Lessons Learned from a Mixed-Method Pilot of a Norms-Shifting Social Media Intervention to Reduce Teacher-Perpetrated School-Related Gender-Based Violence in Uganda

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Abstract: Background: Violence against children (VAC) is a global epidemic rooted in gender norms. One of the most common forms of VAC is school-related gender-based violence (SRGBV). Research has shown the promise of social media to shift norms underlying abusive behaviors, but, to-date, no studies have reported on social media norms-shifting interventions to prevent SRGBV by teachers. This study describes lessons learned from a pilot social-media intervention to shift social norms among Ugandan teachers to promote gender equity and reduce SRGBV. Methods: We extracted information on group size, posts, engagements, and teachers’ comments from intervention Facebook and WhatsApp social media groups and conducted mixed-methods data analysis. The study and program team met weekly to review findings and adjust the approach. Results: We found many teachers voiced social norms and attitudes upholding SRGBV in online groups, highlighting the need for intervention. Social media groups were largely acceptable to teachers, reached many teachers throughout Uganda, and often promoted active discussion. The program team carefully monitored online engagement, identified needed shifts, and performed mid-course adjustments in response to emerging challenges. Lessons learned included focusing on positive norms instead of harmful norms, engaging peer-influencers to shift norms, and including educational resources to inform behavior change. Conclusions: This study offers learnings on application of social and behavior-change communication and social norms principles to future online violence prevention initiatives.

Keywords: social norms; social media; school-related gender-based violence; violence against children; gender discrimination

1. Introduction

More than half of all children, over one billion globally, experience violence or neglect annually [1,2], of whom about one in four experience violence in school [3]. Violence against children (VAC) in school takes on many forms, including physical, sexual, and emotional violence perpetrated by peers or adults such as teachers and staff [4]. One of the most common forms of violence within the educational system is school-related gender-based violence (SRGBV), which includes acts of violence as well as discrimination “perpetrated as a result of gender norms . . . and enforced by unequal power dynamics” [3]. As a form of gender-based violence (GBV), girls represent an especially vulnerable group to SRGBV and are more likely to experience sexual abuse [5,6] and educational discrimination [7]. Individuals who do not conform to prevailing gender-norms may also be at increased risk of SRGBV. The perpetration of SRGBV poses significant, often lifelong harm to children’s health, well-being, educational attainment, and economic stability [8–13] and to girls’ equity.
Given their inherent power differential over students, teachers can increase children’s vulnerability to abuse negatively impacting academic performance [12] and contributing to educational gender inequities [7,14,15]. Alternatively, teachers may serve as a protective factor for setting norms and role-modeling positive behaviors and communication with students [16]. Despite the importance of teachers in shifting student experiences [17], research on interventions to prevent teacher-perpetrated SRGBV, particularly by addressing and shifting gender norms, is nascent [4,18].

Existing evidence highlights high prevalence and severity of teacher-perpetrated SRGBV in schools in Uganda. Results from the Ugandan Violence Against Children Survey (VACS) show that among 13- to 17-year-olds, teachers were the most common perpetrators of physical violence against both boys and girls [19]. VACS across Uganda, Malawi, Nigeria, and Zambia have similarly found that schools are often the first location children experience sexual violence [20]. Furthermore, recent studies have found that most of the girls who experience sexual harassment and violence in Ugandan schools are hesitant to report this abuse in fear of possible retaliation or stigmatization [6,21]. In Ugandan classrooms, gender discrimination has also been shown to start impacting girls’ advancement in science, technology, engineering, and math (STEM) in middle-school, leading to attrition in these areas up through tertiary education [22]. In a cross-sectional survey among primary school teachers in Northern Uganda, our team found the majority of teachers agreed with at least one gender inequitable attitude that prioritized boys’ advancement over girls’ in the classroom, justified using corporal punishment against students for at least one reason, and expected girls to reject sexual advances from teachers [23]. One in five teachers reported caning (i.e. beating) pupils in the past three months, highlighting the need for immediate intervention [23].

One promising but under-researched approach to shifting social norms related to violence is utilizing social media. Social interactions increasingly are taking place online, forming virtual social networks. Research has shown that social media can change people’s knowledge, attitudes, norms, and behaviors [24–26], providing an opportunity for social and behavior change (SBC) practitioners to address norms underpinning violent behaviors. Social media may increase the number of people reached by interventions by engaging on- and offline social networks and may be less resource intensive than in-person interventions, with potential advantages for sustained, wide-spread change [27]. Online social movements such as #MeToo have demonstrated success in shifting attitudes and norms around violence [28]. Additionally, a handful of norms-shifting SBC interventions have found success utilizing social media for various aspects of violence prevention, such as an online YouTube intervention to reduce self-injury [24] and several pilot evaluations in India, China, and Vietnam [29]. To our knowledge, however, no social media interventions have specifically targeted teacher-perpetrated violence in schools.

This study describes implementation and lessons learned from a pilot social-media SBC intervention on Facebook and WhatsApp, Everyday Heroes, designed to shift social norms among Ugandan teachers to promote gender equality for girls in the classroom and reduce teacher-perpetrated SRGBV against primary aged students (referred to as pupils in Uganda). The aim of this paper is to (1) describe the intervention’s reach and engagement, (2) explore the social norms and attitudes voiced by teachers on Everyday Heroes social media groups, and (3) report on acceptability, challenges, and lessons learned from implementation and adaptation to inform future social media norm-shifting interventions to prevent SRGBV.

2. Methods

2.1. Intervention

Everyday Heroes is the social media component of an SBC intervention designed and implemented by Save the Children, engaging teachers to reduce SRGBV in Uganda. The intervention originally included in-person discussion sessions in 20 target schools in the Wakiso district of Uganda and a social media component to reinforce the in-person curriculum. SBC strategies ultimately shifted online, however, due the COVID-19 pandemic...
and resulting school closures throughout Uganda. The online intervention used discussion forums within peer-teacher networks on the social media sites Facebook and WhatsApp to address SRGBV behaviors of interest. Common and normative SRGBV behaviors, identified via formative research with teachers and students, included abusive discipline, sexual abuse/harassment, and gender inequity in classrooms.

Everyday Heroes was implemented using three platforms: a public Facebook page, a private (closed) Facebook group, and a private (closed) WhatsApp group. In these groups, content was posted several times weekly by Save the Children facilitators to encourage discussion among teachers around the behaviors of interest. Posted content was developed using Robert Cialdini’s theorized six principles of interpersonal influence (reciprocity, scarcity, authority, commitment, liking, and consensus) [30] and informed by qualitative formative research with teachers and students. The content included influence-based conversation starters in the form of questions posed to the teachers in the groups, for example, “Teachers like you change lives. How have you changed the lives of your pupils?”, or teacher or student quotes from qualitative interviews and related images to prompt discussion within the group. Posts by program administrators related to intervention content were posted one to two times per day and appeared in focused “modules” related to the key behaviors being addressed, which spanned anywhere from one to six weeks in duration. Less sensitive topics were ordered first (perceptions of a good teacher, positive discipline, gender equity) followed by more sensitive topics (abusive discipline, perceptions of a good teacher). Further, the groups provided an opportunity for teachers to share insights and best practices with other teachers by posting their own content and engaging in teacher-driven discussion.

2.2. Study Design

This mixed-method study included quantitative social media monitoring to track the number of social media group members, posts, people reached by each post (views), engagement (likes and comments), and qualitative thematic analysis of all teacher comments on intervention-related posts from April to November 2020. The study team tracked the implementation process and protocols to monitor progress and identify necessary adaptations and corrective action. We met weekly to review findings and make necessary adjustments to the implementation approach. A subset of social media group participants volunteered for post-implementation virtual semi-structured interviews.

2.3. Recruitment and Data Collection

Teachers from the 20 schools originally targeted for the in-person intervention and teachers’ unions in Uganda were invited to the Everyday Heroes Facebook and WhatsApp groups by Save the Children Uganda. Teachers were also asked to invite colleagues to the groups. On the public Facebook page, Save the Children paid for Facebook to advertise groups and particular posts to teachers in Uganda. For the closed Facebook and WhatsApp groups, Save the Children approved admit requests. All requested users who were not obviously chat bots or spam accounts were admitted; most were known by the study team from their direct recruitment strategies. Data, including the posts’ content, who had made the posts (program administrators or participating teachers), the reach of the posts (number of views), and engagement on the posts (number of likes and comments), were extracted by the study team weekly from Everyday Heroes social media groups via a manual process into Microsoft Excel. Qualitative teacher comments in response to the posts were recorded three to five days after posts were made public. The only personal information collected from participants during this study was their public facing screen name which was separated from comments using unique identifiers. During the intervention implementation, passive consent messages were posted on the WhatsApp and Facebook groups stating the nature of the research being performed and giving all teachers the opportunity to opt out of the study. In January 2021, we also conducted virtual, semi-structured post-implementation interviews with a sub-sample of eight teachers (five
females, three males) to capture teacher reflections on the intervention and suggestions for improvement. Recruited teachers volunteered through passive advertisements posted on WhatsApp and completed oral consent prior to participation. Recruitment of teachers on Facebook for the semi-structured interviews was impossible as the government of Uganda had restricted access to Facebook at the time of data collection.

2.4. Data Analysis

Quantitative data from the social media monitoring on the number of posts, who posted content, and engagement of teachers on intervention related posts were analyzed using descriptive statistics and visual charts and graphs. Social media monitoring data was stratified by the type of post (i.e., the SRGBV behavioral theme in which the post targeted, including sexual assault and harassment, abusive discipline, gender equity, positive discipline, and perceptions of a good teacher). All quantitative data were analyzed in SAS version 9.4.

For the qualitative data from the social media listening (i.e., comments by teachers on intervention related posts), the team developed an a priori codebook of structural themes based on social norms theory and the Everyday Heroes theory of change. Coding followed both deductive and inductive approaches to identify structural and emergent themes via the constant comparative method. Coding was conducted by three graduate-level analysts and the principal investigator with over 30 years of experience in qualitative research for implementation science. Priority aims for the qualitative analysis were to explore the social norms and attitudes voiced by teachers in the social media groups regarding the key SRGBV behaviors and to report on acceptability of the posted content to participating teachers. After gaining consensus from the research team on the a priori list of codes, the analysts initially double-coded data to establish inter-rater reliability, revise code definitions, and identify examples and non-examples of each code. The analysts met weekly to review differences in code structure and come to agreement. Any disputes between analysts were presented to the principal investigator for resolution. Coding was completed in Atlas.ti version 22. The team continued this process until 90% agreement was reached and the analysis team had come to consensus on the codebook, which comprised approximately 20% of the posts. Analysts then independently coded the remaining data. When data coding was complete, coded data and memos were used to develop thematic analytical matrices in Microsoft Excel. Post-implementation interviews were coded via a similar process, with one graduate-level coder overseen by the study principal investigator. Findings from the qualitative analysis were reviewed and compared with the quantitative findings to provide additional context and answer different aspects of the pilot evaluation aims (Table 1).

### Table 1. Evaluation aims and data collection methods.

<table>
<thead>
<tr>
<th>Aims</th>
<th>Quantitative Social Media Tracking</th>
<th>Qualitative Social Media Listening</th>
<th>Post-Implementation Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Describe the intervention’s reach and engagement</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2. Explore the social norms and attitudes voiced by teachers on Everyday Heroes social media groups</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3. Report on acceptability, challenges, and lessons learned from implementation and adaptation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
3. Results
3.1. Intervention Reach and Engagement

At the end of implementation in November 2020, 1606 teachers were recorded in the Facebook page, 142 in the Facebook group, and 242 in the WhatsApp group. These numbers varied over the period of assessment. While some members left groups, in general these losses were small (zero to two participants per week), and other new joining members often replaced them. Over the duration of the tracking process, 417 posts were posted to the private Facebook group, 332 posts to the public Facebook page, and 1006 posts to the WhatsApp group by both teachers and program administrators. There were significantly more posts by teachers than program administrators on WhatsApp (12:1 ratio), while the opposite was true on Facebook (4:1 ratio). The vast majority of the posts by teachers on WhatsApp, however, were on topics not directly related to the intervention (Table 2 and Figure 1).

Table 2. Frequency of posts by group and participant (program administrator vs. teacher).

<table>
<thead>
<tr>
<th>Post Topic</th>
<th>WhatsApp</th>
<th>Facebook</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teacher Administrator</td>
<td>Teacher Administrator</td>
</tr>
<tr>
<td>Intervention-related</td>
<td>749 (42.0%)</td>
<td>77 (94.8%)</td>
</tr>
<tr>
<td>Other</td>
<td>533 (58.0%)</td>
<td>4 (5.2%)</td>
</tr>
<tr>
<td>Total</td>
<td>919 (100%)</td>
<td>77 (100%)</td>
</tr>
</tbody>
</table>

![Figure 1. Number of posts across the three social media channels by topic.](image)

On Facebook, corporal punishment was the topic with the most views (reach) and likes and comments (engagement), followed by positive discipline. A small number of posts from the Everyday Heroes public Facebook page (19 posts) were boosted for extra reach to the target audience of Ugandan teachers. These posts covered content related to corporal punishment, sexual harassment, and positive discipline. As expected, the average reach and engagement for these boosted posts were much higher than the reach and engagement of overall posts; on average, the boosted posts received 3865 views, 616 likes, and seven comments, whereas the non-boosted posts received 45 views, two likes, and zero comments. Additionally, posts on abusive discipline had over double the number of views compared to positive discipline posts (Figure 2). All topics had a similar average number of average...
views on WhatsApp although the topic on corporal punishment had the highest average number of comments (three comments).

Figure 1. Number of posts across the three social media channels by topic.

Figure 2. Number of views, likes, and comments on Facebook posts by topic.

3.2. Social Norms and Attitudes of Teachers Related to SRGBV

Participating teachers who left comments on posts voiced strong norms that upheld and justified corporal punishment for children in their schools. Repeatedly participants, particularly men, voiced support for abusive discipline in this context, such as, “spare the rod, spoil the child” and described physically disciplining children in their classrooms.

“We have a steadily progressive morally decaying society. So, we should not spare the stick. We should uphold the stick... for discipline, I have to cane [beat] them [students].”

“You’re scared but that is the truth my dear. I flog my own [students] to put them to order.”

Despite the dominant norms among teachers upholding corporal punishment of children, some teachers expressed positive attitudes and awareness of the emotional and psychological harms of child abuse. Several noted that beating a child or calling them names could lower their self-esteem, discourage them from participating in class, and increase the likelihood that they leave school and perpetrate violence themselves.

“I think beating affects the child emotionally, psychologically sometimes these pupils’ behavior may be depicting what is happening to them, especially those children who are abused. They tend to be aggressive, so beating maybe just adding salt to their wounds and making school a living hell for them. That’s my view.”

“A child instead feels demotivated and feels like dropping out of school because his or her self-esteem has been lowered.”

“Calling children names is so hurtful and demoralizing. It has adverse effects to their self-esteem and outlook. It erodes their self-confidence and freedom of expression. Their active participation in class is curtailed.”

The conversation starter “How does beating a child lead to long-term damage to the child?” received the most comments or replies (44 comments) and demonstrated the potential of the online intervention in promoting active debate and discussion among teachers on issues of SRGBV, particularly corporal punishment. In this post, teachers posted back and forth with supporting and opposing attitudes and expectations related to disciplining children with physical force, as shown in the excerpt below.
Respondent 1: “Beating a child is not a good idea to help him or her come out of trouble but instead have a serious talk with that child this will help you find a way of handling that child especially in class without hurting each other physically or emotionally that’s my thought thanks.”

Respondent 2: “Many educators who say such incendiary things do the same in their families and schools. Beating is the most effective way or else get the teachers the alternatives.”

Respondent 3: “Not all what our parents did was right. I think it was how they perceived the situation. Can we believe that there are outdated values and norms due to globalization? As when you practice them now you can be reprimanded. So, let’s apply values which suits today not yesterday.”

Respondent 4: “You have really spoilt the generation with minor excuse ... when someone has done wrong twice, he deserves some pain. Me, I can’t support any idea about stopping child beating so long as beating has been done properly that’s why we have a high number of undisciplined people in the community and it’s still increasing.”

The majority of teachers who commented on posts regarding sexual harassment and abuse voiced strong norms and personal attitudes against sexual harassment expressing that it was morally wrong and not tolerated by the community. They reported that teachers who commit abuse could and should be subject to negative social sanctions (i.e., legal prosecution, stigmatization, job loss) if they were caught sexually violating a student. Despite strong support for negative sanctions for teachers who sexually abused students, a few teachers also posted comments which implied it was the responsibility of girls not to place themselves in situations where they could be abused and that some girls made up these stories to humiliate or “get back at” their teachers, even suggesting that the victims themselves may be the sexual aggressor.

“It’s poor upbringing of the child. There are those girls who like seducing our male teachers also. So, they end up making false accusations.”

“In fact, that’s [where] most teachers fall victim to sexual harassment of the young minors.”

Overall, teachers’ discourse on gender discrimination reinforced the importance of gender equity in the classroom. One female teacher described attitudes that boys and girls should be treated equally in the classroom and be “gender sensitive”. Other participants supported the idea that teachers should treat children equally.

“Teachers should focus on the ability of learners, however they should also be gender sensitive and treat all learners equally.”

“The world will be better and become the best place to live in because even in the eyes of GOD we are all equal.”

“All children are placed in the teacher’s hands to be handled equally.”

3.3. Implementation Learning

Throughout the implementation process, partners met weekly to assess progress, review monitoring results, make mid-course corrections, and document actions to improve the intervention (Table 3). Here we focus on the learnings around implementation and actions taken to improve implementation during the study period.
Table 3. Implementation challenges and implemented solutions.

<table>
<thead>
<tr>
<th>Identified Challenge</th>
<th>Action</th>
</tr>
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<tbody>
<tr>
<td>Teachers requested educational content on how to implement positive discipline techniques.</td>
<td>Posted links to educational information on positive discipline.</td>
</tr>
<tr>
<td>Some men voiced they felt attacked by posts on sexual harassment.</td>
<td>Revised posts to largely focus on the positive impact teachers can have and how they can prevent and report sexual harassment and abuse.</td>
</tr>
<tr>
<td>Participant burnout and fatigue related to posts on sexual harassment and abuse.</td>
<td>Varied content instead of posting repeated days of content on this topic.</td>
</tr>
<tr>
<td>Posts directly confronting harmful norms often had the unintended effect of reinforcing harmful norms.</td>
<td>Revised posts to focus on positive norms and positive influence of teachers. Included peer-influencers to comment on posts and shift discussion to focus on positive norms.</td>
</tr>
<tr>
<td>Some teachers posted content that graphically depicted child abuse.</td>
<td>Careful content moderation and removal of problematic teacher posts.</td>
</tr>
</tbody>
</table>

Through intensive social media group monitoring we found that, while many teachers accepted themes around positive discipline, they often stated they did not know how to put this into practice and requested resources to strengthen their capacity in this area. In response to requests for more information, program administrators posted links to resources such as the ‘Good Schools Toolkit’, an educational in-person intervention shown to reduce VAC in Uganda [31–33], and Ministry of Education tools and policies. Several participants posted online in appreciation of these resources, as exemplified in the quote below.

“When I had just started teaching, I did not know how to handle children and often lashed out at them. I am proud of myself now, because I am able to deal with children without resorting to demeaning remarks or violence.”

During the six weeks that content was posted regarding sexual harassment, some teachers, particularly in the last two weeks, commented in the social media groups that they were tired of the content or it made them uncomfortable. Another participant in the post-implementation semi-structured interview also reported feeling uncomfortable with the nature and amount of posted content on sexual harassment. Toward the end of this period, more teachers left the group (around 10 per week instead of one to two). Additionally, a few teachers, particularly men, posted comments indicating that they felt attacked by admin posts on sexual harassment that directly called into question male teacher behaviors and inappropriate relationships with students. For example, one male teacher said, “You want to paint male teachers as rapists and criminals. Stop that please.” Another responded, “I also want to challenge the admin here to also post the positive things teachers do. Why does the admin deal only on the negatives?” In response, program administrators revised posts to focus on the positive impact teachers can have with students and how they can prevent or report sexual harassment and abuse. Program administrators also decreased the number of posts related to sexual harassment and abuse and began to vary content with other SRGBV behaviors and lighter topics such as perceptions of a good teacher.

Posts which focused on negative norms or repeated negative gender stereotypes in an effort to get teachers to disavow those norms had the opposite effect. In these cases, some teachers posted comments reinforcing harmful norms, at times with no other teachers commenting to refute those negative perceptions, as seen in the example below.

Prompt: “What do you feel about the myth that children seduce teachers and are really damaged by sexual abuse?”

Teacher comment: “It is not a myth. Children do seduce teachers after studying their weak areas. So, it is up to a teacher to stand his ground and keep his integrity.”

Furthermore, some teachers posted disturbing videos and posts explicitly visualizing or detailing child abuse within and outside of schools. The program administrators immediately removed posts that reinforced harmful norms or showed inappropriate behaviors.
Administrators also revised future posts to reinforce positive norms rather than directly tackling harmful norms due to the difficulty of carefully facilitating and moderating online conversations about harmful norms. For example, conversation starters asking teachers if student teacher relationships could ever be appropriate were revised to ask how teachers can protect and support students from sexual abuse. Based on these changes, teachers’ comments shifted to be more positive and supportive, as seen in the example below.

Prompt: “What can teachers do to let pupils know they are a safe person to talk to about sexual abuse?”
Teacher comment: “To have regular sex education sessions with pupils in or to provide them with enough space to express their feelings freely with teachers. Teachers should reach down to the earth and listen to pupils.”

Midway through implementation, program administrators also engaged teachers as peer-influencers to comment on posts shifting discussions away from harmful norms and highlighting the positive influence teachers can have on students. Program administrators hypothesized that this peer role-modeling would encourage norm shifting. Influencers were recruited by Save the Children from the 20 original intervention schools and were principals or counselors who had undergone a brief initial training prior to school closure due to COVID-19. These influencers commented in approximately one out of every four intervention posts and often shifted discussions to focus on positive teacher behavior, as seen in the example below.

Prompt: “Do teachers who call pupils harmful names or beat them deserve to be shunned?”
Teacher comment: “Beating and disciplining are two different things. I flog mine seriously. We shall not raise undesirable and unruly children ... I always challenge people who are against caning [beating] to give alternatives and nothing has come out.”
Peer Influencer Comment: “Do you know the psychological effect of beating? There alternatives to beating children. Research has it that the most beaten children end up hooligans ... Stop damaging people’s children.”

Despite the challenges and mid-course corrections, teachers participating in semi-structured interviews found the intervention helpful and encouraging. Teachers noted that the Everyday Heroes Facebook and WhatsApp groups supported them by bringing teachers together and creating a platform where they could discuss “solutions” to improve students’ well-being and reduce abusive behaviors toward students. Two participants explained:

“It has helped me solve problems because when we work together in the Everyday Heroes WhatsApp group, the challenges that children face can be solved and we can find solutions towards ending violence pupils face at school.”

“As teachers, we have been missing something about behavior change within ourselves but whenever they send topics and questions and we see how people discuss about behavior changes, solutions and ways on how we can change our attitudes, it helps us change from what we have been doing to the positive side and in doing that we are able to also uplift others.”

4. Discussion

This study reports implementation learnings from a pilot social media norms-shifting intervention to prevent SRGBV perpetrated by primary school teachers in Uganda. We found diverse norms and attitudes voiced online by teachers on targeted SRGBV behaviors highlighting the need and opportunity for intervention. The online program was largely acceptable to teachers who participated in this study, reached many teachers throughout Uganda, and often promoted active discussion and debate critical for shifting norms. Through the process of actively monitoring and adjusting implementation, the team documented lessons learned relevant for future norm shifting social media initiatives to address school-based violence. In this section, we outline recommendations for future work.
Teachers in social media groups expressed strong norms upholding corporal punishment and blaming girls for sexual harassment. These results align with other studies from the region which report high prevalence of corporal punishment in the classroom [19,23] and found that girls who experience sexual harassment often are unwilling to report it due to fear of stigmatization or victim blaming [6,21]. We also found, however, that teachers in social media groups stated that they prioritize gender equality in their classrooms. These findings differ from other studies in Uganda which document the high prevalence of gender discrimination in educational settings [20,22,23]. This discrepancy could be because teachers who volunteered to comment on this topic were different and in some ways more progressive than those who did not comment. Alternatively, perhaps harmful norms that prioritize male students’ educational achievement are not as widely accepted in this setting as those underpinning corporal punishment. Overall, our results on teacher norms and attitudes reveal the need to engage teachers in social norm shifting interventions related to SRGBV. These results also show the potential to utilize online discussion-based forums and the influence of more progressive peers to shift teacher norms and behaviors.

Our implementation experiences underscore the importance of applying a holistic SBC framework to online violence prevention interventions. The High Impact Practices (HIPs) consortium has documented an evidence-based, multi-level SBC framework [34] which includes digital health best practices [35] as a useful modality to change behavior. Although the framework was originally designed for family planning interventions, many of the recommended practices align with the learnings from this study, including the importance of using formative research to identify appropriate media channels and discussion topics, intensive monitoring with real-time adjustments, and multi-level SBC strategies which target social (norms) and individual attributes (knowledge and attitudes) to shift behaviors. These SBC best practices are not yet consistently applied to online social media interventions, particularly for violence prevention, and therefore we recommend that these HIPs, particularly those developed specifically for digital technologies [35], are applied to future work in this area.

The results of this study also highlight the challenges of shifting social norms in an online space and the need for mitigation strategies. Previous research has documented that norms shifting interventions that “publicize the prevalence of a harmful practice can make things worse” [36] even when intentions are good. Similarly, we found teachers repeating harmful attitudes and norms when posts tried to confront them directly. One mitigation strategy is to focus on positive and protective norms by working with local communities to identify and amplify existing protective norms [36], a strategy which has shown promise in other pilots using social media to prevent violence against women [24,29]. Given our success employing this approach in this study, we recommend future social media violence prevention initiatives also focus on identifying and promoting positive norms. Focusing on positive norms and alternating messaging between different topics may also mitigate the risk of participants becoming overwhelmed by difficult content or feeling targeted by the intervention. Building on learnings from in-person social-norms-shifting interventions [37,38], we also recommend that online interventions are carefully facilitated by program administrators and peer-influencers trained in the foundational principles of the program, specifically on aspects related to gender and gender-based violence.

This study had several limitations. Although the intervention was initially designed as a single component of a larger SBC program with both in-person and online messaging, the in-person intervention activities could not be carried out due to COVID-19 school closures. These closures also made it impossible to conduct the endline survey with teachers and students. The experience of pilot interventions combining social media and in-person facilitation in China and Vietnam suggest that social media interventions may be most effective when integrated with in-person activities [27,29], especially when attempting to directly address harmful norms. Future studies are needed to evaluate the efficacy of integrated social media and in-person strategies to prevent and respond to teacher-perpetrated SRGBV. Another limitation of this study is that it did not collect individual
identifiable data from social media group participants, thus precluding individual level analyses and limiting our ability to verify that all group members were in fact Ugandan teachers. Recruitment efforts specifically targeted Ugandan teachers, however, and so it is likely that most members were indeed teachers. Finally, while social media data presents opportunities to understand social networks and interactions in an increasingly online world, there are also known limitations these data. For example, engagements were captured on posts at a single point in time several days after the post occurred, but it is possible that teachers engaged further after these data were collected. It is possible that posts on a public forum were influenced by social desirability bias given the stated purpose of the groups. Furthermore, it was impractical to reach out to group members to clarify their comments on posts and some teacher comments were not easily interpretable by the study team. Finally, only a sub-sample of group members commented on posts or volunteered for post-implementation interviews. Thus, teacher comments on norms, attitudes, and acceptability presented in this study may not be representative of the views of the larger group of teachers who joined social media groups. Despite these limitations, this study provides valuable findings and learnings from the first known online pilot intervention to reduce teacher-perpetrated SRGBV. These lessons are also applicable more broadly to other online and norms shifting violence prevention efforts.

5. Conclusions

This is the first study to report on the implementation of a social media norms-shifting intervention to prevent SRGBV perpetrated by teachers. Learnings and recommendations from this study are relevant for researchers and programmers to guide the design and implementation of future online social-norms-shifting violence-prevention interventions, particularly those seeking to address and prevent SRGBV perpetrated by teachers.


Funding: This research was funded by the United States Agency for International Development (USAID), Cooperative Agreement No. AID-OAAA-15-00042.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki and approved by the Institutional Review Board of the University of California San Diego (protocol code 202160SX) on 4 March 2021.

Informed Consent Statement: A waiver of consent was granted for the social media data extraction as this project meets the following requirements as outlined in 45 CFR 46.116(d). The research is minimal risk; the waiver or alteration will not adversely affect the rights and welfare of the subjects; the research could not practicably be carried out without the waiver or alteration. Passive assent messages were posted instead where participants could opt out of the study if they desired. Written informed consent was obtained from subjects prior to participating in qualitative interviews, which included consent to publish information from this study in peer-reviewed manuscripts.

Data Availability Statement: De-identified quantitative analysis data sets on the number of posts, comments, likes, and views will be made available upon request for academic or research purposes. To preserve anonymity of research subjects, all qualitative data, including teachers posts and comments, will remain confidential as per the ethics approval. Requests can be directed to the corresponding author Jasmine Uysal (juysal@ucsd.edu).

Acknowledgments: We would like to acknowledge the Save the Children program staff that contributed to moderating and facilitating intervention content along with the teachers who participated and volunteered their time as peer-influencers. We would like to acknowledge the efforts of Namalika Dehingia, from the University of California San Diego, in the formal analysis and visualization of the quantitative social media data.
Conflicts of Interest: The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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