

ENTERTAINMENT-LED APPROACHES TO REDUCE INTIMATE PARTNER VIOLENCE

AUTHOR: M. FAIRLESS

REVIEW: S. KAGEL, S. HILTON

SEPTEMBER 2023

Research Report:

Mass Media Interventions - Entertainment-led approaches to reduce Intimate Partner Violence

Author: Morgan Fairless

Review: Samantha Kagel, Sam Hilton

Date of publication: September 2023

Research period: 2023 Mass Media

We are grateful to the experts who took the time to offer their thoughts on this research: Dr. Akhil Bansal, Prof. Donald Green. Prof. Lauren Frank, Dr. Paul Falzone, Dr. Victor Orozco and Niyati Malhotra. Thanks also to Leonie Falk and Sarah Hough for their recommendation to look into this idea. Finally, thanks to all CE staff for their contributions to this report.

For questions about the content of this research, please contact morgan@charityentrepreneurship.com. For questions about the research process, please contact Sam Hilton at sam@charityentrepreneurship.com.

Executive summary

Charity Entrepreneurship (CE) fosters more effective global non-profits by connecting capable individuals with high-impact ideas. In 2023, CE investigated non-profit ideas related to social and behavioral change campaigns via mass media. This report discusses the merits of entertainment-led approaches (edutainment) to reduce intimate partner violence (IPV).

IPV constitutes a significant and entirely preventable violation of human rights perpetrated against millions of women. Demographic and Health Survey (DHS) suggest that about a third of women (31%) have experienced at least one instance of physical or sexual violence since age 15. IPV is a large health and financial burden with wide-ranging consequences for victims.

We focus on edutainment because it benefits from a more extensive evidence base and robust theoretical underpinning among mass media approaches to prevent violence. Despite increasing attention to edutainment as an effective intervention to alleviate social issues including violence against women and girls, we believe new organizations in this field would find it easy to find contexts with high burdens of IPV where these approaches could be additional.

We reviewed five experimental and quasi-experimental (four and one, respectively) studies evaluating interventions in this space. Crucially, only one study measures the outcome of most interest (prevalence of violence against women). Overall, we think that the experimental evidence provides tentative support for the ability of mass media to change attitudes in the short and medium term. There is indicative and tentative support for the intervention's effectiveness in reducing IPV as an end-line metric.

Overall, experts took a positive view of a new organization in this space and the value of edutainment, specifically for IPV. Experts took different views when asked whether the evidence base was sufficiently strong to justify large-scale interventions. Some suggested that new interventions should be rigorously evaluated given that there are still very few indicative studies and mass media evaluations have low external validity.

Our cost-effectiveness analysis models a hypothetical five-year intervention in Lesotho, Rwanda, Angola, and Ethiopia. Depending on different assumptions made, the cost per disability-adjusted life year (DALY) averted ranged from USD 28 to 1419. The wide range of cost-effectiveness estimates reflects outcomes based on

alternative assumptions. Taking into consideration the three most promising countries, the range is considerably narrower at 28 to 266.

We are somewhat concerned about the challenges of monitoring and evaluating mass-scale edutainment interventions, particularly on a highly sensitive subject that presents additional challenges for outcome verification.

Overall, our view is that edutainment to reduce IPV is an idea worth recommending to future charity founders.

Table of contents

Ex	recutive summary	3
Та	ble of contents	5
1	Introduction	7
2	Background	8
	2.1 Cause area	8
	Factors in favor	8
	Factors against	9
	2.2 Topic area	10
	The prevalence and burden of Intimate Partner Violence	10
	Edutainment to reduce Intimate Partner Violence	11
	Why is a new organization focused on edutainment useful?	12
3	Theories of change	14
	3.1 Edutainment and entertainment-led approaches	14
	3.2 Theory of change	15
4	Quality of evidence	19
	4.1 Evidence that a charity can make change in this space	19
	Experimental evidence	19
	Non-experimental studies and other evidence	23
	Analogous evidence	24
	Relationship between attitudes, norms, and behaviors	25
	Summary	25
	4.2 Evidence that the change has the expected wellbeing effects	26
5	Expert views	29
6	Geographic assessment	30
	6.1 Where existing organizations work	30
	6.2 Geographic assessment	32
	Scale	32
	Neglectedness	33
	Tractability	33
7	Cost-effectiveness analysis	34
	7.1 Burden considerations	34
	Health	34
	Economic	34
	Spillovers	35
	7.2 Effects	35
	7.3 Costs	36
	7.4 Results	36
	7.3 Compared to other interventions in this issue	37
8	Implementation	39

8.1 Talent	39
8.2 Access	40
Information	40
Relevant stakeholders	40
8.3 Feedback loops	40
8.4 Funding	40
Funding from funders in the CE network	40
Broader funding sources	41
8.5 Scale of the problem	41
8.6 Neglectedness	41
8.7 Tractability	41
8.8 Externalities	41
Negative	41
Positive	42
8.9 Remaining uncertainties	42
9 Conclusion	43
References	44

1 Introduction

Charity Entrepreneurship's (CE) mission is to foster more effective charities worldwide by connecting talented individuals with high-impact ideas to help humans and animals. We achieve this goal through an extensive research process and our non-profit incubation program. In 2023, our research process focused on social and behavioral change campaigns (SBCC) through mass media.

CE research staff chose entertainment-led¹ approaches to reduce Intimate Partner Violence (IPV) as a potentially promising intervention within this category. This decision was part of a six-month process designed to identify interventions that were most likely high-impact avenues for future charity entrepreneurs. The research began by listing around 160 ideas, gradually narrowing them down, and examining them in increasing levels of depth.

We use various decision tools such as group consensus decision-making, weighted factor models, cost-effectiveness analyses, quality of evidence assessments, case study analyses, and expert interviews to assess how promising interventions are for future charity entrepreneurs.

This process is exploratory and rigorous but not comprehensive – we did not research all ideas in depth. As such, our decision not to take forward a charity idea to the point of writing a full report does not constitute a view that the idea is not good.

¹ We use entertainment-led and edutainment interchangeably throughout the report.

2 Background

2.1 Cause area

The media content we engage with informs, persuades, and entertains us. However, only a handful of organizations worldwide effectively use communication tools to deliver evidence-based, cost-effective solutions to tackle some of the most significant challenges facing the world's poorest people. We identify highly impactful opportunities to deliver social and behavioral change campaigns (SBCC) through mass media to rectify this.

SBCC delivered to large audiences through mass media can empower people to make better choices about their health and well-being. The use of messages on the importance of mask-wearing and vaccination during Covid-19 are familiar examples of this potential (Anwar et al., 2020; Cherry et al., 2021; Chadwick et al., 2021).

SBCC is an (ideally) research-based, systematic approach that utilizes communication strategies to promote positive behaviors and social change among individuals and communities (Centre for Social and Behavior Change Communication, n.d.). By mass media channels, we refer to large-audience media that (in most cases) is very broadly targeted. We include traditional (radio, television, newspapers) and modern (SMS, voice messages, internet, and chatbots) media. We keep the definition of human well-being broad to encompass health, income, and personal well-being.

The following sections provide an overview of our perspective on the relative value of mass media interventions before going into the specifics of entertainment-led approaches to reduce IPV.²

Factors in favor

Owing to their vast reach and low costs, well-managed mass media interventions can be extremely cost-effective even if they only manage to change behavior in a small proportion of the general target population (Bettle, 2023). Founders Pledge estimates that some mass media interventions can be between four and 32 times as cost-effective at improving people's health and well-being as unconditional cash transfers delivered by GiveDirectly (Bettle, 2023). Growing mobile phone access among the world's poorest has also led to some of the most significant advances in their health and financial well-being through tools like reminders, mobile health, and mobile money.

² For an in-depth treatment of the mass media we recommend Bettle (2023) and Wakefield et al. (2010).

³ Some large organizations working in this sector include <u>Development Media International</u>, <u>MTV Staying Alive</u>, <u>Population Foundation of India</u>, <u>Farm Radio</u>, and the CE-incubated <u>Family Empowerment Media</u>.

In many low and middle-income countries (LMIC), radio still enjoys audiences of up to 90% of a country's population, reaches most low-income households, and is a highly trusted information source (Wilhelm & Lorgerie, 2020). The cost of production and dissemination of campaigns remains low in many LMICs. For instance, CE-incubated Family Empowerment Media reached 5.6 million people with its radio programming in North-East Nigeria for USD 440,000 – costing under eight cents of a dollar to reach people multiple times with potentially life changing information.

Mass media interventions can be of particular value in contexts where providing persuasive information can correct inaccurate information or beliefs with high costs. Generally speaking, these interventions are likelier to succeed when the desired behavior is easy, the message is delivered in a timely fashion, there is a conducive social environment to take the desired action, and the action is attractive (Behavioral Insights Team, 2014).

Despite the challenges of evaluating mass media approaches (see factors against), several high-quality experimental and observational studies have demonstrated that meaningful population-level behavioral changes can be achieved in areas including healthcare-seeking (Sarrassat et al., 2018), tobacco cessation, road safety (Wakefield et al., 2010), and violence against women (Green et al., 2018).

Factors against

Limited funding, challenges in conducting evaluations, and a general lack of interest have led to the neglect of mass media as a tool.

Mass media is inherently difficult to evaluate using so-called gold-standard methods such as randomized controlled trials (RCTs), partly because it is difficult to randomize media exposure at the population level and because media interventions are inherently prone to spillovers and network effects.^{4,5} Other research methods can be used to establish treatment effects on those exposed to the campaigns. Still, the difficulty of testing using the methods most valued by a large proportion of the development community has likely hampered the spread of this type of work.

Finally, SBCC interventions in general, and mass media interventions in particular, are very context-dependent and require deep formative work to get right. Some experts we interviewed noted that the quality of production and research commonly deployed in development interventions using mass media approaches has often been

⁴ Some exceptions of experimental or quasi-experimental studies include Sarrassat et al. (<u>2018</u>), Glennerster et al. (<u>2022</u>) and Banerjee et al. (<u>2019a</u>) and Yanagizawa-Drott (<u>2014</u>).

⁵ In fact, as one interviewee for this research suggested, successful mass media campaigns are attempting to maximize spillovers and network effects by generating conversations and word of mouth about the content they produce (Naugle Interview).

poor, contributing to weak results. Communication campaigns must be relevant, well-grounded, delivered by trusted messengers, and actionable. These factors are context-dependent, meaning that what works in one neighborhood may not work in another.

2.2 Topic area

The prevalence and burden of Intimate Partner Violence

IPV is a large and fully preventable violation of human rights with wide-ranging health, socio-cultural and financial impacts for individuals, communities, and nations. Despite increased global recognition of the issue and its pervasiveness, rates of violence have not significantly decreased on a global scale. One in four ever-partnered women between the ages of 15 and 49 have experienced physical or sexual violence (or both) perpetrated by a partner (Sardinha et al., 2022). Most of this violence is perpetrated by intimate partners – close to 60% of all female homicides are by an intimate partner or family member (UN Women, 2020).

The prevalence of IPV varies across regions and countries widely. We provide an overview focusing on data from the Demographic and Health Surveys (DHS)

Programme in countries where the program operates (<u>Demographic and Health Surveys</u>, 2023):6

- About a third of women (31%) have experienced physical or sexual violence since age 15. The highest prevalence was in Sierra Leone (60%) and the lowest in Armenia (6%).⁷
- 6% of women experienced sexual violence by their partner in the last 12 months. The highest prevalence was in Papua New Guinea (24%) and the lowest in Armenia (0%).8
- 15% of women experienced physical or sexual violence in the past 12 months. The highest prevalence was in Afghanistan (46%) and the lowest in Moldova (2%).9

⁶ These surveys provide nationally-representative data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition. Most data cited below comes from the following sample: Afghanistan, Angola, Armenia, Average, Azerbaijan, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroon, Chad, Colombia, Comoros, Congo Democratic Republic, Côte d'Ivoire, Dominican Republic, Egypt, Ethiopia, Gabon, Gambia, Ghana, Guatemala, Haiti, Honduras, India, Jordan, Kenya, Kyrgyz Republic, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Moldova, Mozambique, Myanmar, Namibia, Nepal, Nigeria, Pakistan, Papua New Guinea, Peru, Philippines, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, South Africa, Tajikistan, Tanzania, Timor-Leste, Togo, Uganda, Ukraine, Zambia, Zimbabwe.

⁷ Surveys from 57 countries. Median year of survey was 2015 (range 2005-2021).

⁸ Surveys from 57 countries. Median year of survey was 2015 (range 2005-2021).

⁹ Surveys from 56 countries. Median year of survey was 2015 (range 2005-2021).

 On average, for women who experienced physical or sexual spousal violence in the past 12 months, 37% suffered from cuts, bruises, or aches; 17% suffered from eye injuries, sprains, dislocations, or burns; and 9% suffered from deep wounds, broken bones, broken teeth, or any other serious injury as a result.¹⁰

These surveys show intimate partners frequently subject women to physical, sexual, and emotional abuse worldwide. IPV is harmful in its own right, with far-ranging consequences on health, well-being, and household finances. Conservative estimates show that this violence leads to the loss of 8.5 million disability-adjusted life years (DALYs) and 68,500 lives annually (Bansal, 2023).¹¹

IPV is a deeply entrenched socio-cultural issue rooted in patriarchy and societal inequality. Survey data has shown that in some countries, upwards of 60% of girls and boys between 15 and 19 consider that a husband can hit or beat his wife for at least one of a list of specified reasons (<u>UNICEF</u>, 2019).

Women often have no recourse when faced with violence, particularly from a partner – only 27% of countries have laws on marital rape (<u>UN Women, 2020</u>). In Kazakhstan, a survey revealed how culturally entrenched IPV can be, with 51% of women who had been victims of violence reporting never telling anyone (<u>UN Women, 2020</u>).

Edutainment to reduce Intimate Partner Violence

IPV is an addressable problem. We here focus on entertainment-led approaches to reduce IPV.

When modeling the cost-effectiveness of this intervention and places where it could be delivered, we focus on programs delivered through radio. Radio is still a widely listened to and trusted form of communication in several countries with high burdens of IPV. In most cases, we expect radio will be cheaper to produce and distribute than other media, such as television. However, a non-profit should explore television and other mediums, such as social media, for its specific context.

We focus on edutainment because it benefits from a larger evidence base (see section 4) and stronger theoretical underpinning among mass media approaches to prevent violence. Non-narrative approaches (like a public service announcement; PSA) can also be explored and tested, but we expect that any messaging will likely be entertainment-led. We discuss edutainment theory in section 3.

¹⁰ Surveys from 56 countries. Median year of survey was 2015 (range 2005-2021).

¹¹ Quantifying the burden of IPV and other forms of violence is notoriously difficult given stigma, the varying forms of violence, and poor data collection.

Edutainment is a mass media intervention combining education and entertainment.

A more formal academic definition can be found in Wang and Singhal (2009), who define entertainment education as a "theory-based communication strategy for purposefully embedding educational and social issues in the creation, production, processing, and dissemination process of an entertainment program, in order to achieve desired individual, community, institutional, and societal changes among the intended media user populations" (p.272). Examples include PSAs with strong entertainment components, TV shows, radio dramas, short dramatizations, theater pieces, games, and other art forms.

Using entertainment as an explicit strategy to educate is arguably as old as the oldest form of communication. However, its roots as a field emerged when Miguel Sabido, a Mexican communication practitioner, pioneered edutainment as a tool for social welfare by combining his theater and communications background with psychology. In the 1970s, Sabido drew on theories such as Bandura's social learning theory (1977) to create telenovelas such as the adult-literacy themed *Ven Conmigo*, and family planning themed *Acompáñame, Vamos juntos, Caminemos, and Nosotros los Mujeres* – credited by some for contributing to a significant lowering of the birth rate in Mexico during the 70s and 80s (<u>Sabido, 2021</u>).

Why is a new organization focused on edutainment useful?

There are two principal reasons why this may be a promising idea: first, we think it is vastly more scalable than most other evidenced interventions in the space of violence against women and girls (VAWG); second, we think it is a neglected approach within IPV prevention.

These mass media approaches are likely among the most promising to address the burden of IPV, particularly in cost, scale, and tractability. Relative to other evidenced interventions – for instance, community activism focused on shifting attitudes and norms (Abramsky et al., 2014; Bansal, 2023; Kerr-Wilson et al., 2020), school-based interventions focused on dating, sexual violence, and peer violence (Kerr-Wilson et al., 2020); and self-defense training programs (Bansal, 2023; Sinclair et al., 2013) – mass media delivery allows for a much larger scale at a lower cost. If it can cost-effectively address a portion of the burden of IPV, an organization could massively scale interventions across highly affected communities without facing many funding or labor force constraints. Mass media may also act as an amplifier of existing intervention and cultural changes by raising the salience of a topic or fostering discussions among members of the public (e.g., Jensen and Oster, 2009).

Despite increasing attention to edutainment as an effective intervention to alleviate social issues, including VAWG, we believe that new organizations in this field would not find it difficult to find contexts with high burdens of IPV where these approaches could be additional. We do not think many organizations work at a large scale, and IPV is regrettably very high worldwide. Experts largely agreed that the approach was neglected, with few players (c.f., MTV Foundation) reaching a vast scale (i.e., regional). Despite identifying small-scale organizations working in some countries, we do not believe that a new organization would be detrimental to the field regarding funding.

A new cost-effectiveness-minded organization could also contribute positively to the field by focusing on building evidence narrowly focused on showing an effect on the actual prevalence of violence and best-practice literature on messaging and message testing. This work could support the impact of other organizations.

3 Theories of change

This section provides an overview of the Theory of Change (ToC) for this idea. It represents a broad depiction of our thinking behind how this intervention works. Before, we briefly discuss theories of edutainment.

3.1 Edutainment and entertainment-led approaches

The main draw of edutainment is that it can engage and build an audience while persuasively promoting a specific message (Green Interview; Frank Interview). Edutainment draws from several sociological and psychological theories, with different ones favored among practitioners and academics. We note a few reasons why edutainment may work:¹²

- Engagement: Put simply, edutainment maximizes the chances of exposure to key messages – implicit messaging through entertaining and high-quality products is liable to be shared and viewed more than drier PSAs or explicit messaging. In an RCT with two treatment arms, viewership was twice as high for a humorous drama as a more explicit information-loaded docu-series on gender issues (<u>Donati et al., 2022</u>).
- Narrative transportation: Through edutainment, audiences can be transported into a narrative and immersed in it (M. C. Green, 2021; van Laer et al., 2013). Through narrative transportation, the audience starts to draw connections between themselves and the characters and engage emotionally. Edutainment can cause shifts in perception, self-reflection, and reproduction of observed and modeled behaviors through these implicit mechanisms (Bandura, 1977; M. C. Green, 2021).

Pre- and post-testing has indicated as much, with studies comparing narrative and non-narrative approaches and identifying transportation as a predictor of changes in attitudes and behavioral intentions (Murphy et al., 2013). However, other lab experiments have found more mixed results about the specific role of emotional shift relative to other narration components (Ophir et al., 2021).

• **Counter-arguing:** Importantly, when messaging is implicit, there may be less counter-arguing from the audience. This refers to the propensity for resistance from the audience when the messaging is non-narrative (i.e., feeling like you are being preached to or having impulses to disagree). Experts have suggested

¹² We are aware of forthcoming work conducting a meta-analysis of edutainment approaches which finds that on average interventions manage to generate changes in attitudes and behaviors consistent with the message.

- that non-narrative approaches are more useful when messaging is uncontroversial and succinct (Frank Interview).
- Social components: If entertaining shows are more likely to be discussed and shared with others, then this may be an essential way in which norms and attitudes are discussed in a community, leading to processes where interactions with others help shape ones own beliefs and attitudes (<u>Arias, 2019</u>; <u>Bandura, 2004</u>).

What this means for practice: There is a stronger case for entertainment-led approaches than those which simply transmit a message (see <u>section 4</u>). This has implications for program design but is not overly restrictive. There is a plurality of approaches to edutainment, including different mediums, styles, and durations. It does not mean a charity must produce expensive multi-season TV shows. A charity should also explore innovations to achieve lower-costs (such as radio short stories).

3.2 Theory of change

Figure 1 details how we believe an edutainment campaign can lead to impact.

Charity Inputs	Charity outputs	Charity outputs COM-change for perpetrators and other men		Impact
Technical capabilities and funding for research, production, and distribution of edutainment content.	Serialised and/or standalone edutainment content distributed at a large scale through radio/tv/etc.	Changes in Automatic/Reflexive Motivation: The content may expose men to alternative behaviors, the damage caused by IPV, etc. Perpetrators thus have increased motivation to cease acts of violence. Changes in Automatic/Reflexive Motivation: The content may normalize interjection. Bystanders, especially other men, feel empowered to challenge behavior they disagree with. Changes in Social Opportunity: If the content encourages women and men to report or seek help in cases of IPV, this may increase the perceived costs of violent behavior for perpetrators. Changes in Social Opportunity: In cases of pluralistic ignorance, the content may expose men to the notion that most people oppose violence against women and do not condone it. This may	Lower rates of violent → behavior by men towards partners.	Healthier and happier → lives for women and girls.
Figure 1: To O for or		change perpetrators' perceptions of the social acceptability of IPV.		

Figure 1: ToC for an edutainment organization focusing on IPV

As shown above, we think that targeting perpetrators is key to IPV prevention – stopping instances of violence before it starts. This can often take the form of addressing – more or less explicitly – men and boys to change their skills, perceptions, and motivations (Flood, 2019). If a new organization starts working with this intervention, we advise carefully tailoring its ToC and content to the context. Generally speaking, we think engaging men is promising because the target countries suffer from weak institutional capacities for women to seek help, making post-prevention efforts and policy approaches more difficult. Additionally, most IPV comes from male partners and is rooted in gendered norms, suggesting that engaging men is a more direct approach to prevention.

The key assumptions corresponding to each step (i.e., " \rightarrow ") in the theory of change are:

Large audiences engage with the content produced (LU). The mentioned The organization changes in social A lower prevalence of The edutainment can produce opportunity and VAWG leads to lower content is edutainment motivation are mortality and morbidity produced in such a content and sufficient to trigger caused by VAWG (U). way that triggers distribute it (LU). behavioral changes the desired (HU).motivation, and

Scale: key uncertainty (KU), high uncertainty (HU), some uncertainty (SU), low uncertainty (LU), unconcerning (U)

The organization can produce edutainment content and distribute it. We assume that a new organization could produce the edutainment content. This is not necessarily an easy task. It requires several inputs, including but not limited to: formative research, content production capabilities, organizational administration, the ability to purchase spots on air or TV, funding, etc. Given the track record of CE-incubated charities, we are appropriately confident that these inputs can be achieved to a good standard. We discuss this more in section 8.

Large audiences engage with the content produced. Evidence and key expert testimony suggest that locally-relevant and well-produced edutainment reaches audiences well. See <u>section 4</u>.

The edutainment content is produced in such a way that triggers the desired capability, motivation, and opportunity changes. The evidence that content like the ones we propose can change behavioral intentions and attitudes includes several

randomized controlled trials and observational studies, suggesting that this assumption can hold. Content has successfully engaged audiences on these issues and led to measurable changes in the social acceptability of VAWG, for instance (Flood, 2019). See section 4.

The mentioned changes in social opportunity and motivation are sufficient to trigger behavioral changes. While a large body of observational and randomized evidence suggests changes in motivation and attitudes, it is highly unclear whether these lead to changes in behavior. In many contexts, attitudes may be weakly correlated with behaviors or simply uncorrelated. The best evidence on this question suggests that changes in the wider social reaction to IPV can lead to changes in IPV levels. For example, Green et al. (2020) tested this mechanism experimentally and found it is supported in the context of exposure to edutainment in Ugandan villages.

4 Quality of evidence

This section documents our review of the evidence regarding this non-profit idea.¹³

We believe mass media interventions are particularly challenging to evaluate through many methods. These challenges should be considered when evaluating the evidence. This was also related to us by several experts (Orozco Interview; Frank Interview; Falzone Interview).

- Mass media interventions are prone to spillovers and network effects. It is tough to separate exposure to a media treatment across a population within a natural setting (people talk, share clips of shows, etc.). However, some studies have quasi-experimentally attempted this with success (<u>Sarrassat et al., 2018</u>).
- Other studies mimic exposure in conditions similar to a laboratory experiment.
 However, in these settings, exposure to the content does not occur as it would
 for the audience to listen to the content at home alone (e.g., <u>Green et al., 2018</u>;
 <u>Banerjee et al., 2019a</u>).
- Studies usually focus on shorter exposure to treatment; however, mass media approaches, particularly edutainment, rely on longer-term exposure and emotional development (<u>Frank Interview</u>).

4.1 Evidence that a charity can make change in this space

Experimental evidence

We found five experimental and quasi-experimental studies evaluating interventions in this space (four and one, respectively). Crucially, only one study measures the outcome of most interest (prevalence of violence against women).

Overall, we think that the experimental evidence provides some tentative support for the ability of mass media to change attitudes in the short and medium term. There is indicative and tentative support for the intervention's effectiveness in reducing IPV as an end-line metric.

Compared to other evaluated mass media interventions, such as those seeking to improve child health (<u>Sarrassat et al., 2018</u>), this intervention faces the added challenge of accurately measuring violence levels against women.¹⁴

We identified four high or high-moderate-quality experimental studies, one moderate-low-quality experimental study, and a moderate-quality

¹³ This <u>spreadsheet</u> contains notes on each study that we looked at. It is intended as a guide only and statements in there may not reflect our latest thinking on each individual paper.

¹⁴ This is challenging because of risks social desirability bias, ethical considerations in data collection, and the notion that people may not be willing to disclose being victims or perpetrators.

quasi-experimental study that assesses edutainment as a tool to reduce violence against women.

The studies strongly indicate that media content can influence attitudes toward IPV, including whether people justify it or view it as acceptable. All studies find positive evidence that attitudes toward IPV change after treatment. Almost all studies measure these effects in the short term. However, two of the studies suggest that even shallow dose exposure (approx. two hours) had continued results at eight months (Banerjee et al., 2019a) and 15 months (Green et al., 2023).

Only one study measured the outcome metrics of most interest (rates of VAW) (Green et al., 2020). This high-quality randomized trial tested whether short vignettes shown during the intermission in video halls ("bibanda") across rural Uganda changed attitudes and behaviors against VAW. The study found that "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 21%, effectively reducing the probability of victimization by one quarter in relative terms" (p. 2308).

We are unconvinced about the external validity of this evidence. Several of the higher-quality studies involved some form of social dimension. People were introduced to the content in a social setting like a viewing hall (c.f., Arias, 2019; Christia et al., 2021; Donati et al., 2022). This puts into question whether similar effects should be expected when the audience engages individually, yet also suggests that communal viewership may be an enabler a charity could seek in its work.

In conclusion, we think that the experimental and quasi-experimental evidence is indicative alone and has limited external validity, particularly due to the lack of data on the endline prevalence of IPV and the fact that several studies leverage communal viewing. These studies indicate potential support for the intervention, but the evidence base could be stronger. Given the highly-contextual nature of this type of intervention, it is unclear whether more evidence of this type would ever resolve whether a specific approach or message will work in a new context, as the audience can always react in unexpected ways. However, more studies could provide more information by testing specific messages, measuring endline prevalence, and testing different viewing mechanisms.

Table 1: Experimental and quasi-experimental studies

Study	Туре	Quality	Intervention (Setting)	Measures	What does the study support?
Donati et al. (<u>2022</u>)	Exp.	H/M	Tested gender equity and violence against women acceptability reduction through a humorous fictitious drama (implicit format), a documentary with clear calls to action (explicit format), and a placebo video delivered through Facebook Messenger. (Urban setting, India)	Attitudes towards VAW. Behaviors, but not actual rates of VAW.	Low-dose edutainment can change attitudes toward the acceptability of VAW. Treated individuals are also more likely to share information with others and show public support against VAW. One week after treatment, the drama was more effective at shifting gender norms and attitudes. At the same time, the documentary was similarly effective and led to more people seeking more information on gender and gender equality websites. The authors suggest this may be because of the baseline views of the sample.
Green et al. (<u>2023</u>)	Ехр.	Н	Tested a two-hour radio drama focusing on early and forced marriage. Delivered through a communal listening hall. (Rural setting, Tanzania).	Attitudes towards early marriage.	Low-dose edutainment lowered levels of support for early and forced marriage, with effects observed 15 months on.
Christia et al. (<u>2021</u>)	Ехр.	M/L	Tests informational videos produced by an Egyptian women's rights organization. Delivered through WhatsApp, Facebook Messenger, and TV. (Egypt).	Attitudes and Behavioral intentions, but not the prevalence of VAW	Treated women are more likely to answer that they would contact and seek help from Women's rights organizations in cases of violence.

Study	Туре	Quality	Intervention (Setting)	Measures	What does the study support?
Green et al. (<u>2020</u>)	Ехр.	Н	Tested video dramatizations discouraging VAW and encouraging reporting. Delivered through a viewing hall. (Rural setting, Uganda).	Attitudes towards VAW. Behaviors, including prevalence of VAW.	The campaign reduced the prevalence of VAW in treated villages, likely by changing the social norm around whether victims of IPV should speak out. This is despite no changes in attitudes.
Banerjee et al. (<u>2019a</u>)	Exp.	Н/М	Tested MTV Shuga, a TV series. Treated participants were exposed to a sub-plot on VAW. Delivered through communal viewing hall. (Nigeria).	Attitudes towards rape and domestic violence	Being exposed to MTV Shuga led to a lower prevalence of justification of rape or domestic violence.
Arias (<u>2019</u>)	Quasi	М	Tested a purpose-produced soap opera through a plausible natural experiment and another experimental treatment. The content was distributed through a community loudspeaker, CDs and a community listen	Attitudes	Increased personal and perceived social acceptance of VAW and support for gender equality. Also increased pessimism on whether violence will decline in the future.

H: High, M: Moderate, L: Low

Non-experimental studies and other evidence

We identified a few studies that lend additional evidence to this research, in particular in terms of the ability to implement the intervention appropriately and the role of media in moderating or shifting attitudes toward gendered violence.

Exposure to content may change attitudes in the long term. Measuring cable TV availability by village, Jensen and Oster (2009) identified associations between the availability of cable television and improvement in attitudes towards gendered violence in India, perhaps due to exposure to different messages and "urban" worldviews. Like similar papers evaluating the effect of media exposure on behaviors (e.g., La Ferrara et al., 2012), this evidence provides indicative support to the notion that exposure to supportive media can change attitudes.

Developing content and reaching large audiences seems tractable; two studies (in India and Papua New Guinea) describe single media and trans-media campaigns to influence VAW. Chatterjee et al. (2021) described a transmedia campaign for teenagers, ADHAFull, led by BBC Media Action, involving a 78-episode EE television program and social media, radio, and gaming components. The TV show became the highest-rated show for the national television channel it was shown on, averaging more than one million viewers per episode. The study mentions an accompanying audience testing RCT (forthcoming publication) that demonstrated a change in attitudes towards gender norms in boys who watched the content versus control. Khosla et al. (2013) discussed a campaign by the Australian Broadcasting Corporation's international development work in Papua New Guinea, noting a reach of around 40% of respondents.

Dr. Falzone, who leads an organization that produces edutainment content on radio and (mostly) television, noted that production barriers were not a significant factor for organizations in the space relative to other barriers (Falzone Interview). Additionally, he noted that radio stations are often eager to collaborate, given their financial incentives. He thought that from his experience (mostly in eastern Africa), there would be no issues with the proposed content.

A review of interventions to prevent VAWG by the What Works Center to Prevent Violence Against Women and Girls placed edutainment and social marketing under the category "Insufficient evidence but unlikely to work as standalone interventions to reduce levels of VAWG," clarifying this means that they could find no RCT or quasi-experimental evidence to support the intervention (Kerr-Wilson et al., 2020, p.

¹⁵ La Ferrara (<u>2012</u>) show a similar effect leading to smaller family sizes due to exposure to Brazilian telenovelas.

iii). 16 As the above section notes, several studies published in this space provide theoretical and experimental evidence to support the intervention – we think that overall, the claim that there is no experimental or quasi-experimental evidence to support the intervention is now out of date.

Analogous evidence

Edutainment and mass media interventions have successfully changed attitudes, norms, and behaviors in somewhat analogous areas, especially those related to sexual behavior and prejudice. These studies add plausibility to different mechanisms through which edutainment can achieve change.

Some of the leading experimental evidence on VAW produced by Donald Green and his team suggests that part of the mechanism leading to changes involves exposing communities to the differences in views among them about the acceptability of a certain behavior (Green et al., 2023). Exposing individuals to the variety of views held by their community members may facilitate changes in behavior. For instance, through an RCT, Bursztyn et al. (2020) demonstrated that correcting a case of "pluralistic ignorance" (whereby Saudi Arabian men overestimated the extent to which their peers disapproved of women working) may support social change. When exposed to the actual views of the population (which were less extreme), treated men were more likely to support their wives to find employment three to five months after the treatment. Other studies have shown that rates of prejudice (in this case, racism towards Middle Eastern people) can also be alleviated through TV sitcoms and music videos (Murrar & Brauer, 2018).

Two RCTs, both in Nigeria, have suggested that short exposures to edutainment can change the behaviors of those exposed. In Banerjee et al. (2019b), exposure to MTVShuga led to significant increases in safer sex and testing for HIV. Blair et al. (2019) showed that, in seven months, areas exposed to anti-corruption edutainment produced 1.7 times as many concrete corruption reports as one year of the previous nationwide corruption-reporting campaign. This latter study may be relevant if a non-profit wants to focus on increasing reporting, given that corruption was commonplace and accepted – like VAW in the areas where a non-profit would work.

¹⁶ The review adds "It may not be reasonable to expect that they would be able to reduce violence on their own, based on what is known about the necessary features of intervention design and implementation required for impact on VAWG (...). For instance, it is unclear how social marketing campaigns and edutainment interventions would achieve groupsessions, and support empowerment, critical reflection and communication skills building, as they are didactic, one way interventions." (p. 26). ¹⁷ "pluralistic ignorance occurs when individual members of a group (...) believe that others in their group hold comparably more or less extreme attitudes, beliefs, or behaviors" (Reed College, n.d., n.p.)

Finally, a non-randomized case-control study in Nigeria tested whether a multi-component campaign including both mass media and direct communication affected the intention to perform Female Genital Mutilation (FGM), concluding that exposure to the program was significantly associated with reduced intentions to perform FGM overall, with rates of intention decreasing in the program state while remaining steady in the control state (<u>Babalola et al., 2006</u>).

Relationship between attitudes, norms, and behaviors

It is unclear whether, in the case of IPV, attitudes toward IPV are predictive of behavior or behavior change. There is an extensive literature in psychology regarding the relationship between attitudes and behavior, providing no clear-cut answers (Verplanken & Orbell, 2022). There is some support that attitudinal change may lead to behavior modifications, but it is unclear how attitude changes would interact with habits and norms in this particular case (Verplanken & Orbell, 2022).

Meta-analyses generally find some support for the relationship between attitudes and behaviors, but the evidence base is quite heterogeneous. A meta-analysis (n = 4,598) of studies investigating attitude-behavior correlations found a considerably heterogeneous set of results with a weighted-mean attitude-behavior correlation of .51 (95% CI .48, .54) – the studies are mostly laboratory experiments with college students (Glasman & Albarracín, 2006). Another meta-analysis of experiments found that attitude changes had more significant effects on intention than behavior changes. It found that attitude changes lead to behavior change, with a pooled mean change of .38 (95% CI: .32 to .45; p <.001.) (Sheeran et al., 2016).

Heise and Kotsadam (2015) combined extensive survey data ranging over a decade to understand the relationship between different norms and attitudes and rates of IPV, largely confirming several strands of feminist theory that posit (lack of) legal rights and patriarchal norms sustain IPV. They find that "the population prevalence of current partner violence against women is 14.6 percentage points higher in a setting where 100% of people agree with at least one of six justifications for wife-beating (norms=1) compared with a setting where no one justifies abuse (norms=0), all other things in the model being equal" (p. e335). The study also found statistically significant associations between educational achievement and women's status, among other factors.

Summary

The following conclusions can be reached from this evaluation of the evidence:

- There are strong indications that an entertainment-led intervention is tractable.
 This mostly includes observational studies and expert commentary.
- The experimental and quasi-experimental evidence includes high-quality studies and mostly supports changes in IPV-related factors, such as attitudes towards gendered violence. Given that these studies do not measure the endline outcomes of most interest to this ToC, they are indicative only.
- We do not have a strong sense of how the relationship between attitudes, habits, norms, and behaviors can play out in a specific context.
- Some further evidence provides support for plausible mechanisms through which edutainment can work.

4.2 Evidence that the change has the expected wellbeing effects

A decrease in IPV in a household would straightforwardly lead to improved well-being for women subjected to abuse. IPV violates human rights and frequently entails sexual, financial, and emotional abuse (<u>Deuba et al., 2016</u>; <u>García-Moreno & Heise, 2005</u>; <u>Hulley et al., 2023</u>).

Given its multifaceted and multidimensional nature, assigning a specific quantified burden to IPV is challenging. For instance, the Global Burden of Disease only accounts for the burden of IPV as associated with poor mental health outcomes (depression and anxiety alone), HIV status, and suicide. However, vast literature suggests a longer list of potential associations between IPV and health burdens.

Figure 2 concisely overviews the associations we identified between IPV and several economic and health burdens. It also notes those burdens that we were able to include in our cost-effectiveness analysis partially. Our CEA considers different estimates for the economic burden, health burden, and spillovers to family members. Our estimate of the economic burden of IPV was roughly between 20% and 40% of our estimate of the health burden used, depending on the country and model used.

Physical violence frequently overlaps with sexual violence (García-Moreno & Heise, 2005), potentially leading to reproductive and mental health consequences, including PTSD, anxiety, and depression. Additionally, IPV is strongly associated with poor physical health outcomes and suffering. When physical or sexual, IPV frequently leads to broken bones and muscle pain, often leading to long-lasting chronic pain conditions, including migraines, and low back, neck, and abdominal pain (Coker et al., 2000). A retrospective study of over 80,000 women in the UK showed an association

between IPV and all-cause mortality and chronic heart conditions (<u>Chandan et al.</u>, <u>2020</u>). Women in abusive relationships frequently feel like they have no power or recourse to remedy their situation, leading to a sense of despair and hopelessness (<u>García-Moreno & Heise, 2005</u>).

IPV may also lead to worsened reproductive health and outcomes. Women who suffer from IPV sometimes suffer pregnancy coercion and contraception sabotage as part of this abuse (Silverman & Raj, 2014). This abuse can often lead to unintended pregnancies, unplanned births, miscarriages, stillbirths, and dangerous abortions (Silverman et al., 2007). A study of over 2,000 married Bangladeshi women found that IPV was associated with increased odds of pregnancy loss due to stillbirth, miscarriage, or induced abortion (Silverman et al., 2007). Physical abuse during pregnancy has also been reported in several surveys of women who suffer from IPV (World Health Organization et al., 2005), which could lead to poor health outcomes for both mother and children.

IPV also costs women money. Women who are subjected to IPV (including financially, emotionally, and behaviorally controlling behaviors) frequently report lower productivity, missed days at work, and lack of work opportunities due to being prevented from entering the workforce (Alvarado Merino et al., 2020; Gupta et al., 2018; Wathen et al., 2015). The exact relationship between economic conditions and IPV is contested, though, with research suggesting that women's income can be protective or a risk factor, depending on the context. This violence has also been shown to lead to profound economic and social costs. A study by the What Works to Prevent VAWG program on the socio-economic effects of VAWG in Ghana, South Sudan, and Pakistan suggested that the issue leads to lower workforce participation by women, increased healthcare costs, and inter-generational impacts such as days of school lost (What Works to Prevent VAWG Global Programme, 2020).

Finally, research looking at children who are brought up in households where IPV is perpetrated suggests that the burden of IPV on wellbeing does not stop with direct victims. Research has suggested that household IPV, and other childhood trauma, are associated with more significant risks of mental illness and ill health (Monnat & Chandler, 2015; Wathen & Macmillan, 2013).

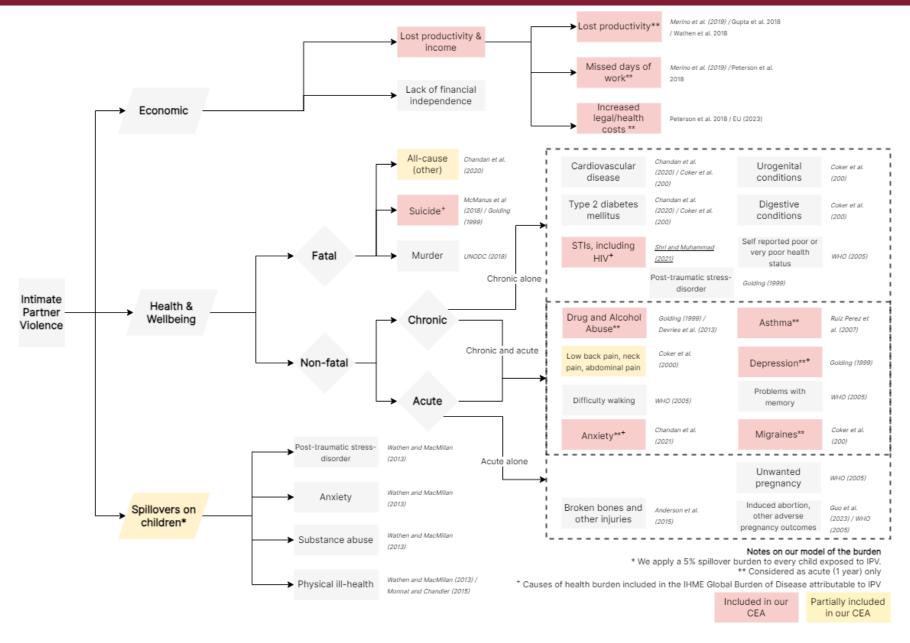


Figure 2: Outcomes from IPV (larger version here)

5 Expert views

We conducted five in-depth interviews with academic and implementation experts, including:

- Dr. Akhil Bansal: Medical Doctor & Field Strategy Consultant, Antimicrobial Resistance, Schmidt Futures (<u>Bansal Interview</u>).
- Professor Donald Green: Burgess Professor of Political Science, Columbia University.
- **Professor Lauren Frank:** Department of Communication, Portland State University (<u>Frank Interview</u>).
- Dr. Paul Falzone: Executive Director, Peripheral Vision International (PVI)
 (Falzone Interview).
- Dr. Victor Orozco and Niyati Malhotra: Senior Economist, World Bank;
 Research Fellow, World Bank.

Overall, the experts viewed a new organization in this space positively. While academic interest in edutainment has grown, it still represents a relatively small field. Some experts noted that the research field is somewhat uncoordinated, acting on opportunities to evaluate interventions without a coordinated agenda to understand what works and how it achieves change.

The experts we spoke to support the value of edutainment, specifically for VAW, given that the subject is more likely to be amenable to narrative approaches.

Experts took different views when asked whether the evidence base was sufficiently strong to justify large-scale interventions. Some suggested that new interventions should be intensely evaluated given that there are still very few and indicative-only studies and mass media evaluations have low external validity. While there is still little evidence to support intervention design choices, this is growing with forthcoming and existing evaluations. A new organization focused on developing a solid understanding of what works in this field could add much value and potentially influence large-scale interventions.

Views were mixed as to the value of randomized evidence in the field. For instance, some experts suggested that studies have demonstrated the value of edutainment approaches – particularly in cases where norms are entrenched. Others suggested that mass media is not particularly suited to experimental evidence, putting into question the external validity of experimental evidence.

6 Geographic assessment

6.1 Where existing organizations work

Many organizations across the world work to address VAWG through different means. Our main priority in this exercise was identifying organizations that operate similar interventions to the one explored here. We focus only on organizations working in LMICs.

Table 2: Organizations working in this space

Organization	Year Est.	Description	Countries of Operation ¹⁸
Population Media Centre	1998	Organization mostly focused on family planning and reproductive rights, with some programs having a gender equality focus. It has produced highly popular edutainment in Ethiopia and the United States (the countries where it seems to have the largest presence), among others, with its show East Los High being in the top five Hulu viewership for its first season.	Burundi, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Guatemala, Haiti, Kenya, Liberia, Mali, Mexico, Nepal, Niger, Nigeria, Papua New, Guinea, Philippines, Rwanda, Senegal, Sierra Leone, Sudan, Uganda, Zambia, Burkina Faso, United States (HQ).
MTV Staying Alive Foundation	2005	MTV Staying Alive Foundation is the creator of MTV Shuga, one of the most prominent and successful examples of edutainment in sub-Saharan Africa. The foundation mostly focuses on sexual and reproductive rights, in particular STI awareness. Recently, the foundation has announced it plans to expand their messages to gender equity, substance abuse, and mental health, among other topics.	Côte d'Ivoire, India, Nigeria, South Africa
Population Foundation of India	1970	A long-standing organization focused on gender equality and reproductive rights. Part of their work delivers SBCC campaigns through mass media.	India (HQ)

¹⁸ Where an organization has more than one type of program, we focus on countries where programs relevant to VAWG have operated (inc. FGM, child marriage, womens' empowrement, etc.).

Organization	Year Est.	Description	Countries of Operation ¹⁸
<u>Uzikwasa</u>	-	A Tanzanian NGO delivering mass media edutainment campaigns across the Tanga region in Tanzania. The organization has an evaluation collaboration with Innovations for Poverty Action.	Tanzania*
PCI Media Impact	1985	Based in the United States, the organization creates and facilitates entertainment-education programming, with programs across several countries relating to equality, climate, and health outcomes.	Colombia, Bolivia, Peru
Puntos de Encuentro	1990	While unclear whether still involved in mass media work, this charity has produced a TV series – El Sexto Sentido – and several radio shows focused on gender equality.	Nicaragua (HQ)*
Soul City Institute	-	A South African feminist organization with decades' experience in edutainment, specifically working in VAWG, through radio and TV approaches.	South Africa (HQ)*
Equal Access International	2000	An organization based in the US and working globally using communication approaches across several programmatic areas, including gender issues. The organization launched the first Hausa-language free-to-air 24/7 satellite TV channel.	Pakistan*, Nepal, Yemen, Nigeria*
<u>Nweti</u>	2008	Health communications organization focused on improving health access and outcomes in Mozambique. Some aspects of its programming relate to female empowerment, especially in health decision-making.	Mozambique*
Zambia Centre for Communication Programmes	2002	A Zambian NGO focused on health access and behaviors using communication approaches. In the past, they have conducted work to prevent gender-based violence	Zambia*
Australian Broadcasting Corporation (ABC)	-	The international development wing of ACB, akin to BBC Media Action, has conducted some work on different areas in development,	Papua New Guinea

Organization	Year Est.	Description	Countries of Operation ¹⁸
		including gender (particularly in Papua New Guinea)	
Peripheral Vision International	2011	PVI implements communications programs in health, gender, livelihoods, and citizenship. It mostly works in East Africa. It is collaborating with other partners in a pilot of a serialized edutainment radio intervention in Uganda, based on Raising Voices' SASA! approach to intimate partner violence. It has also developed popular mobile games.	Uganda*, Sub-saharan Africa*
Femina Hip	1999	Organization working across multiple platforms through communication strategies to promote healthy lifestyles, sexual and reproductive health and rights, economic empowerment, citizen engagement and gender equality.	Tanzania*
BBC Media Action	1999	BBC Media Action is an organization independent from the BBC. It applies the BBC editorial standards and works closely with the BBC, but works to deliver different welfare interventions through media.	Sierra Leone*, Somalia, South Sudan*, Tanzania, Zambia*, Bangladesh*, India, Nepal, Libya*
Breakthrough India	1999	A women's rights organization that frequently uses mass media approaches and works through media interventions to advance women's rights.	India*

* countries indicate an active program

6.2 Geographic assessment

We conducted a <u>geographic assessment</u> to assess which countries could be promising for a new organization. This assessment included a weighted consideration of the following factors:

Scale

We considered the following factors to understand the scale of VAWG and how many people the issue affects [55% weight on score]:

• A country's population [30% weight on score].

- The prevalence of spousal violence, considering the prevalence of women who reported physical, sexual, and emotional violence from their spouses in the last 12 months (Sardinha et al., 2022) [20% weight on score].
- A score for attitudes towards domestic violence to prioritize countries where IPV is more accepted (<u>Sardinha & Nájera Catalán, 2018</u>) [5% weight on score].

Neglectedness

To prioritize countries where this issue is most neglected, we consider two factors, a country's Gross National Income per capita – to weigh lower income countries higher – [10% weight on score] and a count of organizations working on this issue in the country [5% weight on score]. This latter number was based on the above desk research – we weigh cases where an organization has previously run a program in the country by half.

Tractability

We prioritize countries where it would be relatively easy to work [30% weight on score]. To do so, we consider a few indices, such as the Fragile States Index (2022) [10% weight on score] and Freedom in the World (2022) [5% weight on score].

Additionally, we consider two measures of how many people we'd be able to reach with a campaign. Drawing from DHS program surveys, we consider the percentage of respondents who say they listen to radio [10% weight on score], and the price of distribution of radio programming [5% weight on score].

The geographic assessment, with our chosen weights, led to the following shortlist of options for this intervention: Ethiopia, Timor-Leste, Uganda, Angola, Sao Tome and Principe, Rwanda, Kenya, India, Solomon Islands, Papua New Guinea.

Some countries in this list will likely not be viable candidates due to narrower contextual reasons (such as the radio distribution business landscape), wider safety concerns, or the desired potential scale. Based on cost-effectiveness, we think a new non-profit should attempt its prioritization based on narrower considerations, such as the number of different radio station contracts needed to reach a certain population and deeper evaluations of tractability. Some countries were discarded from the geographic assessment despite scoring relatively high, given the uncertainty that a CE non-profit organization could work there (e.g., Afghanistan).

7 Cost-effectiveness analysis

Our <u>cost-effectiveness analysis</u> models a hypothetical five-year intervention in Lesotho, Rwanda, Angola, and Ethiopia.

7.1 Burden considerations

Health

One of the key issues with how to model the cost-effectiveness of an intervention working on IPV revolves around how to model the burden of IPV. Given the uncertainty surrounding this, we discuss the approaches below.

We are highly uncertain about the quality of our burden of IPV estimates for two main reasons:

- 1. The GBD only considers three risks (HIV, depression, and anxiety), providing an estimate based on the assumed risk of the above cause if one is in a situation of IPV. This approach ignores many other causes of burden but is also susceptible to variations in the HIV burden that are probably not majorly led by VAWG. For instance, Lesotho, which has a large HIV burden, also has a huge IPV risk-associated burden (5,915 per 100,000 female population), even though it has comparable levels of IPV to many other countries (16%). Papua New Guinea, which has a much higher prevalence of IPV (31%), has a substantially lower IPV risk-associated burden (627 per 100,000 female population).
- 2. Our derived burden still only considers a small proportion of the overall burden. For instance, we do not quantify the risks of unwanted pregnancies and pregnancy complications.

Given worries about the reliability of these burden calculations, we report cost-effectiveness in three ways: the weighted average burden calculation, the derived burden calculation alone, and the price per year of IPV avoided.

Economic

The evidence on the economic burden of IPV is weaker. However, women exposed to IPV likely suffer from some economic consequences as a result. We take a conservative estimate drawn from the literature on days lost of work, productivity losses, and a blanket percentage of income lost for healthcare costs.

Spillovers

We wished to account for some level of spillover to children from averting exposure to IPV. To do this, we presume that an exposed child suffers from 5% of the parent's burden. We report the result with no spillovers as well.

7.2 Effects

The following approach was taken to model the effects of this intervention:

- 1 Health burden of IPV. The expected DALY burden of being in an IPV relationship was drawn from a weighted average of several sources:
 - IHME Global Burden of Disease data on the health burden due to the risk factor IPV. As discussed previously, we think this undercounts the true burden.
 - Two academic publications (Ferrari et al., 2022; Jan et al., 2011).
 - Derived risk Looking at the literature on health costs associated with IPV, we calculated the overall odds of suffering from each injury or disease to understand the consequences associated with IPV.

The average resultant DALY burden among the modeled countries was about 0.2 DALYs per case of IPV. This is close to the disability weight for several musculoskeletal disorders, for instance. Remember that this is a rough estimate that does not differentiate among different severities of IPV.

- **Economic burden of IPV.** We mostly follow Bansal (2023) here. The burden is derived from literature suggesting that victims of IPV suffer from lost productivity, lost days of work, and incurring costs for healthcare.
- **Spillovers.** As discussed in the quality of evidence section, we think that IPV spills over to family members, especially children. To reflect this, we estimate that children suffer 5% of the health burden that their mother does when in an IPV situation.
- **Reach.** We approximate the number of couples from the total population, adjusted for the proportion of women who are married and the proportion of men who listen to the radio. We expect that about 40% of those individuals will engage with the programming we put out. We also suggest that for each couple exposed, three children receive spillovers.
- **5** Baseline rates of IPV were taken from Sardinha et al. (2022).

- **6. Intervention effect.** Following our evidence review, we suggest that the intervention will reduce IPV by 25% from its baseline. We adjust this effect for validity concerns down to around 12%.
- **7. Other adjustments.** We made some subjective estimations, such as the number of years it would take to scale, the probability of success, and other adjustments.

The effect of the intervention is a factor of the reach (4), baseline rates of IPV (5), and the intervention's effect (6). We then assign the economic and health burden of IPV (1-3) as avoided by virtue of not being in an IPV relationship.

7.3 Costs

Variable costs for this intervention were drawn from two main considerations:

- 1. **Cost of distribution**: a factor of the number of radio stations we consider necessary, costs for distribution in the country, length of the shows, and the number of times we would air per week.
- 2. **Cost of production**: a factor of the number of episodes we would produce and the cost of production per estimate derived from the costs of two charities who shared cost data with us.

Fixed costs were constant across CEA for this research at 125,000 for the first year and 225,000 after that. We think this is likely an overestimate for this intervention.

7.4 Results

Results from this modeling were as follows:

Table 3: Results from cost-effectiveness modeling

Country	USD p/ DALYs averted (weighted average)	USD p/ DALYs averted (derived estimate)	USD p/ year of IPV averted	USD p/DALYs averted no spillovers, weighted average)	USD p/DALYs averted (more conservative effects at 5% behavior change, weighted average)
Lesotho	579	739	221	608	1419

Country	USD p/ DALYs averted (weighted average)	USD p/ DALYs averted (derived estimate)	USD p/ year of IPV averted	USD p/DALYs averted no spillovers, weighted average)	USD p/DALYs averted (more conservative effects at 5% behavior change, weighted average)
Ethiopia	36	28	9	39	88
Rwanda	109	116	26	116	266
Angola	85	72	23	96	209

These estimates are higher than the only other estimates we could find, provided by Bansal (2023) who estimates that mass media interventions could avert a DALY for USD 13 and a year free from violence for USD 11. We think this is mainly because we take more conservative estimates of the health burden associated with IPV and model costs differently.

The wide range of cost-effectiveness estimates reflects outcomes based on different assumptions. In hindsight, we believe Lesotho was a poor choice of country to model, given its small population size (which increases the costs per person reached).

Considering the three other countries, the range is considerably narrower at 28 to 266.

7.3 Compared to other interventions in this issue

We report results from a peer-reviewed cost-effectiveness study (<u>Ferrari et al., 2022</u>) and a report by Bansal (<u>2023</u>) identified through a non-systematic desk literature review.

Table 4: Results from other cost-effectiveness studies

Study	Description	Estimate (USD)
Bansal (2023) ¹⁹	· · · · · · · · · · · · · · · · · · ·	180/DALY 150/ Year free of IPV

¹⁹ Model-based on a non-systematic literature review.

Study	Description	Estimate (USD)	
	Self-defence program for women, supported by moderate quality of evidence.	260/DALY 215/Year free of IPV	
	Mass media campaigns, supported by low-moderate quality of evidence.	13/DALY 11/Year free of IPV	
	Social empowerment as an add on to economic empowerment, supported by moderate quality of evidence.	180/DALY 145/Year free of IPV	
Ferrari et al. (<u>2022</u>)	Peer-reviewed observed cost-effectiveness study.	"From a health sector perspective, the cost per DALY averted varies between US\$222 (2018), for an established gender attitudes and harmful social norms change community-based intervention in Ghana, to US\$17,548 (2018) for a livelihoods intervention in South Africa. Taking a societal perspective and including wider economic impact improves the cost-effectiveness of some interventions but reduces others." (p.2)	

8 Implementation

This section summarizes our concerns (or lack thereof) about different aspects of a new charity putting this idea into practice.

Table 5: Summary of implementation key concerns

Factor	How concerning is this?
Talent	Low Concern
Access to information	Moderate Concern
Access to relevant stakeholders	Low Concern
Feedback loops	High Concern
Funding	Moderate Concern
Scale of the problem	Low Concern
Neglectedness	Moderate Concern
Execution difficulty/Tractability	Low Concern
Negative externalities	Moderate Concern
Positive externalities	Low Concern

8.1 Talent

Overall, we are not concerned that talent will be a major bottleneck for this intervention.

Given the particularly sensitive topic, we think that an ideal co-founder pair will show a keen awareness of the complexities of IPV. Therefore experience and/or awareness of working on gender equality and/or other advocacy would be helpful.

We are excited about an organization that can produce high-quality and entertaining content. Experience in artistic work and communications (theater, TV, writing, etc.) would be welcome, yet could also be supported through a first hire. Based on our consultations with experts, we do not believe hiring talent for content production will be a significant barrier for the organization.

8.2 Access

Information

Information regarding the production of edutainment materials and communication on gender issues is unlikely to be a significant barrier to implementation.

We think that data availability around key indicators will likely be poor. Data collection around IPV is likely challenging, particularly in locations with strong cultural aversions to discussing these issues. Additionally, country monitoring efforts may be lacking, leading to challenges in establishing a baseline. Monitoring IPV efforts presents a challenge, given that the behavior often occurs behind closed doors, and a stigma is associated with its discussion.

Relevant stakeholders

We did not experience any substantial issues identifying and reaching stakeholders in this field, particularly academics. We think there are strong networks of people working on gender issues who could support a new non-profit in this space.

8.3 Feedback loops

We are concerned about the ability of non-profits to evaluate and communicate impact reliably. Robust monitoring will require creative usage and triangulation of different data sources (Frank Interview). Randomized trials are possible, yet may be difficult to implement in this space. Monitoring the reach of the content produced is possible, but an expert with experience with implementation noted that there are challenges related to the lack of accurate reach data (Falzone Interview). We expect that a non-profit working in this space will need to develop a strong capacity for monitoring and evaluation. See sections 4 and 8.2.

8.4 Funding

Funding from funders in the CE network

We know that Founders Pledge has a positive view of mass media interventions, given their potential scale and low cost (Bettle, 2023). Additionally, Open Philanthropy awarded a second prize to an entry on VAWG prevention in its "cause exploration" contest. We have not consulted with them regarding their appetite and funding bandwidth for this intervention.

Broader funding sources

We are uncertain how access to funding will play out for this intervention. Funder attention toward mass media approaches is generally low (<u>Falzone Interview</u>). However, it is possible that in the specific case of IPV prevention, a non-profit would face fewer barriers to accessing funding given the broad appeal to large funders of work on gender issues (<u>Bansal Interview</u>).

8.5 Scale of the problem

Regrettably, we think that the scale of the problem is large (see <u>section 2</u>). This means that a non-profit organization is unlikely to have issues finding areas to scale into and replicate. Limiting factors are more likely to come from production and funding barriers.

8.6 Neglectedness

We found that interviewed experts believe a new organization in this space would be largely additional. We could identify a few organizations that work on edutainment for VAW prevention in a few countries (see section 6), yet believe that the scale of most projects remains relatively small (Falzone Interview). Actors and researchers in this field remain relatively uncoordinated (Falzone Interview).

We are unsure how this intervention would interact with the growing availability of Western media that may involve similar messages to the content produced. Overall, there is likely space for new organizations, especially those working on a large scale.

8.7 Tractability

We do not believe there are significant challenges related to the production and distribution of edutainment. We base this view on expert interviews and our view of existing organizations in the field,

8.8 Externalities

Negative

While we have not found evidence of a backlash effect against efforts to change attitudes and norms toward IPV, we are somewhat concerned that a non-profit could create one if it does not plan and test its messages ahead of time and well.

Positive

Beyond the main endline objective to reduce the prevalence of IPV, we believe there are several positive externalities from the production and dissemination of edutainment. These include but are not limited to:

- Changes in attitudes and norms towards women. These can be considered
 good outcomes on their own under several ethical views and views of
 development, such as a capabilities approach, equity frameworks, and more.
- A platform for other interventions. As observed with MTVShuga, strong edutainment programs can flexibly introduce narratives beyond the main message.
- Improvements and innovation in the field of edutainment. In particular, we believe there may be a need for more efforts focused on cost-effectiveness and evaluation in the field. Additionally, demonstrations of effectiveness may build funder support for the intervention approach.
- **Entertainment value**. The edutainment produced could provide entertainment value that could improve the mood and joy of the audience.
- Investments in the media industries for target countries.

8.9 Remaining uncertainties

The main uncertainties we have for this intervention revolve around the relative value more evidence could provide, for instance, if additional studies measured and reported behavioral effects. Given there is only one high–quality randomized study measuring behavioral outcomes, it may be the case that waiting for further research pays off in deciding what to deliver and where.

9 Conclusion

Overall, our view is that entertainment-led approaches to reduce Intimate Partner Violence is an idea worth recommending to future non-profit founders.

This intervention targets an extremely large burden with far-reaching health and economic consequences. We are particularly excited by entering a field that shows promise yet requires building more evidence around what works, with a particular focus on cost-effectiveness and scalability.

We think radio-based edutainment will likely reach the largest scale at comparatively cheap price points, relative to other approaches to reduce the burden of violence on women. If the content is well designed and tailored to the communities it is working within, it is likely that it will change men's behaviors towards their partners, therefore reducing the burden of emotional, physical, and sexual abuse that countless women are be subjected to.

References

- Abramsky, T., Devries, K., Kiss, L., Nakuti, J., Kyegombe, N., Starmann, E., Cundill, B., Francisco, L., Kaye, D., Musuya, T., Michau, L., & Watts, C. (2014). Findings from the SASA! Study: a cluster randomized controlled trial to assess the impact of a community mobilization intervention to prevent violence against women and reduce HIV risk in Kampala, Uganda. *BMC Medicine*, *12*, 122. https://doi.org/10.1186/s12916-014-0122-5
- Alvarado Merino, G., Scriver, S., L. Mueller, J., O'Brien-Milne, L., P. Fenny, A., & Duvvury, N. (2020). The health and economic costs of violence against women and girls on survivors, their families, and communities in Ghana. In *Public Health in Developing Countries Challenges and Opportunities*. IntechOpen. https://doi.org/10.5772/intechopen.88690
- Anwar A, Malik M, Raees V, et al. (2020). Role of Mass Media and Public Health

 Communications in the COVID-19 Pandemic. *Cureus* 12(9): e10453.

 doi:10.7759/cureus.10453
- Arias, E. (2019). How Does Media Influence Social Norms? Experimental Evidence on the Role of Common Knowledge. *Political Science Research and Methods*, 7(3), 561–578. https://doi.org/10.1017/psrm.2018.1
- Babalola, S., Brasington, A., Agbasimalo, A., Helland, A., Nwanguma, E., & Onah, N. (2006). Impact of a communication programme on female genital cutting in eastern Nigeria. *Tropical Medicine & International Health: TM & IH, 11*(10), 1594–1603. https://doi.org/10.1111/j.1365-3156.2006.01701.x
- Bandura, A. (1977). *Social Learning Theory*. Prentice Hall. https://play.google.com/store/books/details?id=IXvuAAAAMAAJ
- Bandura, A. (2004). Health promotion by social cognitive means. Health Education &

- Behavior: The Official Publication of the Society for Public Health Education, 31(2), 143–164. https://doi.org/10.1177/1090198104263660
- Banerjee, A., La Ferrara, E., & Orozco-Olvera, V. H. (2019a). *The Entertaining Way to Behavioral Change: Fighting HIV with MTV* (No. 26096). National Bureau of Economic Research. https://doi.org/10.3386/w26096
- Banerjee, A., La Ferrara, E., & Orozco-Olvera, V. H. (2019b). *The entertaining way to behavioral change: Fighting HIV with MTV*. World Bank, Washington, DC. https://doi.org/10.1596/1813-9450-8998
- Bansal, A. (2023). What you can do to help stop violence against women and girls.

 https://forum.effectivealtruism.org/posts/uH9akQzJkzpBD5Duw/what-you-can-do
 -to-help-stop-violence-against-women-and
- Behavioral Insights Team. (2014). *EAST: Four simple ways to apply behavioural insights*. Behavioral Insights Team.

 https://www.bi.team/publications/east-four-simple-ways-to-apply-behavioural-insights/
- Bettle, R. (2023). *Mass media interventions report*. Founders Pledge. https://founderspledge.com/stories/mass-media-interventions
- Blair, G., Littman, R., & Paluck, E. L. (2019). Motivating the adoption of new community-minded behaviors: An empirical test in Nigeria. *Science Advances*, 5(3), eaau5175. https://doi.org/10.1126/sciadv.aau5175
- Bursztyn, L., González, A. L., & Yanagizawa-Drott, D. (2020). Misperceived Social Norms: Women Working Outside the Home in Saudi Arabia. *The American Economic Review*, *110*(10), 2997–3029. https://doi.org/10.1257/aer.20180975
- Centre for Social and Behavior Change Communication. (n.d.). *What is SBCC*.

 Retrieved July 18, 2023, from https://www.centreforsbcc.org/what-is-sbcc/

 Chadwick, A., Kaiser, J., Vaccari, C., Freeman, D., Lambe, S., Loe, B. S., Vanderslott, S.,

- Lewandowsky, S., Conroy, M., Ross, A. R. N., Innocenti, S., Pollard, A. J., Waite, F., Larkin, M., Rosebrock, L., Jenner, L., McShane, H., Giubilini, A., Petit, A., & Yu, L.-M. (2021). Online Social Endorsement and Covid-19 Vaccine Hesitancy in the United Kingdom. *Social Media + Society*, 7(2), 205630512110088. https://doi.org/10.1177/20563051211008817
- Chandan, J. S., Thomas, T., Bradbury-Jones, C., Taylor, J., Bandyopadhyay, S., & Nirantharakumar, K. (2020). Risk of Cardiometabolic Disease and All-Cause Mortality in Female Survivors of Domestic Abuse. *Journal of the American Heart Association*, *9*(4), e014580. https://doi.org/10.1161/JAHA.119.014580
- Chatterjee, J. S., Pasricha, R., Mitra, R., & Frank, L. B. (2021). Challenging the

 Forcefield: Crafting Entertainment-Education Transmedia Campaigns. In L. B.

 Frank & P. Falzone (Eds.), *Entertainment-Education Behind the Scenes: Case*Studies for Theory and Practice (pp. 265–278). Springer International Publishing.

 https://doi.org/10.1007/978-3-030-63614-2_16
- Cherry, T. L., James, A. G., & Murphy, J. (2021). The impact of public health messaging and personal experience on the acceptance of mask wearing during the COVID-19 pandemic. *Journal of Economic Behavior & Organization*, 187, 415–430. https://doi.org/10.1016/j.jebo.2021.04.006
- Christia, F., Larreguy, H., Muhab, N., & Parker-Magyar, E. (2021). Can media campaigns empower women facing gender-based violence amid COVID-19? In *Research Square*. https://doi.org/10.21203/rs.3.rs-1137307/v1
- Coker, A. L., Smith, P. H., Bethea, L., King, M. R., & McKeown, R. E. (2000). Physical health consequences of physical and psychological intimate partner violence.

 Archives of Family Medicine, 9(5), 451–457.

 https://doi.org/10.1001/archfami.9.5.451

Demographic and Health Surveys. (2023). STATcompiler.

- https://www.statcompiler.com/en/
- Deuba, K., Mainali, A., Alvesson, H. M., & Karki, D. K. (2016). Experience of intimate partner violence among young pregnant women in urban slums of Kathmandu Valley, Nepal: a qualitative study. *BMC Women's Health*, *16*, 11. https://doi.org/10.1186/s12905-016-0293-7
- Donati, D., Orozco-Olvera, V., & Rao, N. (2022). *Marketing Gender Norms: A Social Media Experiment in India*. https://doi.org/10.2139/ssrn.4158065
- Ferrari, G., Torres-Rueda, S., Chirwa, E., Gibbs, A., Orangi, S., Barasa, E., Tawiah, T.,
 Dwommoh Prah, R. K., Hitimana, R., Daviaud, E., Kapapa, E., Dunkle, K., Heise, L.,
 Stern, E., Chatterji, S., Omondi, B., Ogum Alangea, D., Karmaliani, R., Maqbool
 Ahmed Khuwaja, H., ... Vassall, A. (2022). Prevention of violence against women
 and girls: A cost-effectiveness study across 6 low- and middle-income countries.

 PLoS Medicine, 19(3), e1003827. https://doi.org/10.1371/journal.pmed.1003827
- Flood, M. (2019). *Engaging Men and Boys in Violence Prevention*. Palgrave Macmillan US. https://doi.org/10.1057/978-1-137-44208-6
- García-Moreno, C., & Heise, L. (2005). WHO Multi-country Study on Women's Health and Domestic Violence Against Women: Initial Results on Prevalence, Health Outcomes and Women's Responses. World Health Organization.

 https://play.google.com/store/books/details?id=xRXLQgAACAAJ
- Glasman, L. R., & Albarracín, D. (2006). Forming attitudes that predict future behavior: a meta-analysis of the attitude-behavior relation. *Psychological Bulletin*, *132*(5), 778–822. https://doi.org/10.1037/0033-2909.132.5.778
- Glennester, R., Pouliquen, V., & Murray, J. (2022). The media or the message?

 Experimental evidence on mass media and modern contraception uptake in Burkina Faso.
 - https://poverty-action.org/media-or-message-experimental-evidence-mass-medi

- a-and-modern-contraception-uptake-burkina-faso
- Green, D. P., Groves, D. W., Manda, C., Montano, B., & Rahmani, B. (2023). A Radio Drama's Effects on Attitudes Toward Early and Forced Marriage: Results From a Field Experiment in Rural Tanzania. *Comparative Political Studies*, *56*(8), 1115–1155. https://doi.org/10.1177/00104140221139385
- Green, D. P., Wilke, A., & Cooper, J. (2018). Silence Begets Violence: A mass media

 experiment to prevent violence against women in rural Ugandar←.

 https://www.povertyactionlab.org/sites/default/files/research-paper/Silence-Beget
 s-Violence_Green_et_al_January2018.pdf
- Green, D. P., Wilke, A. M., & Cooper, J. (2020). Countering Violence Against Women by Encouraging Disclosure: A Mass Media Experiment in Rural Uganda. *Comparative Political Studies*, *53*(14), 2283–2320. https://doi.org/10.1177/0010414020912275
- Green, M. C. (2021). Transportation into Narrative Worlds. In L. B. Frank & P. Falzone (Eds.), *Entertainment-Education Behind the Scenes: Case Studies for Theory and Practice* (pp. 87–101). Springer International Publishing. https://doi.org/10.1007/978-3-030-63614-2_6
- Gupta, J., Willie, T. C., Harris, C., Campos, P. A., Falb, K. L., Garcia Moreno, C., Diaz Olavarrieta, C., & Okechukwu, C. A. (2018). Intimate partner violence against low-income women in Mexico City and associations with work-related disruptions: a latent class analysis using cross-sectional data. *Journal of Epidemiology and Community Health*, 72(7), 605–610. https://doi.org/10.1136/jech-2017-209681
- Heise, L. L., & Kotsadam, A. (2015). Cross-national and multilevel correlates of partner violence: an analysis of data from population-based surveys. *The Lancet. Global Health*, *3*(6), e332–e340. https://doi.org/10.1016/S2214-109X(15)00013-3
- Hulley, J., Bailey, L., Kirkman, G., Gibbs, G. R., Gomersall, T., Latif, A., & Jones, A. (2023). Intimate Partner Violence and Barriers to Help-Seeking Among Black,

- Asian, Minority Ethnic and Immigrant Women: A Qualitative Metasynthesis of Global Research. *Trauma, Violence & Abuse, 24*(2), 1001–1015. https://doi.org/10.1177/15248380211050590
- Jan, S., Ferrari, G., Watts, C. H., Hargreaves, J. R., Kim, J. C., Phetla, G., Morison, L. A., Porter, J.D., Barnett, T., Pronyk, P. M. (2011). Economic evaluation of a combined microfinance and gender training intervention for the prevention of intimate partner violence in rural South Africa. *Health Policy and Planning*, 26(5), 366–372. https://doi.org/10.1093/heapol/czq071
- Jensen, R., & Oster, E. (2009). The power of TV: Cable television and women's status in India*. *The Quarterly Journal of Economics*, *124*(3), 1057–1094. https://doi.org/10.1162/qjec.2009.124.3.1057
- Kerr-Wilson, A., Gibbs, A., & McAslan Fraser, E. (2020). A rigorous global evidence review of interventions to prevent violence against women and girls. *What Works to Prevent*.
 - https://www.whatworks.co.za/resources/item/693-a-rigorous-global-evidence-review-of-interventions-to-prevent-violence-against-women-and-girls
- Khosla, V., Mikami, A., Frank, L. B., Popal, I., Debeljak, K., & Shaw, A. (2013). Combating Violence Against Women Through C4D: The "Use Your Voice" Campaign and Its Implications on Audience-Citizens in Papua New Guinea. *International Journal of Communication Systems*, 7(0), 18.
 - https://ijoc.org/index.php/ijoc/article/view/1852/990
- La Ferrara, E., Chong, A., & Duryea, S. (2012). Soap Operas and Fertility: Evidence from Brazil. *American Economic Journal. Applied Economics*, *4*(4), 1–31. https://doi.org/10.1257/app.4.4.1
- Monnat, S. M., & Chandler, R. F. (2015). Long Term Physical Health Consequences of Adverse Childhood Experiences. *The Sociological Quarterly*, *56*(4), 723–752.

- https://doi.org/10.1111/tsq.12107
- Murphy, S. T., Frank, L. B., Chatterjee, J. S., & Baezconde-Garbanati, L. (2013).

 Narrative versus Non-narrative: The Role of Identification, Transportation and Emotion in Reducing Health Disparities. *The Journal of Communication*, *63*(1). https://doi.org/10.1111/jcom.12007
- Murrar, S., & Brauer, M. (2018). Entertainment-education effectively reduces prejudice. *Group Processes & Intergroup Relations: GPIR, 21*(7), 1053–1077.

 https://doi.org/10.1177/1368430216682350
- Ophir, Y., Sangalang, A., & Cappella, J. N. (2021). The Emotional Flow Hypothesis in Entertainment-Education Narratives: Theory, Empirical Evidence, and Open Questions. In L. B. Frank & P. Falzone (Eds.), *Entertainment-Education Behind the Scenes: Case Studies for Theory and Practice* (pp. 103–120). Springer International Publishing. https://doi.org/10.1007/978-3-030-63614-2_7
- Reed College (n.d.) General overview Pluralistic Ignorance.

 https://www.reed.edu/psychology/pluralisticignorance/#:~:text=What%20is%20Pluralistic%20Ignorance%3F
- Sabido, M. (2021). Miguel Sabido's Entertainment-Education. In L. B. Frank & P. Falzone (Eds.), *Entertainment-Education Behind the Scenes: Case Studies for Theory and Practice* (pp. 15–21). Springer International Publishing. https://doi.org/10.1007/978-3-030-63614-2_2
- Sardinha, L., Maheu-Giroux, M., Stöckl, H., Meyer, S. R., & García-Moreno, C. (2022).

 Global, regional, and national prevalence estimates of physical or sexual, or both, intimate partner violence against women in 2018. *The Lancet*, *399*(10327), 803–813. https://doi.org/10.1016/S0140-6736(21)02664-7
- Sardinha, L., & Nájera Catalán, H. E. (2018). Attitudes towards domestic violence in 49 low- and middle-income countries: A gendered analysis of prevalence and

- country-level correlates. *PloS One, 13*(10), e0206101. https://doi.org/10.1371/journal.pone.0206101
- Sarrassat, S., Meda, N., Badolo, H., Ouedraogo, M., Some, H., Bambara, R., Murray, J., Remes, P., Lavoie, M., Cousens, S., & Head, R. (2018). Effect of a mass radio campaign on family behaviours and child survival in Burkina Faso: a repeated cross-sectional, cluster-randomised trial. *The Lancet. Global Health*, *6*(3), e330–e341. https://doi.org/10.1016/S2214-109X(18)30004-4
- Sheeran, P., Maki, A., Montanaro, E., Avishai-Yitshak, A., Bryan, A., et al. (2016). The impact of changing attitudes, norms, and self-efficacy on health-related intentions and behavior: A meta-analysis. *Health Psychology*, 35(11), 1178-1188. https://pubmed.ncbi.nlm.nih.gov/27280365/
- Silverman, J. G., Gupta, J., Decker, M. R., Kapur, N., & Raj, A. (2007). Intimate partner violence and unwanted pregnancy, miscarriage, induced abortion, and stillbirth among a national sample of Bangladeshi women. *BJOG: An International Journal of Obstetrics and Gynaecology*, *114*(10), 1246–1252.

 https://doi.org/10.1111/j.1471-0528.2007.01481.x
- Silverman, J. G., & Raj, A. (2014). Intimate partner violence and reproductive coercion: global barriers to women's reproductive control. *PLoS Medicine*, *11*(9), e1001723. https://doi.org/10.1371/journal.pmed.1001723
- Sinclair, J., Sinclair, L., Otieno, E., Mulinge, M., Kapphahn, C., & Golden, N. H. (2013). A self-defense program reduces the incidence of sexual assault in Kenyan adolescent girls. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, *53*(3), 374–380. https://doi.org/10.1016/j.jadohealth.2013.04.008
- UNICEF. (2019, October 11). *Attitudes and social norms on violence*. UNICEF DATA. https://data.unicef.org/topic/child-protection/violence/attitudes-and-social-norms

- -on-violence/
- UN Women. (2020). *TA6: Violence Against Women and the girl child*.

 https://worlds-women-2020-data-undesa.hub.arcgis.com/pages/violence-against
 -women-and-the-girl-child
- van Laer, T., de Ruyter, K., Visconti, L. M., & Wetzels, M. (2013). The Extended

 Transportation-Imagery Model: A Meta-Analysis of the Antecedents and

 Consequences of Consumers' Narrative Transportation. *The Journal of Consumer Research*, 40(5), 797–817. https://doi.org/10.1086/673383
- Verplanken, B., & Orbell, S. (2022). Attitudes, Habits, and Behavior Change. *Annual Review of Psychology*, *73*, 327–352. https://doi.org/10.1146/annurev-psych-020821-011744
- Wakefield, M. A., Loken, B., & Hornik, R. C. (2010). Use of mass media campaigns to change health behaviour. *The Lancet*, *376*(9748), 1261–1271. https://doi.org/10.1016/S0140-6736(10)60809-4
- Wang, H., & Singhal, A. (2009). Entertainment-Education Through Digital Games. In U. Ritterfeld, M. Cody, & P. Vorderer (Eds.), *Serious games: Mechanisms and effects*. Routledge. https://doi.org/10.4324/9780203891650
- Wathen, C. N., MacGregor, J. C. D., & MacQuarrie, B. J. (2015). The Impact of Domestic Violence in the Workplace: Results From a Pan-Canadian Survey. *Journal of Occupational and Environmental Medicine / American College of Occupational and Environmental Medicine*, *57*(7), e65–e71.
 - https://doi.org/10.1097/JOM.0000000000000499
- Wathen, C. N., & Macmillan, H. L. (2013). Children's exposure to intimate partner violence: Impacts and interventions. *Paediatrics & Child Health*, *18*(8), 419–422. https://www.ncbi.nlm.nih.gov/pubmed/24426794
- What Works to Prevent VAWG Global Programme. (2020). Economic and social costs of

VAWG. What Works to Prevent Violence Against Women and Girls Global Programme.

https://www.whatworks.co.za/documents/publications/378-10912-nuig-gillian-8p g-vagw-web-10032020/file

Wilhelm, J. P., & Lorgerie, P. (2020, February 13). *Radio – Africa's prime medium*.

Deutsche Welle.

https://www.dw.com/en/worldradioday-why-radio-is-still-going-strong-in-africa/a -52355828

World Health Organization, García-Moreno, C., Ellsberg, M., Watts, C., & Heise, L. (2005). WHO Multi-country Study on Women's Health and Domestic Violence Against Women: Initial Results on Revalence, Health Outcomes and Women's Responses. World Health Organization.

https://play.google.com/store/books/details?id=aPsJPQAACAAJ

Yanagizawa-Drott, D. (2014). Propaganda and Conflict: Evidence from the Rwandan Genocide. *The Quarterly Journal of Economics*, *129*(4), 1947–1994. https://doi.org/10.1093/qje/qju020