti-VAW campaign.

A key psychological principle underlying education-entertainment is the concept of “vicarious learning” (Bandura 2004). According to this theory, people acquire new ways of responding to social situations not only through direct experience, but also by making inferences based upon the observation of others’ behavior. Bandura points out that such learning need not take place through

the observation of actual behavior; people may also acquire new ways of acting based on behavior modeled in fictional dramatizations.

Our campaign uses education-entertainment to convey what Bandura terms a “differential modeling” narrative:

Characters representing relevant segments of the viewing population are shown adopting the beneficial attitudes and behavior patterns. [...] Other characters personify negative models exhibiting detrimental views and lifestyles. Transitional models are shown transforming their lives by moving from uncertainty or discarding adverse styles of behavior in favor of beneficial ones. Differential modeling contrasts the personal and social effects of different lifestyles. Viewers are especially prone to draw inspiration from, and identify with, transforming models by seeing them surmount similar adverse life circumstances. (Bandura 2004, 83)

Our videos follow this *Tale of Two Cities* motif. The first vignette begins in a village where there is reluctance to report VAW. The protagonist is a sympathetic and personable woman whose husband beats her severely despite her sincere efforts to appease him. As depicted in the first panel of Figure 4 in section E.3 of the Online Appendix, the protagonist’s neighbor overhears her screams but decides not to speak out. In the second vignette, which begins with the protagonist’s hospitalization and ends with her funeral, we learn that not only her neighbor, but also her daughter and parents knew about the violence. They express regret for failing to speak out sooner. In the third vignette, we move to the “disclosure” village. The focal woman in the story is also beaten by her husband, but unlike the woman in the preceding vignette, she decides to disclose this information to her parents. Rather than scold, her parents intervene to help mediate. Moreover, the parents share the information with the local women’s counselor (*Nabakyala*), who visits the household to provide guidance. The vignette closes with the couple in visibly better relations with each other. A voiceover confirms that the situation has improved and implores viewers to speak out before it is too late when they learn of violence in their community.

This dramatization is designed to facilitate vicarious learning through a vivid and realistic depiction of the audiences’ context and experience. It is rare for media with high production value to be filmed on site and in the local language (Luganda). The video dramas, which were composed by local screenwriters, depict situations that would be very familiar to the participants in our study. And indeed the relevance of the films was apparent in a separate survey experiment we conducted wherein villagers directly watched our video material on hand-held tablets prior to answering survey

questions.⁶ The vast majority (eighty-four percent) of respondents said that the stories could have happened in their village. That viewers found the stories relevant to their own lives is also reflected in what they said when invited to comment on the videos, for instance: “The video is so real” or “What I have seen in the video can also happen in my home.”

Vicarious learning is important theoretically insofar as it enables audiences to update their beliefs about both the prevalence of violence in their community and the motivations of those who claim that violence has occurred. The films present a strong case against the idea that allegations stem from baseless gossip. The videos not only depict people reporting an actual incident, but also show these reports being believed by those who receive the second-hand accounts. Another source of vicarious learning is common knowledge (Schelling 1960). In our case, the experience of viewing the videos in a communal setting enables audiences to update about how others in their community may be updating in light of their shared viewing experience (Arias 2018).

3.1 Ethical Considerations

We took a number of steps to ensure the appropriateness of our media campaign for the setting in which we work in order to make sure that it was protective of participants’ rights and well-being. We also took steps to ensure that our survey measurement of intra-household violence minimized risk of retaliation by men. As these require a fuller description than constraints allow for here, we include a description of the measures taken in section E.1 of the Online Appendix.

4 Research Design

Aside from the messages on VAW that are the focus of this paper, our field experiment was designed to test the effects of two other sets of video vignettes. These concern the stigma surrounding abortions and the problem of teacher absenteeism, respectively. We assigned villages to receive either: one set of vignettes (e.g., anti-VAW only); a combination of two sets (e.g., abortion stigma and anti-VAW); or a placebo (just the Hollywood movie with no vignettes). In total, this creates seven experimental conditions. Prior to random assignment, villages were organized into sixteen blocks of seven in order to minimize within-block variance in latitude and longitude (see Figure 2). The analyses in this paper will compare respondents from clusters (villages) that were exposed to

⁶We did not include questions about respondents’ views on the videos in our main survey to preserve, as much as possible, its unobtrusive character.

the messages on VAW (anti-VAW, abortion and anti-VAW, and anti-VAW and absenteeism) to the respondents in clusters assigned to all other conditions (collectively referred to as the control group). We discuss the identifying assumptions behind this design in section A.1 of the Online Appendix and show that our results are robust when these assumptions are relaxed in sections B.1 and B.2.

Almost all sites complied with the treatment assignment insofar as we were able to correctly screen the assigned films and messages.⁷ We measure individual-level compliance based on responses to questions about attendance of the screenings posed at the end of our surveys conducted months later.⁸

In most analyses, we focus on *compliers*, respondents who indicated they attended at least one of the screenings. (Section A.1 of the Online Appendix provides a fuller definition of compliers and describes their attributes.) By comparing compliers in the treatment group to compliers in the control group (i.e., those who saw films but not the VAW messages), we obtain unbiased estimates of the complier average causal effect.⁹ As Figure 4 shows, attendance rates were similar across experimental conditions. In sections A.2 and A.3 of the Online Appendix we provide evidence that the treatment is not statistically significantly related to the rate at which people attended screenings or to the attributes of those who attended.

Compared to the rest of the sample, compliers are more likely to be men, young, and consume news media, and they are less likely to own a television (see Table 1 in section A.1 of the Online Appendix). The over-representation of men is related to the image of video halls in Uganda. Visiting a video hall tends to be seen as more appropriate for men than for women, as the video content presented typically consists of soccer matches and action movies. To counter this perception, our film festival was explicitly marketed as an event open to both women and men. As a result, our sample of compliers encompasses a sizable share of women (thirty-one percent).

Measurement of outcomes took place in two waves, illustrated in Figure 3. In our midline survey in late October 2016, we interviewed respondents from randomly selected households. Sampling was

⁷In two villages only five of the six scheduled screenings took place. In one case, a video hall owner suspected that the movie *Oz The Great and Powerful* promoted black magic; in another case, a local leader sought to prevent the screening apparently in an effort to extract a gratuity. In neither case do we have reason to suspect that noncompliance was related to the experimental vignette featured in the film.

⁸“Recently, a series of six free films (Pirates of the Caribbean, Creed, Fast and Furious, Spy, Slumdog Millionaire, Oz The Great And Powerful) were screened in the *kibanda* [video hall] in your [village]. Have you heard about the screenings and if so, how many screenings did you attend?”

⁹See section B.2 of the Online Appendix for a discussion of alternative estimators that invoke different modeling assumptions but produce similar results.

not conditional on attendance of the screenings, and the survey, which was conducted weeks after the film festival, was billed as an unrelated public opinion poll, in order to avoid Hawthorne effects. We successfully interviewed 5,344 women and men in 110 of our 112 villages. The response rate was ninety-six percent, with most of the nonresponse coming from two villages where we were not able to conduct the survey due to resistance from local residents. As explained in the appendix, our inability to work in these locations does not appear to be related to the treatment status of the villages. Our main analysis therefore excludes villages in which we could not survey. Section B.4 of the Online Appendix shows the robustness of our main results to agnostic methods of imputing missing values.

In our endline survey in late May of the following year, we returned to the 110 villages in which we successfully conducted the midline survey in order to re-interview those who had reported attending at least one screening (compliers). Of the 1,156 midline compliers, we were able to re-interview 1,035, a follow-up rate of ninety percent.

In the following two sections, we discuss the main results of this study. To ensure comparability across analyses, almost all results are reported among the group of compliers who were interviewed in both the midline and the endline survey. As Tables 20 to 23 in the Online Appendix show, the results remain unchanged when we include all compliers who were interviewed in the midline survey or all compliers interviewed in the endline survey. We report separate analyses for men and women, which is in line with our pre-analysis plan that anticipates treatment effect heterogeneity by gender (p. 18). When it comes to the effect of our treatment on respondents' experience of VAW, we report results among all women as well as the subset of female compliers interviewed at the endline. Presenting results for all women allows for the possibility that the media campaign reduces victimization not only of potential victims who see our videos, but also of potential victims in other households who are now more willing to report what they see and hear.

5 Results

Attitudes Towards VAW and Gender Equality

Even though our mass media campaign was designed to encourage reporting, it may have affected views on the legitimacy of VAW and gender hierarchy more broadly. The dramatization of a sympathetic wife who is beaten while trying to accommodate her husband's impossible demands

might encourage empathy with victims of violence. The remorse expressed by the husband when his wife is hospitalized could similarly encourage men to regard domestic violence as behavior that can have tragic consequences. Our experimental results, however, provide little support for these hypotheses. We find no apparent change in responses to the question, “In your opinion, does a man have good reason to hit his wife if she disobeys him?” or other scenarios, such as “she spends a lot of time chatting with friends in the market” or “she does not complete her household work to his satisfaction” (see the outcome *VAW Not Acceptable* in Figure 5). The same null results hold for both men and women, regardless of whether we focus on outcomes measured during the midline or endline surveys. By the same token, we find no treatment effects on whether victims of VAW are perceived to experience great suffering, on whether respondents believe that initial acts of VAW can easily escalate to more severe forms of violence, or on support for gender equality, gauged by questions such as “Do you agree that it is more important that a boy goes to school than a girl?” or “Do you agree that the father, not the mother, should have the final say in the household?”¹⁰

¹⁰Unlike our other analyses, this analysis of support for gender equality was not pre-registered.

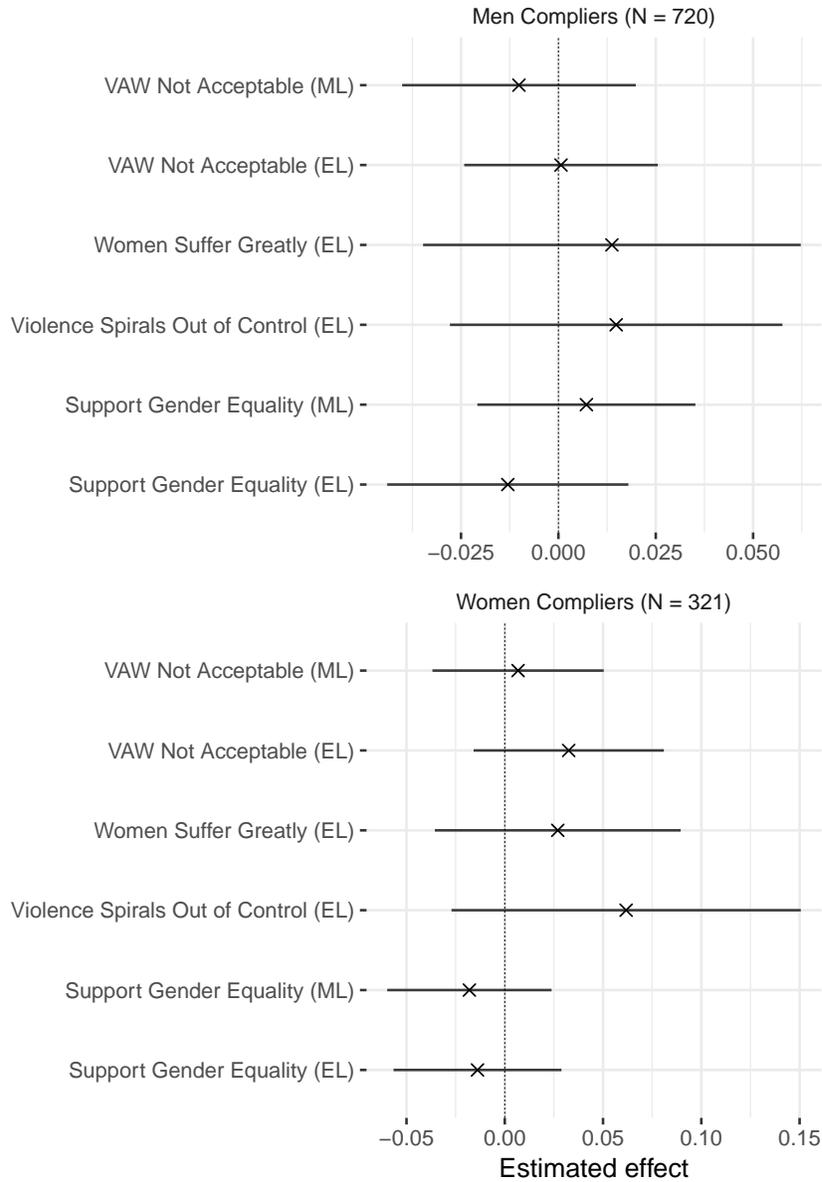


Figure 5: Attitudes on VAW and Gender Equality Largely Unaffected by Treatment.

All effects are estimated among compliers. Crosses indicate the estimated effect size, bars indicate 90% confidence intervals that are computed using the standard normal approximation of the randomization distribution. See section F.2 of the Online Appendix for tables, section E.2 for details on model specifications and section D for details on question wording.

Willingness to Report VAW

The second set of outcome measures concerns respondents' inclination to take certain actions (what Fishbein and Ajzen (1975) calls conative attitudes). Here, we are interested in whether, as theories of vicarious learning would suggest, exposure to the treatment videos changed viewers' willingness

to help victims report incidents to local authorities. Tables 1 and 2 show those who attended screenings became significantly more inclined to report violence.¹¹ The outcomes in columns 1-8 are based on questions that ask respondents to imagine discovering that their cousin has been severely beaten by her husband and offer respondents a choice between two actions, coding the outcome 1 if the respondent chooses the reporting option and 0 if they choose an option that implies inaction. These items measure the respondent’s willingness to report the incident to the victim’s parents, the women’s representative in the village (Nabakyala), the LC1 chairperson, and the police. The outcome variable used in the last two columns takes the average of these items. Even though our intervention aimed to encourage reporting among both victims and bystanders, we did not ask respondents about scenarios that involve themselves being a victim to minimize the risk of re-traumatization.

Table 1 shows substantial and lasting effects on women’s willingness to report violence: as columns 9-10 show, women who attended screenings with anti-violence messaging are nine to thirteen percentage points more likely to say they would report to others ($p < .01$). A striking feature of these effects is their persistence over time: we find highly significant estimated effects at both the two-month midline and the eight-month endline. The effects on men are suggestive but not as strong: the messaging increases the average measure of willingness to report among men compliers by two to four percentage points.¹²

In our pre-analysis plan, we had hypothesized that viewers would be particularly likely to report to actors featured in the treatment videos (the victim’s parents and the village counselor for women). This expectation receives only mixed support in the data. Women compliers, for example, are eleven to thirteen percentage points more likely to say that they would report to the police, even though the police were not depicted in our video messages. The results are thus consistent with a more general increase in the proclivity to report that goes beyond the specific actions modeled in the treatment videos.

One might wonder whether this increase is attributable to a greater sense that reporting prevents future violence. It turns out that this sense tends to be widespread in the villages we studied,

¹¹In keeping with our PAP, results are presented separately for men and women.

¹²In our PAP, we hypothesized that treatment effects would be especially strong for reporting behaviors that were directly modeled in our videos (i.e., reporting to parents and to counselors); although there are some hints of this among men, the evidence is mixed and on the whole receives little support.

<i>Would report VAW to:</i>	Parents		Counselor		LC1 Chairperson		Police		Reporting Index	
	Midline	Endline	Midline	Endline	Midline	Endline	Midline	Endline	Midline	Endline
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Anti-VAW Media	0.095* (0.057)	0.144*** (0.053)	0.076* (0.056)	0.171*** (0.058)	0.058 (0.049)	0.061 (0.057)	0.111*** (0.040)	0.130*** (0.048)	0.085*** (0.030)	0.126*** (0.035)
Control Mean	0.44	0.46	0.52	0.58	0.4	0.22	0.2	0.16	0.39	0.36
RI <i>p</i> -values	0.068	0.008	0.1	0.004	0.133	0.148	0.008	0.008	0.006	0
Hypothesis	Upr	Upr	Upr	Upr	Upr	Upr	Upr	Upr	Upr	Upr
Block FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	321	321	321	321	321	321	321	321	321	321
Adjusted R ²	0.053	0.010	0.020	0.044	0.002	0.019	0.002	0.018	0.039	0.076

*p<0.1; **p<0.05; ***p<0.01

Table 1: The effect among women compliers of anti-VAW mass media on attitudes towards sharing information about VAW. All analyses are run on the individual respondent level. See section E.2 of the Online Appendix for details on model specifications and section D of the Online Appendix for details on question wording.

<i>Would report VAW to:</i>	Parents		Counselor		LC1 Chairperson		Police		Reporting Index	
	Midline	Endline	Midline	Endline	Midline	Endline	Midline	Endline	Midline	Endline
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Anti-VAW Media	0.080** (0.035)	0.037 (0.036)	0.037 (0.037)	0.055* (0.034)	0.021 (0.034)	0.062* (0.036)	-0.046 (0.025)	0.019 (0.035)	0.023 (0.019)	0.043* (0.025)
Control Mean	0.5	0.49	0.61	0.61	0.35	0.29	0.23	0.2	0.42	0.4
RI <i>p</i> -values	0.021	0.176	0.183	0.068	0.281	0.056	0.946	0.318	0.142	0.05
Hypothesis	Upr	Upr	Upr	Upr	Upr	Upr	Upr	Upr	Upr	Upr
Block FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	720	720	720	720	720	720	720	720	720	720
Adjusted R ²	0.005	0.004	-0.014	0.008	0.002	0.003	0.001	0.007	0.001	0.019

p*<0.1; *p*<0.05; ****p*<0.01

Table 2: The effect among men compliers of anti-VAW mass media on attitudes towards sharing information about VAW.

All analyses use individual respondents as the unit of observation. See section E.2 of the Online Appendix for details on model specifications and section D for question wording.

with over seventy percent of women and over eighty percent of men in control villages describing intervention as an effective way to prevent future violence. We do not find that our campaign changed perceptions of efficacy among men or women compliers. Evidently, the videos made viewers more inclined to act in a context in which they were already convinced that community action would be effective.

Perceptions of the Community’s Response to Reports of VAW

If the videos did not increase the belief that reporting is effective, why was there an apparent increase in willingness to report? Table 3 suggests that many people perceived strong sanctions against reporting and that the treatment alleviates such concerns. Column 2 indicates that exposure to the media campaign sharply reduces the probability that women expect to be scolded for gossiping (coded 1), rather than encouraged for doing the right thing (coded 0), if they were to report a hypothetical incident. The eleven percentage point reduction ($p < .05$) brings women – the group for whom reporting may be most costly – in the treatment group roughly in line with men in the control group. The reduction in expected sanctions appears to center on social repercussions from the community at large: column 4 provides little support for the hypothesis that the campaign reduced respondents’ fear that friends or family of an accused perpetrator would take revenge. Nor is there any change in respondents’ perception that the community sees well-meaning interference in others’ affairs as generally acceptable.

Accompanying the change we see in perceptions about whether reports of VAW would be well-received is an increased expectation that members of the community would intervene in an incident of violence. Columns 5-6 show that men became four to five percentage points more likely to state that, if people in their community were to find out about a man beating his partner, those same people would intervene personally or mobilize others (coded 1) rather than minding their own business (coded 0). It is particularly important that this belief increases among men, since they are the principal perpetrators of VAW. In columns 7-8 we see that this shift in beliefs is mirrored to some extent among women.

Reports of Violent Incidents

Measurement presents a serious challenge to all studies of VAW. Here, we measure violence using direct self-reports of victimization by survey participants, participants’ indirect estimates of how

	Social Repercussions		Personal Retribution		Community Would Intervene			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Anti-VAW Media	-0.034 (0.034)	-0.114** (0.051)	-0.021 (0.041)	-0.029 (0.060)	0.052* (0.029)	0.043* (0.029)	0.081* (0.057)	0.068 (0.047)
Control Mean	0.49	0.63	0.52	0.58	0.75	0.79	0.72	0.73
RI <i>p</i> -values	0.199	0.042	0.344	0.334	0.052	0.096	0.092	0.106
Hypothesis	Upr	Upr	Lwr	Lwr	Upr	Upr	Upr	Upr
Sample	Men	Women	Men	Women	Men	Men	Women	Women
Block FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	720	321	720	321	720	720	321	321
Adjusted R ²	-0.001	0.002	0.003	0.010	0.020	0.016	-0.002	0.003

*p<0.1; **p<0.05; ***p<0.01

Table 3: The effect among compliers of anti-VAW mass media on perceptions of the social sanctions associated with reporting. All analyses use individual respondents as the unit of observation. See section E.2 of the Online Appendix for details on model specifications and section D for question wording.

much VAW occurs in their communities, and administrative encounters described by village health workers. Our ability to assess treatment effects using victimization data collected through a survey seemingly unrelated to the intervention presents an advantage over studies that rely purely on administrative data collected by police or other state authorities. Violence is only recorded in administrative datasets when individuals make post-treatment decisions to report to authorities. By contrast, we are able to measure incidents of violence revealed by respondents, even if those incidents were never reported to authorities. For this reason, we see self-reported victimization measures as the best measure of VAW.

Our primary measure of violence asks women respondents in the endline survey to count the number of times that they can recall a woman in their household, including themselves, experiencing violence over the six-month period preceding the survey. To ensure that respondents in treatment and control have the same definition of violence in mind, we remind respondents of the many forms assault can take: “Assault can take many forms such as pushing, punching, bashing and hurting someone with a weapon. When a person forces another person to perform sexual acts that they don’t want to do, this is also assault.”

Conscious of the potentially traumatic nature of these questions, we paired female respondents with women interviewers, who were instructed to reassure respondents that they may answer these questions only if they were comfortable doing so and never asked to know the identities of the women or men involved.¹³

Table 4 presents the effect of the treatment on this self-reported measure under the column heading ‘Number of Incidents.’ Columns under the ‘Any Incidents’ heading report effects on a binary measure coded 1 if the number of incidents was greater than 0, and 0 otherwise. Rather than ask the respondent how many times VAW occurred, the ‘Violence Frequency’ measure asked those who reported more than 0 incidents whether violence occurred almost every day (coded 4), around once a week (coded 3), about once a month (coded 2), less than once a month (coded 1), or almost never (coded 0). Those who report 0 incidents are coded 0 on this measure.

¹³Following [Follingstad and Rogers \(2013\)](#), we measure VAW in a redundant manner in order to corroborate responses across questions. The first question asked “How many specific incidents since last Christmas can you remember when a woman in your household, including yourself, was a victim of violence?” The second question asked “In many of the villages we have visited, men sometimes beat women. Thinking again of the time that has passed since last Christmas, would you say that this has happened more than about once a week to a woman in your household, including yourself?” The question is then branched to categorize responses into “almost never,” “less than once a month,” “about once a month,” “once a week,” and “almost every day.”

Effects in columns 1, 2, 4, 5 and 7 are estimated among all women respondents in the endline survey ($N = 1,036$), irrespective of whether or not they attended the movie screenings, on the grounds that the norms affected by the videos could reduce VAW throughout the village. We present the results at both the individual level (columns 2-3 and 5-8) and at the village cluster level (columns 1 and 4); both approaches produce similar estimates. When analyzing individual-level responses, standard errors are clustered at the village level, the unit of random assignment. In section B.3 of the Online Appendix, we illustrate that the findings are robust to alternative statistical models.

Columns 1 - 3 suggest that the screenings reduced the average rate at which women in treatment communities experienced violence by roughly .15 - .35 of an incident, from a baseline of just over half an incident on average. In our pre-analysis plan, we hypothesized that the campaign might either sensitize people to the issue of VAW without deterring violence (thus increasing this measure) or deter violence (thus decreasing this measure). Accordingly, we pre-registered a two-tailed hypothesis test, and our estimates fall short of significance.

On the other hand, columns 4 - 6 show the campaign lowered the probability that a household experienced any incidents of VAW during this period. Column 4 shows that the campaign reduces the village-level proportion of women respondents who report any violence in their household by seven percentage points. The probability of observing effects of such magnitude due to sampling variability if there were no true effect is less than one percent. Column 5 reports a similar estimate, this time estimating the effect using individual data as opposed to village-level aggregates. Here anti-VAW messaging reduces the probability that women in a household experienced violence over the prior six months by five percentage points from a baseline of twenty percent, effectively reducing the probability of victimization by one-quarter in relative terms. Column 6 suggests that effects of the intervention are especially strong among women who actually attended the films, although further analysis of the interaction between treatment and attendance shows it to be of borderline statistical significance.

Columns 7 and 8 report the effects of the anti-VAW media on the frequency-based measure of victimization. Given the ordinal outcome measure, we fit an ordered logit model. The estimates indicate a reduction of the odds of a household experiencing violence almost every day as opposed to once a week, once a month or never by roughly thirty percent. Again, the estimated effects are

	Number of Incidents			Any Incidents		Violence Frequency		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Anti-VAW Media	-0.177 (0.113)	-0.146 (0.091)	-0.346 (0.226)	-0.069*** (0.026)	-0.048** (0.022)	-0.132*** (0.049)	-0.155 (0.169)	-0.375** (0.287)
Control Mean	0.56	0.59	0.59	0.19	0.2	0.2	0.42	0.42
RI <i>p</i> -values: IPV	0.128	0.159	0.138	0.009	0.038	0.007	0.1	0.02
Hypothesis	Two	Two	Two	Two	Two	Two	Two	Two
Sample	All W	All W	W compl.	All W	All W	W compl.	All W	W compl.
Analysis Level	Clus.	Indiv.	Indiv.	Clus.	Indiv.	Indiv.	Indiv.	Indiv.
Block FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Estimator	OLS	OLS	OLS	OLS	OLS	OLS	Ordered Probit	Ordered Probit
Observations	110	1,036	356	110	1,036	356	1,036	356
Adjusted R ²	-0.033	0.002	-0.006	0.057	0.015	0.032		

*p<0.1; **p<0.05; ***p<0.01

Table 4: The effect of anti-VAW mass media on incidents of VAW over the preceding six-month period (endline).

All outcomes were measured during the endline survey. Analyses labelled “All W” are conducted among all women in the endline, regardless of compliance status, those labelled “W compl.” are conducted among women compliers only. Analyses in columns labelled “Indiv.” use individual respondents as the unit of observation, those labelled “Clus.” are conducted at the village level, after collapsing individual responses to the cluster-level using cluster-level means. Columns 7 and 8 report results from an ordered logit model. All other estimates rely on OLS. See section E.2 of the Online Appendix for details on model specifications and section D of the Online Appendix for details on question wording.

especially strong and statistically significant among compliers.

We employ a weighted bootstrap method to estimate the total number of households that were prevented from experiencing any VAW by the campaign (see section F.4 of the Online Appendix). The average village in our study comprises 115 households and the campaign prevented women from experiencing any violence in roughly six households in each of the forty villages where we screened the anti-VAW campaign, with a 95% confidence interval ranging from one to eleven households per village.

Because VAW is so difficult to measure, any experiment that purports to show a reduction in incidence must immediately address the critique that the purported treatment effect is a measurement artifact. While such an interpretation cannot be ruled out conclusively, three facts militate against it.

First, the overall pattern of treatment effects that we observe among women respondents is at odds with the notion that the apparent reduction in violence is due to eagerness on the part of the treatment group to please researchers by reporting fewer incidents. As we have discussed above, we find negligible effects on many outcomes that were closely connected to the topic of our treatment videos, such as whether husbands have legitimate cause to beat their wives. The effects we observe are largely confined to willingness to report VAW, not core attitudes about the legitimacy of husbands being violent toward their wives.

Second, the hypothesis that women in the treatment group were offering socially desirable responses is undercut by the relatively weak inter-item correlations across different outcome measures, such as self-reported violence in the household, perceptions of views held by the community, and the respondent's own willingness to report incidents of violence (see Table 36 in section F.6 of the Online Appendix). If women in the treatment group were trying to paint a rosy picture about household relationships in their community, they were not doing so with much verve or consistency.¹⁴

Third, we designed the study so that there was little apparent connection between the film festival and the surveys that measured outcomes months later. In order to avoid priming respondents, the question used to measure household VAW refers to incidents that occurred “since last Christmas,”

¹⁴Yet another possibility is that by depicting violence in a particular way, we narrowed the definition of violence employed by compliers in the treatment, thereby reducing the numbers they reported. However, as noted above, we were careful to preface our questions about household VAW with a summary of the kinds of acts that would be considered assault.

months after the film festival concluded. One may worry that respondents in the endline perceive a connection between the film festival and the surveys because they were asked whether they had attended the film festival during the midline. However, as can be seen in Table 35 in section F.5 of the Online Appendix, we do not find any evidence that our main results are driven by the responses of compliers who had already been interviewed in the midline. If anything, treatment effects on victimization are larger among those compliers taking our survey for the first time.

In an effort to assess the reliability of alternative measurement approaches, we attempted to gather endline information about village-level incidence of VAW by interviewing the village health teams (VHTs) in each site. Village health teams are unpaid volunteers from the community who give health and counseling advice. Although VHTs were cooperative and response rates were high, we found their reported rates of violence for the village to be weakly correlated with the aforementioned village-level estimates we obtained from our interviews with women villagers. Across the 110 sites for which we have outcome data, the correlation between the number of incidents reported by villagers and the average number of incidents reported by VHTs is less than .01. We also attempted to corroborate the female villagers' reports at the village level with a battery of survey questions asked of all villagers about the incidence of violence in their community, with follow-up questions about the incidence of violence specifically against women. Again we find that, at the village level, average reports about VAW in the community at large are weakly correlated with female villagers' reports about violence within the household ($r = .13$). We do not find treatment effects on any of these alternative measures (see table 31 in the appendix). This pattern of results is subject to multiple interpretations. One is that only the female villagers' have reliable information about incidents that occur within the household, which is why the treatment effects are apparent only for this outcome measure. Another is that the treatment prevented violent incidents but increased the rate at which such incidents are reported to VHTs or others in the village. We cannot rule out the possibility, however, that our results are a statistical fluke that occurred by chance in one outcome measure but not the others. Replication of the current study is needed to rule out the latter possibility.

6 Discussion

Crucial to the theoretical interpretation of our results is a recognition that exposure changes certain outcomes but not others. Although education-entertainment is often said to have special persuasive

influence because audiences come to identify with the main characters and let down their guard when encountering new viewpoints (Slater and Rouner 2002), it should be stressed that we see very little evidence of attitude change on the acceptability of VAW and no indication whatsoever that the treatment causes viewers to rethink their position about gender hierarchy more broadly. Nonetheless, we observe a newfound willingness among viewers in treated locations to report incidents to police, village leaders, and victims' families. This change is especially pronounced among women, for whom reporting ordinarily carries elevated costs given widespread disdain for "gossips."¹⁵ Women who watched the anti-violence videos, which dramatized a community being supportive of a victim who speaks out about domestic violence, months later expressed substantially more willingness to take complaints to the police and became more sanguine that their allegations will be believed rather than denounced. For their part, responses by male viewers in treated sites bear evidence of this shift in perceptions of norms: they became more likely to indicate eight months later that their community would intervene in response to incidents of domestic abuse. In line with these changes, we also observe a substantial reduction in the proportion of households reporting VAW in the eight-month endline survey.

Overall, the results suggest that a change in norms around reporting and, ultimately, reductions in violence can be achieved without a change in core attitudes. Stepping back, VAW in Uganda has much in common with stubborn problems in other domains and regions. The key ingredients consist of a negative social behavior that governments seek to regulate coupled with the lack of information to do so. In this case, Ugandan law prohibits domestic violence, but the state and its informal agents have little ability to detect and address violations unless victims or bystanders come forward. Petty corruption by bureaucrats (De Graaf 2010), endemic theft of local utilities (Smith 2004), and illegal logging (Tacconi 2012) present analogous governance problems due to an inability to monitor and punish violations.

Solutions to problems of this type come in many forms. New institutions may be created to realign incentives, as in the case of community organizations that distribute resources in return for environmental management (Brandt et al. 2016). New technologies may make it easier to detect and prosecute corruption or theft (Smith 2004). The state may forcefully bring unruly sectors to heel,

¹⁵As noted above, our 2015 survey of Ugandan villagers found gossiping was the offense that respondents felt most justified VAW, overshadowing even infidelity.

sometimes razing entire neighborhoods in the process (Scott 1998), or a softer approach may be taken to change attitudes and behaviors through public outreach campaigns. In the case of VAW, the latter approach has predominated.

Mass media campaigns provide a potentially cost-effective alternative that can be deployed on a vast scale. The question is, to what extent and under what conditions do media campaigns generate policy-relevant changes in attitudes and behavior? Few media campaigns have been evaluated rigorously, and most randomized trials have focused on health-related messaging. Nevertheless, the literature has begun to offer theoretically informative insights concerning the conditions under which media messages shape attitudes and behavior. Studies have repeatedly found weak effects from information campaigns whose messages are not conveyed through dramatization. For example, radio campaigns in Africa designed to encourage hand-washing (Galiani et al. 2012) and communication with public officials (Grossman et al. 2014, 704) generated little apparent change in listener behavior. Education-entertainment programs have been more successful in changing behaviors. Blair et al. (2017) found that embedding an encouragement to report corruption in a feature-length film induced Nigerian viewers to report hundreds of instances of corruption. Exposure to a yearlong radio soap opera reduced Rwandan listeners' deference to authority (Paluck and Green 2009). The few direct experimental tests of the relative effectiveness of information-only videos and education-entertainment videos in public health suggest that education entertainment tends to have stronger behavioral effects (Beach et al. 2016; Murphy et al. 2015).

Skeptics of media-induced effects have long contended that "propaganda" rarely succeeds in changing attitudes (Hovland et al. 1949). In some ways, our inability to change core attitudes is in line with this conclusion. At the same time, our study calls attention to a theoretically important pathway by which education-entertainment campaigns may affect behavior. It appears that witnesses tend to be reluctant to report what they know for fear of social sanctions, perhaps because the dominant perception is that violence is rare and that false accusations are common. Especially when it comes to sexual violence, the view that women tend to fabricate accusations is widely held in many contexts (Tuerkheimer 2017). Those who can act with impunity as long as anti-disclosure norms prevail have incentives to sustain such beliefs. Just as defenders of gender hierarchy benefit from dismissing women's allegations of abuse as malevolent gossip, so too do corrupt politicians by subjecting whistle-blowers to a campaign of intimidation, defamation, or

outright violence (Friebel and Raith 2004; Ting 2008).

An important question concerns the conditions under which education-entertainment can encourage reporting. In a concurrent study conducted in a nearby rural region, we found that willingness to report VAW to police or community leaders was unaffected by our videos when they were shown to viewers individually in the context of a lab-like experiment, despite the close attention that respondents were paying to the treatment videos and short time that elapsed between exposure and outcome measurement. Communal exposure to anti-violence messages thus appears to be crucial for the change in perceived descriptive norms that we observe. In addition to the cinematic display of a sympathetic community, it may thus also have been the observations of and interactions with other audience members that led potential witnesses of VAW to change their expectations about how they would be treated should they come forward. A second scope condition for education-entertainment to encourage victims and bystanders to speak out through the channels discussed above is that community members and local authorities are indeed willing to take action to stop the behavior in question were they to believe that it actually occurred. This condition implies that changes in local leadership can have important effects on reporting and, by extension, the prevalence of VAW, a potentially fruitful line of future research.

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