Can Media Campaigns Empower Women Facing Gender-Based Violence amid COVID-19?[*]

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Women's exposure to gender-based and intimate partner violence (GBV and IPV) may be especially acute due to COVID-19, which has led to a notable increase in reporting of such violence, especially in the Global South. Building on recent studies on the role of edutainment and community-level interventions in combating GBV and IPV, we assessed the impact of a randomized intervention distributed via widely used social (Facebook and WhatsApp) and traditional (TV) media by an Egyptian women's rights non-governmental organization amid COVID-19. WhatsApp was a more effective way to deliver the treatment information than Facebook, but there are no statistical differences across outcomes between WhatsApp and TV dissemination. Our findings show that overall these media campaigns had no impact on women's attitudes toward gender or marital equality, or the justifiability of GBV or IPV. However, the campaign did increase women's knowledge, hypothetical, and reported use of resources available to those exposed to GBV and IPV.

The restrictions on movement, social isolation, and increased economic stress accompanying the COVID-19 pandemic have increased women's exposure to gender-based violence (GBV) and intimate partner violence (IPV) (1, 2), particularly in the Global South (3–5). Beyond being morally reprehensible, GBV and IPV increase social inequality and undermine economic development (6, 7). The prevalence of GBV and IPV across the globe and their significant economic costs have led to an increase in research on how to curb violence. Globally, systematic reviews have emphasized the need to shift norms that accept violence (6, 8), remedy the economic and political marginalization of women (9–11), and consider community-based interventions including public engagement and advocacy (12–14).

COVID-19 has limited organizations' ability to implement traditional in-person, often community-based, interventions, spurring the need for alternative ways of disseminating information and providing resources and support to women potentially impacted by violence. Harnessing the increased use of the internet and social media during the pandemic (15), we assess the impact of a social media and traditional TV campaign aimed at increasing women's rejection of violence and deepening knowledge of resources and support services available to those impacted by GBV and IPV.

Our study draws on findings that the expansion of entertainment programming along with cable TV has durably shifted gender norms and outcomes across contexts (16, 17). Closely connected research on edutainment posits that exposure to role models or dramatized, entertaining content can change attitudes by capturing individuals' attention, and motivating shifts in social behaviors (18, 19). Particularly when delivered at the community-level, edutainment may also shift perceptions of social norms and cue behavioral changes (20, 21). Studies that apply informational or edutainment interventions around GBV and IPV (22–25) have produced mixed findings. While some have found that interventions increase rejection of violence (22, 23), especially when delivered via communal channels, others note these interventions do not shift attitudes but increase individuals' willingness to report violence (24, 25). However, while scholars have used social media to examine phenomena like misinformation (26, 27) and political accountability (28), we are not aware of any study that probes whether social media platforms like Facebook and WhatsApp can be effective in delivering edutainment interventions, which often rely on traditional film distribution or in-person gatherings for communal screenings.

Egypt, the context of our intervention, features high levels of gender inequality and gender-based violence, ranking 129th out of 153 countries in the World Economic Forum's 2020 Global Gender Gap Index (29), reflecting the high rates of GBV and IPV in the broader Arab world (30, 31). 36% of ever-married women between the ages of 15-49 surveyed in 2015 report having experienced physical domestic violence, but only one-third of these women sought help to stop violence and only 18% reported it (32). There are several phenomena that explain such low levels of help seeking and reporting. More than half of ever-married women surveyed in 2005 express that physical domestic violence (hitting or beating) was justifiable in some cases (33, p. 1128). Social norms that blame women who are exposed to intimate partner violence

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and sanction women who report violence to authorities also sustain its occurrence (*34*). Those who do reject violence and would report it must contend with the challenges of navigating the Egyptian legal system's handling of violence against women amid the absence of some legal protections against IPV (*34*, *35*).

Despite these barriers to reporting directly to authorities, women subjected to violence can also access advocacy organizations, which provide them with resources and counseling on ways to safely respond to violence. Indeed, existing cross-national research shows that mobility limitations related to the COVID-19 pandemic led to increased searches for online resources around domestic violence (*2*). Research also underscores the challenge COVID-19 presented to existing organizations attempting to reach isolated audiences, emphasizing how social distancing renders women without knowledge of resources and organizations especially vulnerable (*5*). Our baseline survey of close to 6,000 Egyptian women showed that only 28% exhibited any knowledge of online resources and 22% knew of any organizations available to support women affected by GBV or IPV.

To explore the potential for content delivered over social and traditional media to shift attitudes, increase knowledge of available resources and shift behaviors around responding to GBV and IPV, we worked with an established women's rights non-governmental organization (NGO), the Egyptian Center for Women's Rights (ECWR), whose media programs, hotlines, and legal advocacy seek to shift women's rejection of violence, address norms that heighten women's inequality, and provide resources to aid women impacted by violence. The organization, and particularly its founder, women's rights lawyer Nehad Aboul Qomsan, social media and TV as an important, underutilized tool for NGOs and public agencies to connect with women subjected to violence and disseminate information about resources available for such women, especially given social distancing restrictions common in the pandemic.

We analyzed how encouragement to watch videos produced by ECWR and Aboul Qomsan with content aimed at empowering women through a shift in attitudes, increased knowledge, and change in responses to violence. The first set of videos constituted the latest season of a weekly TV show called *Hekayat Nehad* (Nehad's Stories), aired on a popular satellite channel, *Al Kahera Wa Al Nas*, on Saturday evenings between June 27, 2020 and September 5, 2020. The shows' 10 episodes were around 25-30 minutes in length and featured Aboul Qomsan sitting in a TV studio and speaking directly to the camera in a conversational tone. ECWR and Aboul Qomsan also produced a second set of thirteen 5-9 minute videos, with a similar narrative style as the TV show, to be disseminated over social media. Her tone and conversational nature aimed to cue the role modeling effects emphasized in edutainment interventions. Appendix Tables S1 and S2 summarize the content of each TV episode and video disseminated over social media, while Figure S2 shows an example of the landing page that social media users accessed.

While different in length and setting, the TV show and the video messages featured similar content centered on topics related to women's empowerment, sexual harassment, and violence against women. In the videos, Aboul Qomsan addresses linkages between patriarchal social

norms and exposure to violence; emphasizes that women are not to blame for violence; defines violence beyond just physical force and highlights its prevalence in the family, workplace, and in public; details Egypt's legal system, including where it needs reform; and instructs friends and families who become aware of violence to support victims. Given the difficulty in navigating the Egyptian legal system, the videos often emphasize access to NGOs, like an ECWR-sponsored hotline, that can connect women with support resources, including legal consultations. When discussing high-level violence like rape, she also underscores procedures to preserve evidence and immediately notify the police. Aboul Qomsan formally discusses the hotline at the end of most video messages, while she emphasizes several organizations and intricacies of navigating the Egyptian legal system more diffusely in the TV show. When discussing the complexities of the Egyptian legal system, Aboul Qomsan often emphasizes that respondents should contact ECWR, who can to provide legal representation.

1   Recruitment, Demographics, Treatment Delivery

Our intervention resembled those fielded in person in contexts as diverse as India (*36*), Mexico (*22*), and Uganda (*24*, *25*), but distinctively different in how we recruited participants into the study and especially in how we delivered the content. We used Facebook advertisements to recruit approximately 10,000 Egyptian women to a baseline survey. To incentivize participation, respondents who completed the survey received 25 Egyptian Pounds (1.2 USD) in mobile phone credit. As part of the baseline survey, respondents were invited to text a project WhatsApp account, add the number to their contacts, and follow and send a message a project Facebook account to request receiving additional information and videos about women's issues in Egypt. After removing individuals with duplicated responses, which we feared were not genuinely interested, we identified 5,618 Egyptian women interested in receiving such information and videos. In an endline survey conducted between September 10 and October 11, 2020, endline response rates were balanced among treatment conditions at 75% yielding a final sample of 4,165 participants.

We chose to recruit an all-female sample for two practical reasons beyond allowing a close focus on women's attitudes. First, our partner's content is designed to speak to and spark conversation among women and to address sensitive topics around GBV and IPV. Second, as some of our treatment content was disseminated via Whatsapp groups, rather than individually, we sought to avert the potential for harassment of women online that may have been more likely to occur in mixed-gender groups. Fig S1. show that our final sample of Egyptian women was largely drawn from more densely populated Egyptian governorates, and in particular Egypt's most populous city and its capital, Cairo. However, Figure 1 shows that respondents were demographically similar in age, education, relationship status, number of children, and extent of media usage, to Egyptian women who reported having access to the internet—the study's population of interest—in the 2016 and 2018 rounds of the nationally-representative Arab Barometer survey.

Using block randomization to ensure balance among treatment arms according to baseline demographics and attitudes, baseline respondents that showed interest in receiving more information and videos were assigned to one of five treatment conditions. A control group received all treatment content upon completion of the endline survey. A treatment group received WhatsApp messages reminding them about the TV show. In the remaining three treatment arms, we delivered video messages via the two most popular social media platforms in Egypt: WhatsApp and Facebook (37). Appendix Table S3 displays details on the block randomization procedure, assignment to treatment, and endline response rates across treatment arms. Appendix Tables S4-S11 show that the randomization was successful.

Participants in the TV Reminder treatment received a WhatsApp message each Saturday informing them about the time and channel of the show *Hekayat Nehad* over an eight week period from July 18, 2020 through September 5, 2020.[1] Participants assigned to the other three treatment arms—Facebook, WhatsApp Individual or WhatsApp Group—received thirteen links to a website publishing the videos mentioned earlier over the course of the same eight week period. Those in the WhatsApp Individual treatment received individual messages, while those in the WhatsApp Group received messages in groups of between eight and twelve other users. In both, the Individual and Group treatments, basic questions about the goals of the research were answered, but there was no in-depth moderation.

Lastly, those respondents assigned to the Facebook treatment initially received individual messages via Facebook's Custom Messages Channel. However, this treatment arm was transitioned to individual WhatsApp receipt after the delivery of four videos due to a technical issue with the Facebook account. In the subsequent analysis, we pool individuals who received the messages via WhatsApp and Facebook individually. Below, we discuss the relative effectiveness of the different social media platforms in generating consumption of the treatment information by participants.

We examine whether a mode of delivery was particularly effective in generating treatment consumption and ultimately shifting attitudes, increasing information about resources and support, and changing behaviors. Communally-delivered content may provoke more substantive shifts in attitudes and behaviors than content delivered individually, by generating discussions conducive to changes in individuals' beliefs about social norms (22, 38). In using the Group functionality of WhatsApp, we aimed to measure whether communally transmitted information on social media functions similarly to offline groups. Observing conversation in groups before endline, however, we noted very low levels of aggregate conversation (Table S12).[2]

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[1]Since we received IRB approval three weeks after the TV show started, these messages initially also pointed to the location of videos from the first three episodes.

[2]This might be driven by the fact that participants did not know other participants in the assigned WhatsApp group. However, the lack of variation on the extent to which WhatsApp group members knew each other prevent us from being more conclusive about this.

2 Information consumption

Our study differs from other edutainment interventions around GBV and IPV in its use of social and traditional media to deliver content rather than communal screenings or radio broadcasts (*23–25*). As a result, the first challenge of our study was whether individuals would consume the information we delivered via Facebook and WhatsApp, given their limited attention and the significant amount of information and notifications they receive online.

Because participants assigned to the social media treatment arms received messages with links to a server that showed videos hosted on YouTube, we can to measure website visits and YouTube views to understand aggregate consumption of treatment information across those treatment arms. While this data is subject to error around the website's calculation of unique users, S5 and Tables S13 and S14 suggest that approximately 45% of those in the social media treatment arms visited the site, and that the mean visitor watched between 2 and 3 videos.[3]

Server data also allows us to explore the relative effectiveness of Facebook vis-a-vis WhatsApp in ways that self-reported viewing at endline would not. Fig. S3 displays visits per assigned user across videos distinguishing for Facebook and WhatsApp Individual treatments. Fig. S4 reports the corresponding means for the first four weeks, when we were able to disseminate videos through Facebook, and the last eight weeks, when we had to continue disseminating the treatment information via WhatsaApp to those initially assigned to Facebook. A simple difference-in-differences analysis, which uses the fact that participants assigned to receive videos through Facebook treatment were migrated to WhatsApp Individual delivery, indicates that the individual dissemination of videos via WhatsApp was much more effective than through Facebook, with 0.126 ($p < 0.05$) visits more per assigned users for WhatsApp Individual than for Facebook. These differences show that, in addition to the technical issue we faced with our Facebook account, WhatsApp was a more effective method to deliver the treatment content in terms of generating video views.

3 Empirical Specification and Description of Outcome Measures

Our main results are from the following Intent-To-Treat Specification using weighted generalized least squares (WGLS),[4]

$$Y_i = \alpha_0 + \alpha_1 \text{ F\&WI} + \alpha_2 \text{WG} + \alpha_3 \text{TV} + \Omega X_i + \gamma_b + \varepsilon_i,$$

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[3]Table S12 shows visits and average visiting or viewing time per video for the website and YouTube respectively. Fig. S5 report the distribution of visits per user across treatments. Out of 3,695 assigned users, the website data identified 1,635 unique users who visited a total of 7,090 times, spending approximately 4 minutes each on the site.

[4]The weights correspond to the inverse probability of treatment assignment, and are detailed in Appendix Table S1.

where Y_i is an outcome of interest of individual i; $F\&WI$, WG, and TV are respectively indicators for treatment assignment to Facebook or WhatsApp Individual, WhatsApp Group, and TV Reminders; X_i are baseline-individual controls from the corresponding family of outcomes, γ_b are block-randomization fixed effects. Our primary estimates (α_{1-3}) recover the treatment effects for the Facebook or WhatsApp Individual, WhatsApp Group, and TV Reminder treatments.

In addition to measuring the extent to which treated participants internalized the treatment information through indexes of reported consumption of videos and knowledge about treatment information (Tables S15-16), we focus on the following indexes as outcomes: attitudes around violence, gender, and marital equality; reported and hypothetical behavior; as well as future outlook toward gender and marital equality. Knowledge questions measured respondents' ability to list organizations and online resources available to support women (Table S17). We measured attitudinal outcomes via two indexes, both centered around content explicitly delivered in the videos. The first index of gender and marital equality includes questions around the husband's role in the family, women's place in the workforce, and the justifiability of forms of violence like yelling and hitting (Table S18). The second index revolves around attitudes toward sexual violence, including questions on whether verbal harassment carries legal consequences, harassment in the street and the workplace, and whether women's clothing plays any role in exposure to violence (Table S19). In line with other studies' use of donations to measure commitment to a cause (*39*, *40*), we also measured whether our intervention shifted individuals' willingness to make a donation to a support organization, in this case by sacrificing some or all of their remuneration for the endline survey (Table S20).

Our main behavioral outcomes centered around hypothetical and recent use of resources in response to domestic or sexual violence (Tables S21 to S23). We pre-registered the intervention's focus on accessing support organizations or online resources, which were emphasized in the treatment content. Finally, we measured outcomes related to respondents' beliefs about whether Egyptian women would achieve gender equality and gender rights in the future (Table S24). These questions measured women's beliefs that in the future women would have an equal say in family decisions, as well as more equal legal rights, access to education, and economic opportunities. We also measured reported outcomes that we did not expect our intervention to shift, like self-reported exposure to violence (Table S25-S26), hypothetical reporting behaviors to family members or authorities (Tables S27-S28), as well as reporting behaviors prior to COVID-19 (Table S29). Table S30 displays all of the questions used to generate these endline indices.

4 Results

Figure 2 shows a successful treatment-information delivery, as individuals in the various treatment arms were more likely to report receiving and viewing treatment content, and were able

to accurately describe the content of either the videos disseminated over social media or the TV show. These results underscore the utility of using both social and traditional media to deliver this type of content. The successful treatment delivery over social media is particularly noteworthy, given the high numbers of messages that women in Egypt may have received each day, especially during the pandemic (*2*).

The third panel of Figure 2 shows that individuals who received the videos or reminders to watch the TV show reported increased knowledge about information on resources for women subjected to violence (0.12-.30 SD increase, $p < 0.01$; see disaggregated results for the individual outcomes aggregated into the index in Table S17), which were continuously emphasized in the treatment content. As in the results that follow, there is no robust difference in knowledge acquisition between those receiving the treatment content via WhatsApp (individually or in groups) or the TV shows.

Figures 3 through 5 display our results in terms of attitudes, resource use, and future outlook. Results show that receipt of the videos over social media or reminders to watch the TV show did not shift individuals' beliefs toward gender and marital equality, increase rejection of sexual violence, or increase willingness to donate to support organizations. Tables S18 through S20 show disaggregated results, and similarly shows null results across all outcomes. Results in Columns 5-7 in Table S34 show that ceiling effects among individuals who at baseline hold attitudes rejecting violence or were more in favor of gender and marital equality do not drive these null results. Instead, these results underscore the stickiness of attitudes toward gender norms, which are reinforced by patriarchal cultural norms, prevailing religious interpretations, and via economic structures like labor market barriers (*40*, *41*).

In contrast, Figure 4 shows the intervention successfully encouraged treated participants to use the resources for women subjected to violence emphasized in the videos and the TV show. The two central plots of the figure show that, in hypothetical scenarios of response to domestic and sexual violence, treated participants were more likely to report that they would seek to use online resources or contact an organization (0.08-0.11 SD increase, at least $p < 0.05$; Tables S21 and S22 report disaggregated results).

Figure S6 and Tables S27 and S28, meanwhile, show that the intervention had no impact on individuals' hypothetical responses to violence via talking to family members or contacting the authorities. The preregistration anticipated these results, as the treatment content did not emphasize or encourage these forms of reporting. In portions of both the videos and TV show, Aboul Qomsan alludes to ongoing efforts to improve women's protections in the Egyptian legal system, and alludes to recent court cases in which women subjected to violence struggled to access justice. Given this background, we did not anticipate that the intervention would meaningfully have an impact on the perception of the Egyptian legal system, and thus associated behavior.

More importantly, in addition to reporting more *willingness* to contact a support organization or

use online resources for women affected by violence, the far-right column of Figure 4, meanwhile, shows that treated women were also more likely to report recent contact with a support organization and use of these resources (0.1 SD increase, $p < 0.01$, for WG and TV; 0.06 SD increase, $p < 0.1$, for FB + WI; Table S23 reports disaggregated results). The left panel of Figure 4 shows that these changes in behavior are not due to increased exposure to violence; as we anticipated, there is a precise null on reported experience of domestic and sexual violence during COVID-19 (see Table S25 for disaggregated results).

Finally, Figure 5 shows that despite having limited impact on women's attitudes toward gender and marital equality and rejection of violence, the intervention increased women's beliefs that women would achieve greater gender and marital equality in the future for participants who received individual messages via WhatsApp and Facebook, or who received reminders of the TV show (0.1 - 0.13 SD increase, $p<0.05$), but not for those who received the messages via WhatsApp groups. This null result in WhatsApp Groups may be due to the absence of substantial interactions in those groups.

Figures 1 and 6 and Appendix Tables S33-S34 underscore that our results are generalizable and not driven by social desirability bias. While Figure 2 shows that the women in our study demographically reflect female internet users in Egypt, Figure 6 displays how their attitudes differ from those of women surveyed in the two most recent rounds of the nationally representative Arab Barometer survey. The data show that the women who participated in our study express attitudes slightly more in favor of gender and marital equality at baseline than respondents in the most recent waves of the Arab Barometer survey. Similarly, women in our study are more likely to report at baseline that they would consider contacting an organization, and are more likely to report knowing of or experiencing violence; however, these questions are worded differently across the questionnaires.

Given these differences, to further analyze the generalizability of our results, we estimate heterogeneous effects based on a few variables. These include baseline attitudes, as it was possible that ceiling effects in terms of already favorable attitudes toward gender or marital equality and greater rejection of violence. Further, age could have played an important role and our experimental sample is slightly younger than that of those women who reported having access to the internet in the Arab Barometer survey (Tables S31 and S32). While young people are perhaps easier to reach on social media, previous edutainment interventions have underscored that role modeling from a relatable figure can play an important psychological cueing mechanism. As Nehad Aboul Qomsan is an accomplished professional and a mother, we might have expected to see stronger results among older women. Appendix Tables 32 and S33 show that indeed there are no heterogeneous effects on our findings according to these baseline attitudes or demographic variables. This absence of heterogeneous effects suggests any compositional differences in our sample do not impact the generalizability of our results. Finally, the precise nulls on placebo outcomes that our intervention should have no impact on reported experience of violence during COVID-19, recalled experiences of violence before COVID-1, or use of re-

sources before COVID-19 (Tables S25, S26, and S29) emphasize that social desirability bias is not driving the shifts we detect in hypothetical or recently reported use of resources.

5 Discussion

Our findings align, first and foremost, with those that find dramatized interventions can shift increases in reporting violence without necessarily impacting underlying attitudes (*24*, *25*). Unlike these other studies, we focus more specifically on the use of online resources and access to support organizations who can help, possibly remotely, women subjected to GBV and IPC in a context of rising levels of such violence. Our study further extends findings from those edutainment interventions addressing GBV and IPV via its distribution through social media and TV. Interventions delivered via social media and TV differ considerably relative to those delivered via communal film screenings (*23–25*), or transmission (*22*), such that they may not induce discussion or cue perceptions that others' norms are shifting, limiting their behavioral impact. Despite these differences, together with traditional media such as TV, social media platforms like Facebook and WhatsApp can be highly impactful because they are increasingly popular in Egypt (*42*) and elsewhere, and allow for low-cost—even free—information dissemination and circumventing mobility restrictions resulting from COVID-19.

Future work should extend our findings by considering how to deliver similar programming to men or consider mixed-gender groups. Several recent, successful interventions that purposefully include men and male community leaders have shifted women's access to the labor market (*43*) and exposure to violence (*13*), or shown that edutainments' impacts can work through shifts in male attitudes (*23*). We did not include men in our intervention because Aboul Qomsan's content is geared toward women, and because the high prevalence of online harassment constrained us from creating mixed-gender groups. Future online interventions should carefully consider how to appropriately include men without cueing fears or heightening the risk of online harassment.

Fig. 1: Comparison of demographics between Arab Barometer and experimental sample respondents
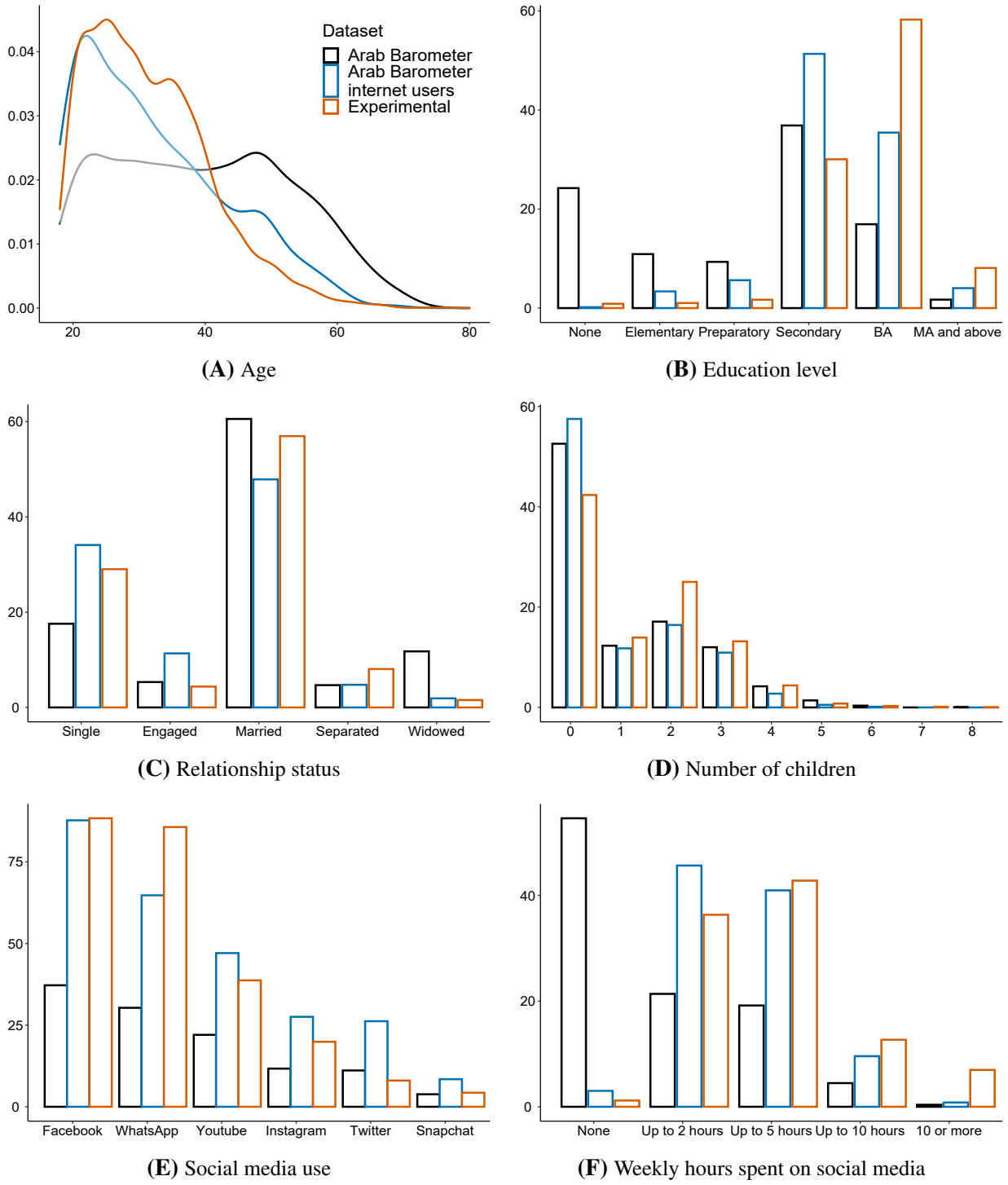
(A) Age

(B) Education level

(C) Relationship status

(D) Number of children

(E) Social media use

(F) Weekly hours spent on social media

Notes: The Arab Barometer data belongs to the 2016 and 2018 waves. Additional summary statistic comparisons are in Table S30.

Fig. 2: Treatment effects on TV show consumption, Facebook and WhatsApp treatment consumption, and knowledge of resources delivered in treatment
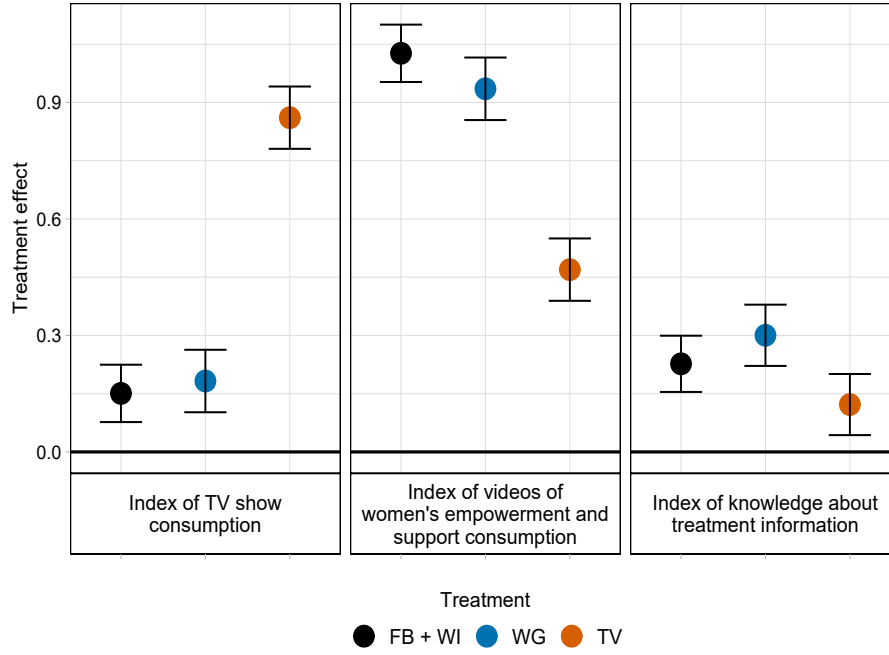
Notes: The estimates and 95% confidence intervals in each box are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent variables regressed on treatment indicators (FB + WI = Facebook or WhatsApp individual message, WG = WhatsApp group message, TV = TV show reminder), relevant baseline controls and randomization block fixed effects. The outcomes included in the index of TV show consumption are in Table S15. The outcomes included in the index of videos of women's empowerment and support are in Table S16. The outcomes included in the index of knowledge about treatment information are in Table S17.

Fig. 3: Treatment effects on attitudes toward gender and marital equality, and sexual violence
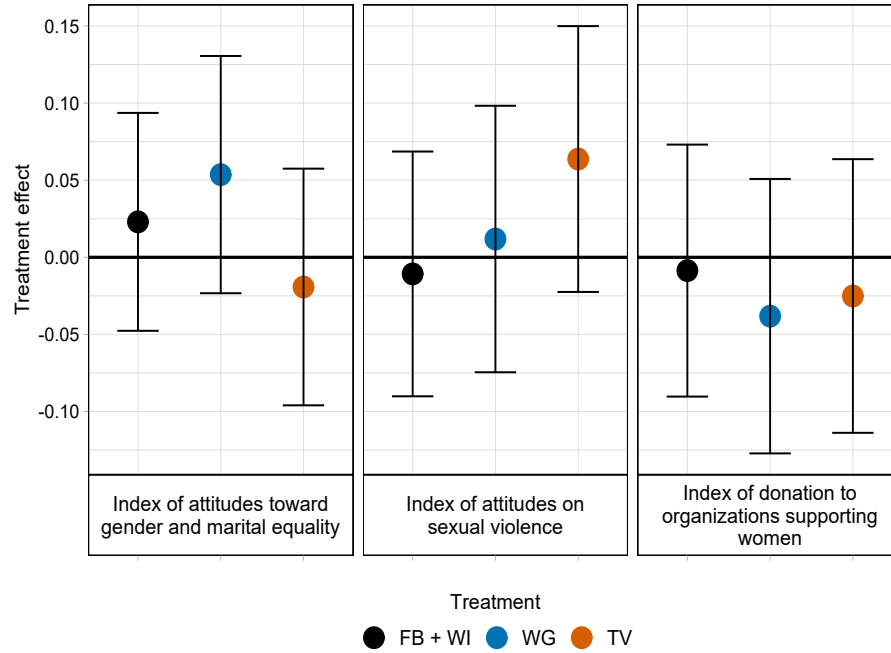
Notes: The estimates and 95% confidence intervals in each box are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent variables regressed on treatment indicators (FB + WI = Facebook or WhatsApp individual message, WG = WhatsApp group message, TV = TV show reminder), relevant baseline controls and randomization block fixed effects. The outcomes included in the index of attitudes toward gender and marital equality are in Table S18. The outcomes included in the index of attitudes on sexual violence are in Table S19. The outcomes included in the index of donation to organizations supporting women are in Table S20.

Fig. 4: Treatment effects on violence experienced during COVID-19, hypothetical and recent use of online resources or contact with an organization when responding to domestic or sexual violence

Notes: The estimates and 95% confidence intervals in each box are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent variables regressed on treatment indicators (FB + WI = Facebook or WhatsApp individual message, WG = WhatsApp group message, TV = TV show reminder), relevant baseline controls and randomization block fixed effects. The outcomes included in the index of domestic and sexual violence experienced during COVID-19 are in Table S25. The outcomes included in the index of hypothetical use of online resources and contact with an organization when responding to domestic violence are in Table S21. The outcomes included in the index of hypothetical use of online resources and contact with an organization when responding to sexual violence are in Table S22. The outcomes included in the index of recent use of online resources and contact with an organization during COVID-19 are those in Table S23.

Fig. 5: Treatment effects on women's future outlook toward gender and marital equality
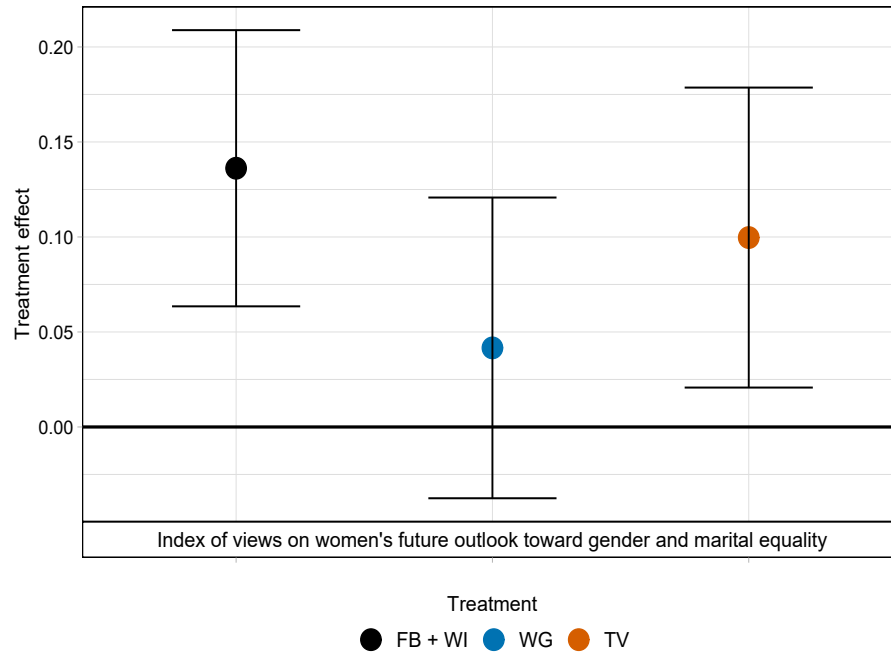
Notes: The estimates and 95% confidence intervals in each box are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent variables regressed on treatment indicators (FB + WI = Facebook or WhatsApp individual message, WG = WhatsApp group message, TV = TV show reminder), relevant baseline controls and randomization block fixed effects. The outcomes included in the index of views on women's future outlook toward gender and marital equality are in Table S24.

Fig. 6: Comparison of attitudes and behavior between Arab Barometer and experimental sample respondents
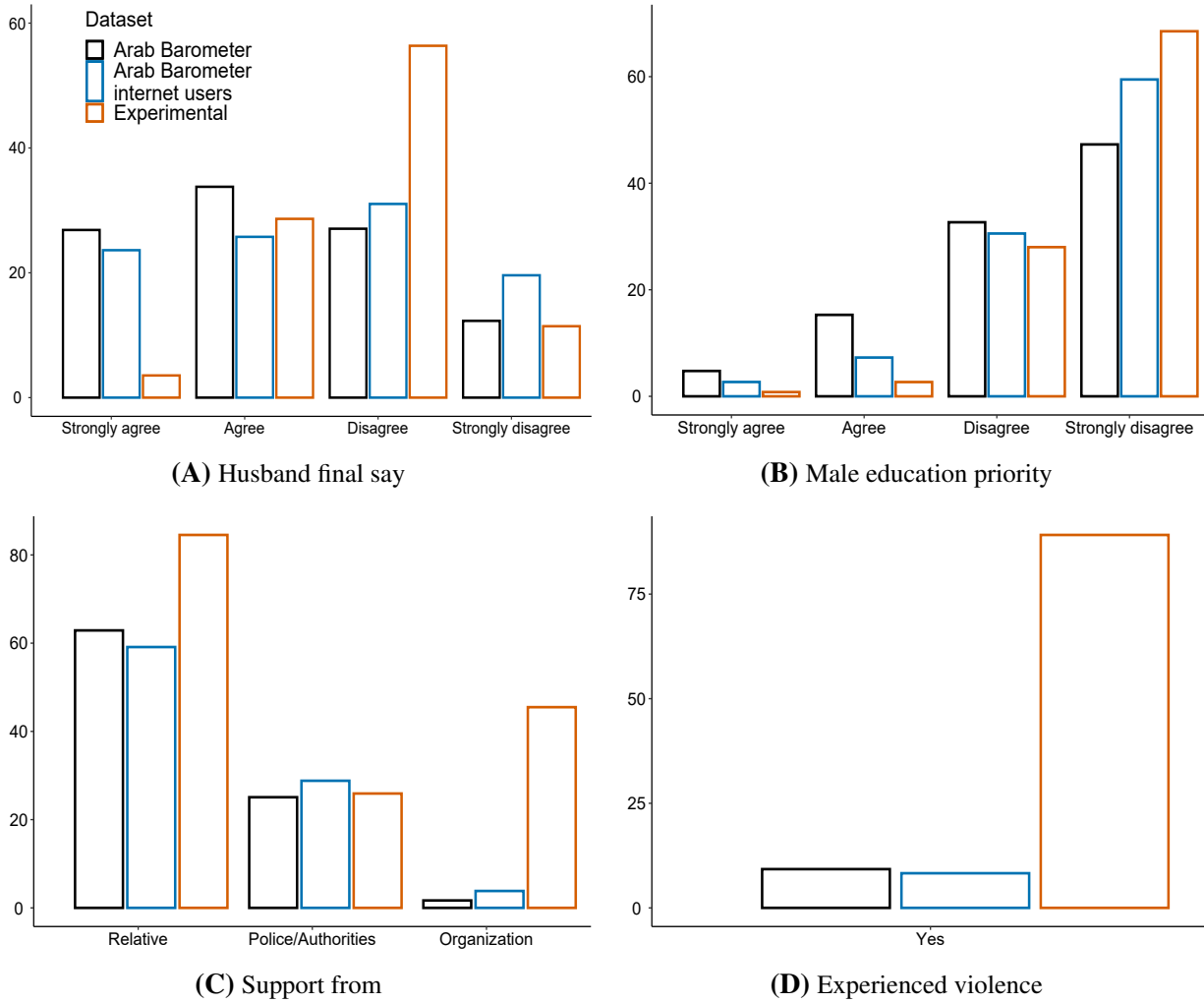
(A) Husband final say

(B) Male education priority

(C) Support from

(D) Experienced violence

*Notes:* The Arab Barometer data belongs to the 2016 and 2018 waves. Additional summary statistic comparisons are in Table S31. The "Support from" variables differ in both surveys: the Arab Barometer survey asked whether respondents thought that a family member who was abused would be able to receive assistance from each of the actors, and our survey asked whether respondents would recommend a friend or family member who was abused to reach each of the actors. (2) The "Experienced violence" variable differs in both surveys: the Arab Barometer survey asked if in the last twelve months a female member of the household was abused by another member, and our survey asked whether, in the month before the COVID-19 pandemic, they heard of someone or themselves experienced being hit by a man.

6 References and Notes

1. A. R. Piquero, W. G. Jennings, E. Jemison, C. Kaukinen, F. M. Knaul, *Impact Report: COVID-19 and Domestic Violence Trends*, (`https://build.neoninspire.com/counciloncj/wp-content/uploads/sites/96/2021/07/Domestic-Violence-During-COVID-19-February-2021.pdf`).

2. I. Berniell, G. Facchini, *European Economic Review*, 1–19 (2021).

3. C. Rivera, Y. Hsu, F. P. Esbry, E. Dugarova, *What does coronavirus mean for women What does coronavirus mean for women*, **july** 2020, (`https://www.undp.org/blogs/what-does-coronavirus-mean-women`).

4. *Gender Implications of COVID-19 Outbreaks in Development and Humanitarian Settings*, CARE, **july** 2020, (`https://www.care.org/wp-content/uploads/2020/07/gendered_implications_of_covid-19_-_full_paper.pdf`).

5. J. Usta, H. Murr, R. El-Jarrah, *Violence and Gender* **8**, 133–139 (2021).

6. E. G. Krug, J. A. Mercy, L. L. Dahlberg, A. B. Zwi, *The Lancet* **360**, 1083–1088 (2002).

7. K. M. Devries, J. Y. Mak, C. Garcia-Moreno, M. Petzold, J. C. Child, G. Falder, S. Lim, L. J. Bacchus, R. E. Engell, L. Rosenfeld, *Science* **340**, 1527–1528 (2013).

8. A. Semahegn, K. Torpey, A. Manu, N. Assefa, G. Tesfaye, A. Ankomah, *Reproductive Health* **16**, 1–31 (2019).

9. C. Bourey, W. Williams, E. E. Bernstein, R. Stephenson, *BMC Public Health* **15**, 1–18 (2015).

10. A. M. Buller, A. Peterman, M. Ranganathan, A. Bleile, M. Hidrobo, L. Heise, *The World Bank Research Observer* **33**, 218–258 (2018).

11. M. E. Tankard, E. L. Paluck, D. A. Prentice, *BMC Women's Health* **19**, 17 (2019).

12. T. Abramsky, K. M. Devries, L. Michau, J. Nakuti, T. Musuya, L. Kiss, N. Kyegombe, C. Watts, *BMC Public Health* **16**, 339 (2016).

13. J. A. Wagman, R. H. Gray, J. C. Campbell, M. Thoma, A. Ndyanabo, J. Ssekasanvu, F. Nalugoda, J. Kagaayi, G. Nakigozi, D. Serwadda, *The Lancet Global Health* **3**, e23–e33 (2015).

14. V. Sharma, J. Leight, F. Verani, S. Tewolde, N. Deyessa, *PLoS medicine* **17**, e1003274 (2020).

15. B. Guermazi, *Digital transformation in the time of COVID-19: The case of MENA*, **july** 2020, (`https://blogs.worldbank.org/arabvoices/digital-transformation-time-covid-19-case-mena`).

16. R. Jensen, E. Oster, *The Quarterly Journal of Economics* **124**, 1057–1094 (2009).

17. E. La Ferrara, A. Chong, S. Duryea, *American Economic Journal: Applied Economics* **4**, 1–31 (2012).

18. A. Bandura, *Applied Psychology* **51**, 269–290 (2002).

19. A. Singhal, E. Rogers, *Entertainment-education: A Communication Strategy for Social Change* (Routledge, 2012).
20. G. Blair, R. Littman, E. L. Paluck, *Science Advances* **5**, eaau5175 (2019).
21. E. L. Paluck, D. P. Green, *American Political Science Review*, 622–644 (2009).
22. E. Arias, *Political Science Research and Methods* **7**, 561–578 (2019).
23. A. Banerjee, E. L. Ferrara, V. Orozco, *AEA Papers and Proceedings* **109**, 133–37 (2019).
24. J. Cooper, D. P. Green, A. M. Wilke, *AEA Papers and Proceedings* **110**, 615–19 (2020).
25. D. P. Green, A. M. Wilke, J. Cooper, *Comparative Political Studies* **53**, 2283–2320 (2020).
26. P. Melo, J. Messias, G. Resende, K. Garimella, J. Almeida, F. Benevenuto, *Proceedings of the International AAAI Conference on Web and Social Media* **13**, 676–677 (2019).
27. J. Bowles, H. Larreguy, S. Liu, *PloS One* **15**, e0240005 (2020).
28. J. R. Enríquez, H. Larreguy, J. Marshall, A. Simpser, *Working paper*, (`https://dx.doi.org/10.2139/ssrn.3897408`) (2019).
29. *Global Gender Gap Report 2021*, 2021, (`http://www3.weforum.org/docs/WEF_GGGR_2021.pdf`).
30. T. Elghossain, S. Bott, C. Akik, C. M. Obermeyer, *BMC International Health and Human Rights* **19**, 1–16 (2019).
31. C. Hawcroft, R. Hughes, A. Shaheen, J. Usta, H. Elkadi, T. Dalton, K. Ginwalla, G. Feder, *BMC Public Health* **19**, 1–12 (2019).
32. *Egypt Demographic and Health Survey 2014: Key Findings*, 2014, (`https://dhsprogram.com/pubs/pdf/SR223/SR223.pdf`).
33. K. M. Yount, L. Li, *Journal of Marriage and Family* **71**, 1125–1140 (2009).
34. K. M. Yount, *Sex Roles* **64**, 43–58 (2011).
35. M. Abdulaal, *Egypt's Hidden Pandemic: Domestic Violence On The Rise During COVID-19*, 2020.
36. A. Banerjee, S. Kumar, R. Pande, F. Su, *Do Informed Voters Make Better Choices? Experimental Evidence from Urban India*, 2011.
37. S. Kemp, *Digital 2020: Egypt*, 2020, (`https://datareportal.com/reports/digital-2020-egypt`).
38. M. S.-Y. Chwe, *Rationality and Society* **10**, 47–75 (1998).
39. V. Charnysh, C. Lucas, P. Singh, *Comparative Political Studies* **48**, 267–300 (2015).
40. T. Masoud, A. Jamal, E. Nugent, *Comparative Political Studies* **49**, 1555–1598 (2016).
41. R. Inglehart, P. Norris, *Rising tide: Gender equality and cultural change around the world* (Cambridge University Press, 2003).
42. N. Newman, R. Fletcher, A. Kalogeropoulos, R. Nielsen, *Reuters Institute Digital News Report 2019*, 2019.
43. L. Bursztyn, A. L. González, D. Yanagizawa-Drott, *American Economic Review* **110**, 2997–3029 (2020).

Supplementary Materials

Fig. S1: Survey responses by Egyptian Governorate
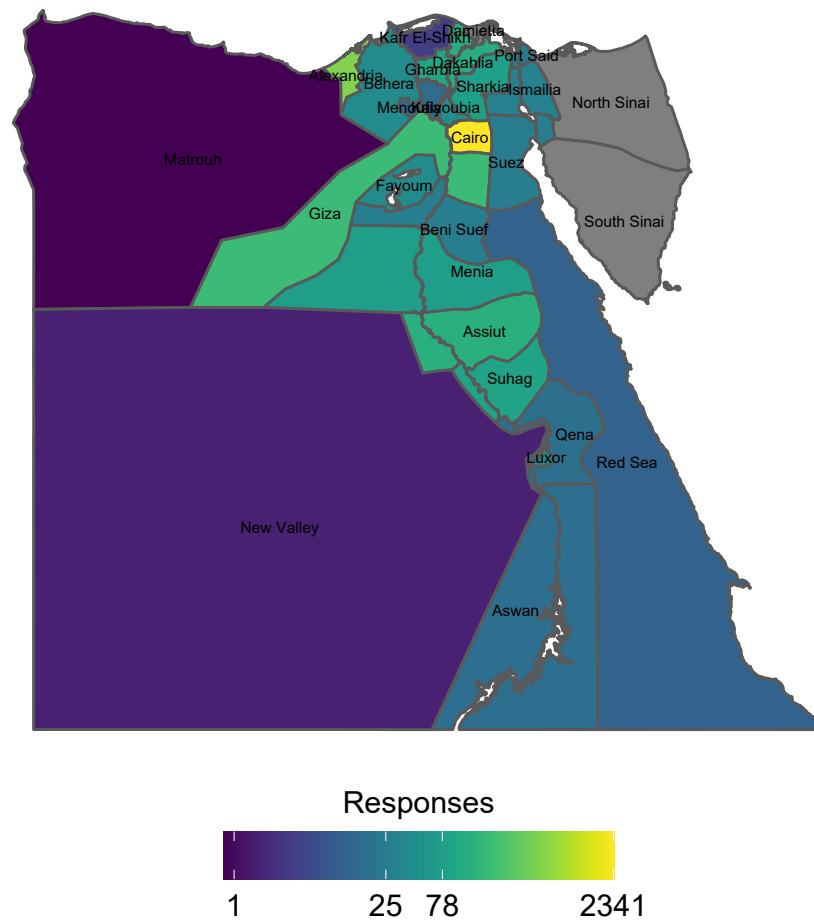
Fig. S2: Example of a treatment video whose link was disseminated to individuals assigned to the Facebook, WhatsApp Individual, and WhatsApp Group treatments
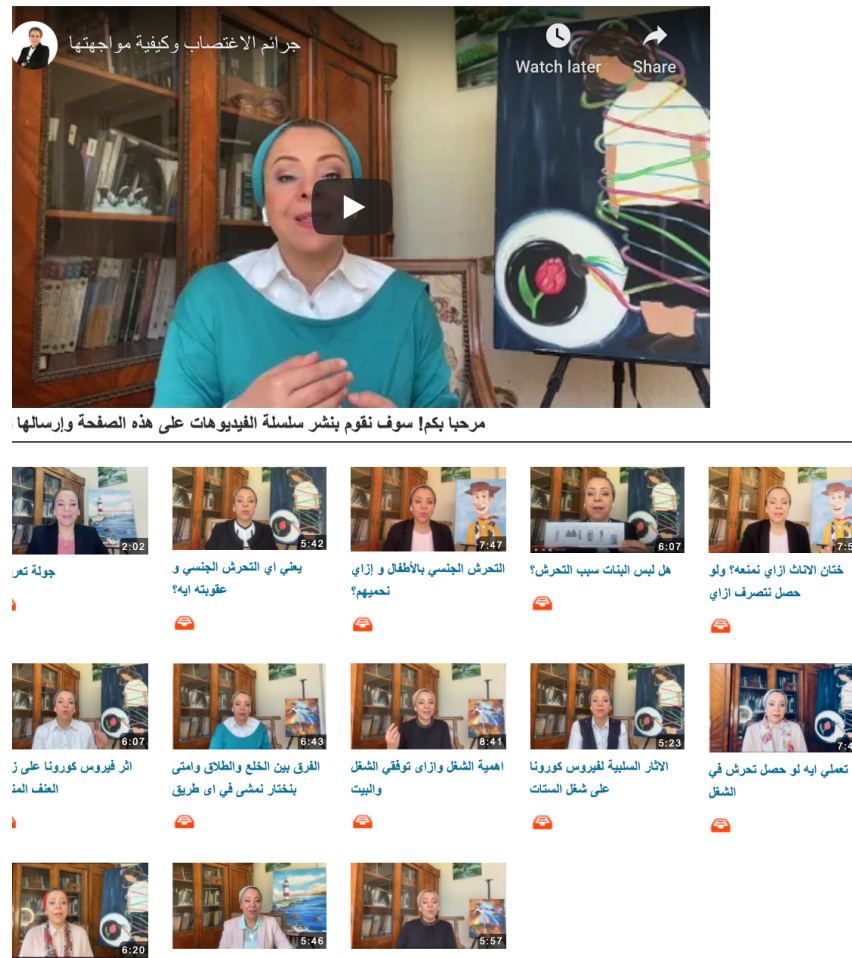
Fig. S3: Video landing web page visits for Facebook and WhatsApp Individual treatment before and after participants assigned to the Facebook treatment were shifted to the WhatsApp Individual treatment
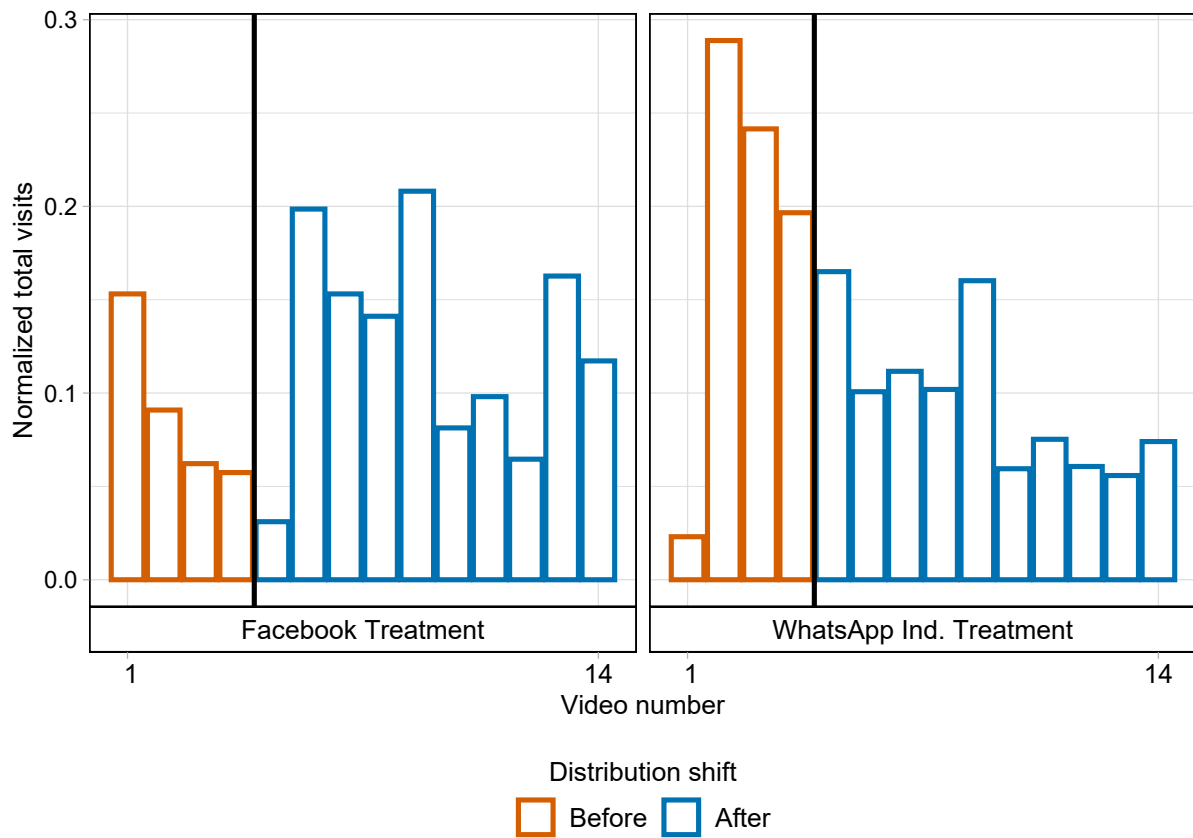
Fig. S4: Difference in difference effects of WhatsApp Individual treatment on video landing web page visits
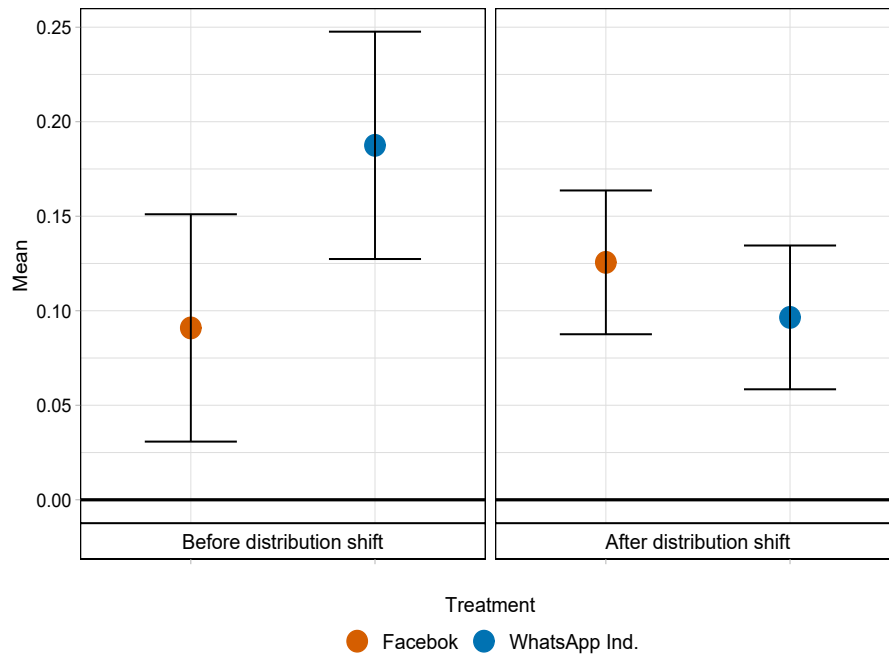
Notes: The estimates and 95% confidence intervals in each box are from the same difference in difference regression. We regressed number of visits per assigned participant per video on an indicator for Facebook treatment assignment, an indicator for the shift in distribution from Facebook to WhatsApp Individual, and the interaction between the two indicators, while including video fixed effects. The coefficient on the interaction is 0.126 ($p < 0.05$).

Fig. S5: Number of treatment web pages visited per web page user across treatments

(A) All treatment pages

Mean = 2.6

(B) Facebook treatment pages

Mean = 2.3

(C) WhatsApp individual treatment pages

Mean = 2.8

(D) WhatsApp group treatment pages

Mean = 2.4
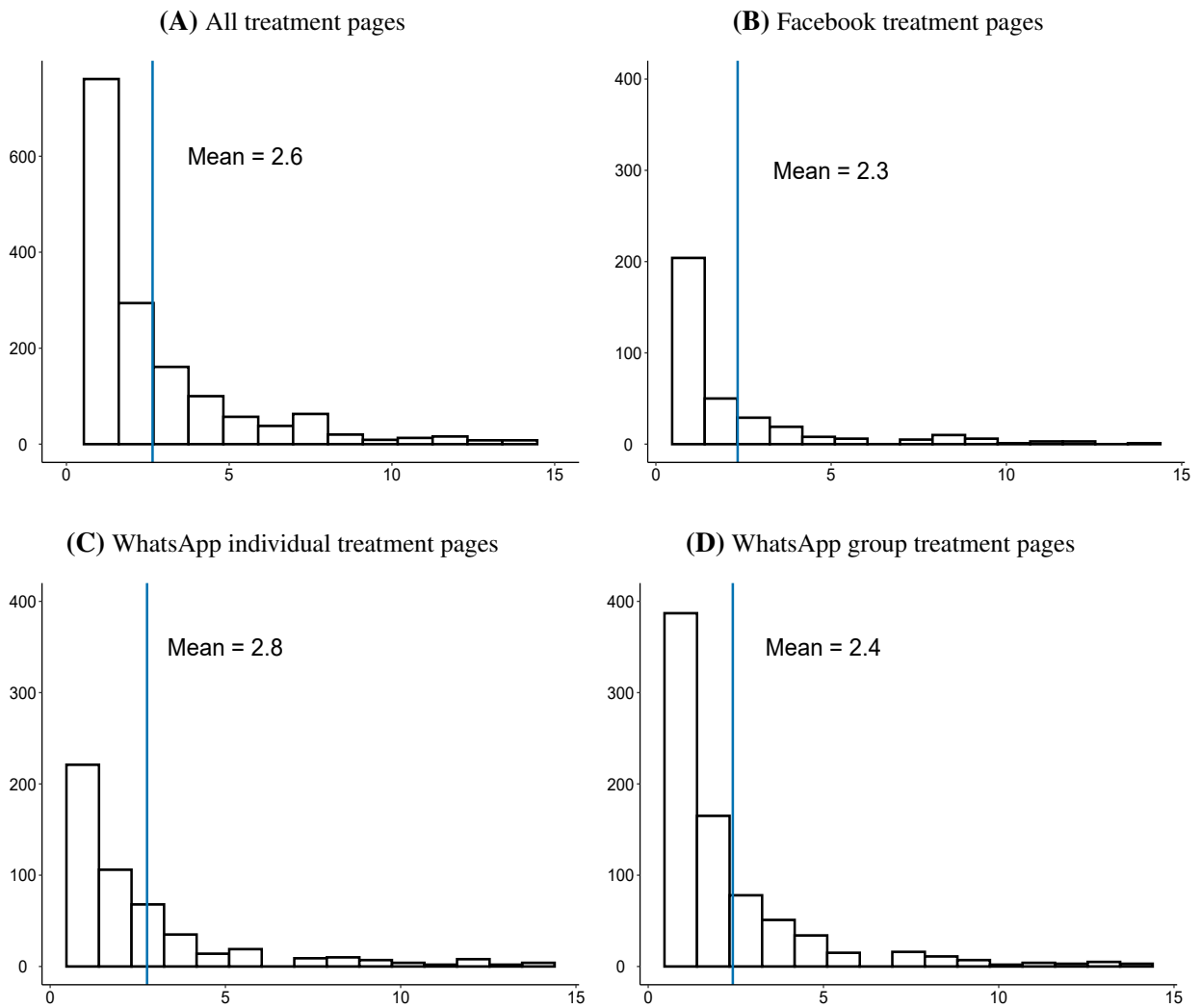
Fig. S6: Treatment effects on hypothetical talking to husband and family members, or reporting to authorities when responding to domestic and sexual violence

Notes: The estimates and 95% confidence intervals in each box are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent variables regressed on treatment indicators (FB + WI = Facebook or WhatsApp individual message, WG = WhatsApp group message, TV = TV show reminder), relevant baseline controls and randomization block fixed effects. The outcomes included in the index of hypothetical talking to husband, family members, or reporting to authorities when responding to domestic violence are in Table S24. The outcomes included in the index of hypothetical talking to husband and family members, or reporting to authorities when responding to sexual violence are in Table S25.

Fig. S7: Treatment effects on violence experienced before COVID-19 and recent use of online resources or contact with an organization when responding to domestic or sexual violence

Notes: The estimates and 95% confidence intervals in each box are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent variables regressed on treatment indicators (FB + WI = Facebook or WhatsApp individual message, WG = WhatsApp group message, TV = TV show reminder), relevant baseline controls and randomization block fixed effects. The outcomes included in the index of domestic and sexual violence experienced before COVID-19 are in Table S26. The outcomes included in the index of recent use of online resources and contact with an organization before COVID-19 are in Table S27.

Content Tables

Ep.	Title	Content	Reporting
1	What is sexual harassment and what is its penalty?	Pervasiveness of sexual harassment; definition; harassment in public, on streets or in stores; men's role in harassment; legal rights and ramifications of violence; interfering when you witness harassment; contact ECWR where a professional team will help you learn how to deal with these situations.	Organizations
2	Sexual harassment of children and how to protect them?	Sexual harassment of children; protecting, supporting, & believing children; boundaries; contact ECWR.	Organizations
3	Are women's clothes the cause of sexual harassment?	Sexual harassment; justifiability of sexual harassment; research on when it occurs; personal experiences; harassment and veiling, the Niqab; supporting victims & contacting ECWR.	Organizations; ECWR
4	FGC and how to stop it?	FGC; negative health effects; absence of relationship with religion; criminality; doctors' role; contact ECWR.	Organizations; ECWR
5	Impact of COVID-19 on increasing domestic violence	COVID-19 & DV; safety in the home; justifiability of violence; violence's harm to relationships; cycles of violence; supporting victims; contact ECWR.	Organizations; ECWR
6	Rape crimes and how to fight them	COVID-19 & social issues; anxiety; spread of violence & rape in public spaces; female clothing; how to report to the police; gaining justice; family support; psychological effects; contact ECWR.	Organizations; ECWR; police
7	The difference between divorce and Khul' and when to choose either?	COVID-19 rise in DV; rise in questions re: divorce and Khul'; difference between two; legal rights; Egyptian law; contact ECWR.	Organizations; ECWR
8	The importance of work and how to balance between work and home?	Absence of conflict between work and home; safety via financial security; work's benefit to social relations and esteem; work and tensions with a husband or family; work as a safety net; contact ECWR.	Organizations; ECWR
9	The negative effects of Covid-19 on women's work	COVID-19 and labor market; schools; working remotely; combating sexual harassment at the workplace; inappropriate staring; sexual harassment as a crime; contact ECWR.	Organizations; ECWR
10	How to deal with workplace harassment?	Definition; lack of justifiability; online harassment; criminality; intervening in a case of harassment; expressing opinions; creating a safe workplace; contact ECWR.	Organizations; ECWR
11	How to act if you saw someone harassing a colleague at work?	COVID-19 & changes in workplace; work environment; intervening in harassment; helping a colleague; importance of speaking up; assuring privacy; contact ECWR.	Organizations; ECWR
12	Dealing with workplace harassment for new employees	Workplace harassment; seeking training as a new employee; expectations and boundaries; saying no; contact ECWR.	Organizations; ECWR
13	How can men stand against violence against women?	Need for men's support; COVID-19 and rise of ECWR complaints; men's role in intervening; men's role in regulating anger; no justifiability of anger or violence; blame on women; men standing against violence; contact ECWR.	Organizations; ECWR

Table S1: Content of videos hosted on our website and delivered via message.

Ep.	Title	Content	Reporting
1	Statement of the Egyptian Public Prosecutor	Female Genital Cutting (FGC); one family's experience; a family's criminal responsibility.	Reporting FGC to the police
2	Horrible Stories from Medical Clinics	FGC; doctors' role in limiting FGC; FGC's lack of health benefits; Social relationships in COVID-19.	Need for patients & doctors to contact police on FGC
3	Rape and Sexual Harrassment: To Who and Why?	Rape; current events; parental support for daughters who are victims; minimizing victim blaming; reporting; COVID-19.	Procedures for reporting to the police, reforms to limit fears of reporting
4	Underage Marriage	Health implications of underage marriage; laws in Egypt; marriage officials; household life in COVID-19.	Advertising of organization
5	Mary Asaad & Aziza Hussein	A women's initiative to combat FGC; women's activism; family planning; physical & emotional consequences of FGC; religion & FGC.	Advertising of support organization; the need for legal reform.
6	What do men want from women?	Male & female partnership; research on men's perceptions of manhood; FGC; COVID-19 and domestic violence (DV); a UN initiative combatting DV.	NA; Advertising of support organization
7	What should you do if you are in the home & you don't feel safe?	DV against women during COVID-19; reporting DV to then police or doctors; total number of comments, questions, & calls to organizations' pages and hotlines; organizations supporting women facing DV in situations; COVID-19's impacts on women generally; COVID-19 & the economy.	Reporting: Police, institutions, organizations, phone number.
8	FGC & the Internet	FGC; intergenerational relationships; COVID-19 & internet usage.	
9	What's the definition of a man?	A divorce after DV; raising responsible children and men; forgiveness for men & men's expectations; women's views on the justifiability of DV vs. men's.; how to help women facing DV who accept DV; how to respond while violence is occurring & how to flee home if you need to	Seeking support from to organizations; available hotlines; calling the police
10	Do women prefer kind or macho (over-protective) men?	Negative effects of over-protectiveness; anecdote about a marriage; spread of negative information about marriage; shifting gender norms and women's preferences; unjustifiability of any form of DV; role of doctors; reporting DV in cases of extreme violence.	Reporting: Police, institutions, organizations.

Table S2: Content of TV shows hosted on satellite channel.

Table S3: Block sizes, treatment probabilities and responses rates by treatment assignment

Treatment	Baseline	With Facebook account		Only with WhatsApp account		Endline	Response rate
		Block size	Treatment probability	Block size	Treatment probability		
Control	1104	10	1/5	50	1/5	839	0.76
Facebook	565	10	3/5	0	0	418	0.74
WhatsApp Individual	1118	10	1/5	50	1/5	824	0.737
WhatsApp Group	1879	0	0	50	2/5	1382	0.735
TV Show Reminder	952	0	0	50	1/5	702	0.737
Total	5618					4165	0.741

Notes: We block randomized treatment assignment separately according to whether we could identify the Facebook account of the baseline survey respondent.

Balance Tables

Table S4: Balance on demographics variables

Panel A: Respondent's outcomes

	Age	Education (BA)	Number of male children	Number of female children	Other family members
	(1)	(2)	(3)	(4)	(5)
Facebook and WhatsApp Ind.	0.096	-0.021	-0.028	0.062*	-0.135
	(0.363)	(0.013)	(0.035)	(0.035)	(0.125)
WhatsApp Group	-0.008	-0.012	-0.014	0.021	-0.050
	(0.396)	(0.014)	(0.038)	(0.038)	(0.136)
TV Show Reminder	-0.144	-0.020	-0.058	0.027	-0.141
	(0.395)	(0.014)	(0.038)	(0.037)	(0.136)
Control Mean	31.507	0.753	0.685	0.559	2.652
Observations	4,165	4,165	4,165	4,165	4,165
R^2	0.161	0.518	0.136	0.120	0.101

Panel B: Whether married and husband' outcomes

	Married	Age	Education (BA)	Marriage duration	Husband lives at home
	(1)	(2)	(3)	(4)	(5)
Facebook and WhatsApp Ind.	0.012	7.235*	-0.035**	-0.336	0.021
	(0.017)	(4.352)	(0.017)	(0.431)	(0.023)
WhatsApp Group	0.005	2.469	-0.053***	-0.091	0.032
	(0.018)	(4.614)	(0.018)	(0.456)	(0.024)
TV Show Reminder	0.002	-1.299	-0.042**	0.427	0.018
	(0.018)	(4.660)	(0.018)	(0.461)	(0.024)
Control Mean	0.555	31.631	10.064	0.798	0.818
Observations	4,165	2,348	2,354	2,354	2,354
R^2	0.401	0.057	0.561	0.163	0.079

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. * denotes $p < 0.1$, ** denotes $p < 0.05$, and *** denotes $p < 0.01$.

Table S5: Balance on before and during COVID-19 home presence of respondent and husband, and whether household income declined with COVID-19

	Before COVID-19				During COVID-19				
	full time at home	partially at home	husband full time at home	husband partially at home	full time at home	partially at home	husband full time at home	husband partially at home	COVID-19 income decline
Dependent variable:									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Facebook and WhatsApp Ind.	-0.001	0.001	0.002	0.011	-0.014	0.005	0.012	0.029	0.018
	(0.020)	(0.021)	(0.018)	(0.024)	(0.018)	(0.017)	(0.025)	(0.027)	(0.018)
WhatsApp Group	-0.017	-0.003	0.017	0.002	-0.013	-0.001	0.054**	-0.026	0.015
	(0.021)	(0.022)	(0.019)	(0.025)	(0.020)	(0.018)	(0.027)	(0.029)	(0.019)
TV Show Reminder	-0.035*	0.007	0.007	-0.040	-0.027	0.015	0.045*	-0.062**	0.032*
	(0.021)	(0.022)	(0.019)	(0.025)	(0.020)	(0.018)	(0.027)	(0.029)	(0.019)
Control Mean	0.366	0.45	0.099	0.221	0.745	0.194	0.228	0.344	0.757
Observations	4,162	4,162	2,351	2,351	4,165	4,155	2,346	2,346	4,165
R^2	0.113	0.092	0.074	0.092	0.083	0.075	0.080	0.085	0.067

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

Table S6: Balance on TV show consumption variables

	Watches TV morning	Watches TV afternoon	Watches TV evening	Own TV satellite	Watches Channels of TV show	Watches TV show type	Mentioned watched TV show Saturday evening
	Dependent variable:						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
All treatments	0.010	-0.029	-0.011	0.009	0.014	0.039**	0.001
	(0.015)	(0.019)	(0.017)	(0.010)	(0.015)	(0.019)	(0.002)
WhatsApp Group	0.010	-0.007	-0.006	0.009	0.012	0.027	0.002
	(0.016)	(0.021)	(0.019)	(0.011)	(0.017)	(0.021)	(0.002)
TV Show Reminder	0.013	-0.045**	-0.004	-0.004	-0.001	0.009	0.005**
	(0.016)	(0.021)	(0.019)	(0.011)	(0.017)	(0.021)	(0.002)
Control Mean	0.137	0.319	0.781	0.934	0.148	0.267	0
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.045	0.060	0.057	0.059	0.047	0.071	0.043

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. * denotes $p < 0.1$, ** denotes $p < 0.05$, and *** denotes $p < 0.01$.

Table S7: Balance on social media habits and videos received variables

	Hours spent on social media	Uses WhatsApp	Uses Facebook	Uses Instagram	Uses YouTube	Uses Twitter	Uses Snapchat	Uses Telegram	Watched videos on social media	Watched videos on WhatsApp
	Dependent variable:									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Facebook and WhatsApp Ind.	0.011	-0.006	-0.006	0.004	-0.024	-0.013	0.011	-0.027*	0.028	-0.021
	(0.037)	(0.015)	(0.013)	(0.017)	(0.020)	(0.011)	(0.009)	(0.014)	(0.049)	(0.041)
WhatsApp Group	0.082**	-0.001	0.005	0.024	0.021	-0.009	0.020**	-0.004	0.133**	0.069
	(0.040)	(0.016)	(0.015)	(0.018)	(0.022)	(0.012)	(0.009)	(0.015)	(0.053)	(0.045)
TV Show Reminder	0.116***	0.016	-0.026*	0.003	-0.032	-0.024*	0.016*	-0.005	0.139***	0.096**
	(0.040)	(0.016)	(0.015)	(0.018)	(0.022)	(0.012)	(0.009)	(0.015)	(0.053)	(0.045)
Control Mean	1.839	0.858	0.892	0.195	0.4	0.093	0.033	0.139	2.863	1.707
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.091	0.058	0.064	0.063	0.067	0.094	0.070	0.070	0.125	0.113

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Table S8: Balance on attitudes toward gender and marital equality

				Dependent variable:			
	Husband final say	Husband earn income	Yelling justified	Hitting justified	Male education priority	Future equal say	Future equal rights
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Facebook and WhatsApp Ind.	0.035	-0.035	0.037	0.015	0.010	0.067*	0.004
	(0.043)	(0.044)	(0.040)	(0.019)	(0.031)	(0.038)	(0.033)
WhatsApp Group	0.084*	-0.020	0.003	-0.015	0.005	-0.019	-0.024
	(0.046)	(0.048)	(0.043)	(0.021)	(0.034)	(0.042)	(0.036)
TV Show Reminder	0.026	-0.057	-0.047	-0.037*	0.014	-0.016	-0.035
	(0.046)	(0.048)	(0.043)	(0.020)	(0.034)	(0.042)	(0.036)
Control Mean	2.621	2.566	2.135	1.176	1.421	4.101	4.313
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.078	0.090	0.108	0.066	0.057	0.053	0.063

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

Table S9: Balance on domestic violence experienced before and during COVID-19

	Before COVID-19		During COVID-19	
	Heard of or experienced yelling	Heard of or experienced hitting	Heard of or experienced yelling	Heard of or experienced hitting
	(1)	(2)	(3)	(4)
Facebook and WhatsApp Ind.	0.011	0.117**	-0.012	0.039
	(0.048)	(0.052)	(0.053)	(0.057)
WhatsApp Group	0.023	0.045	-0.001	-0.021
	(0.053)	(0.057)	(0.058)	(0.062)
TV Show Reminder	0.010	0.046	-0.021	0.030
	(0.052)	(0.057)	(0.058)	(0.062)
Control Mean	3.659	3.3	3.479	3.176
Observations	4,165	4,165	4,165	4,165
R^2	0.077	0.093	0.069	0.075

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

Table S10: Balance on hypothetical talking to husband and family members, reporting to authorities, use of online resources, and contact with an organization when responding to domestic violence

	Dependent variable:				
	Would talk husband	Would Talk family	Would report authorities	Would use online resources	Would contact organization
	(1)	(2)	(3)	(4)	(5)
Facebook and WhatsApp Ind.	0.017	0.037	-0.064	-0.036	-0.070
	(0.050)	(0.047)	(0.055)	(0.051)	(0.050)
WhatsApp Group	-0.050	0.030	-0.022	-0.028	-0.022
	(0.054)	(0.051)	(0.060)	(0.055)	(0.055)
TV Show Reminder	-0.084	0.011	0.024	0.001	0.032
	(0.054)	(0.051)	(0.060)	(0.055)	(0.055)
Control Mean	3.819	3.738	2.64	2.647	3.334
Observations	4,165	4,165	4,165	4,165	4,165
R^2	0.072	0.067	0.077	0.126	0.124

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Table S11: Balance on knowledge and experience of accessing resources for women

	Know online: other than ECWR	Know online: ECWR	Before COVID-19 used online resources	During COVID-19 used online resources	Know organization: other than ECWR	Know organization: ECWR	Before COVID-19 contacted organization	During COVID-19 contacted organization
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Facebook and WhatsApp Ind.	0.003	-0.0001	-0.013	0.037	-0.018	0.002	-0.002	-0.039*
	(0.013)	(0.005)	(0.032)	(0.027)	(0.013)	(0.004)	(0.024)	(0.023)
WhatsApp Group	0.001	-0.005	0.045	0.058*	-0.020	0.002	0.033	-0.003
	(0.015)	(0.005)	(0.035)	(0.030)	(0.014)	(0.005)	(0.026)	(0.025)
TV Show Reminder	0.011	-0.0004	0.055	0.059**	-0.030**	0.002	0.056**	0.002
	(0.015)	(0.005)	(0.035)	(0.030)	(0.014)	(0.005)	(0.026)	(0.025)
Control Mean	0.274	0.015	2.404	2.269	0.228	0.008	2.178	2.184
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.517	0.080	0.378	0.378	0.450	0.060	0.340	0.319

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

Website, YouTube and WhatsApp Conversation Tables

Table S12: Coding of conversations in WhatsApp groups

Level of conversation	Number of groups	Description
No conversation	112	No one replying at all
Limited conversation	69	Only one person replying with an elaborate feedback or one or more persons replying with short feedback.
Active conversation	18	More than one person replying with an elaborate feedback or two members engaging in discussion
Problematic conversation	1	Two people getting into a heated argument or one or more persons attacking video content
Total	200	

Table S13: Unique Ips, users, visits, and average visit time by treatment assignment

Treatment assignment	Assigned	Unique IPs	Unique users	Total visits	Avgerage visit time
Facebook	586	597	345	1347	4:02
WhatsApp Individual	1163	1178	509	2463	4:01
WhatsApp Group	1946	1671	781	3280	3:57
Total	3695	3446	1635	7090	4:01

Notes: Website data provides the number of unique IPs, unique users, and total visits by treatment assignment. A Unique User is determined via cookies and thus corresponds to a specific individual in a particular device. Note that this table reports different treatment assignment numbers than Table S1 as it includes assignments to individuals who responded twice to the endline survey, and thus were excluded from the study.

Table S14: Website and YouTube analytics

Video	Website		YouTube	
	Visits	Average visit time	Views	Average viewing time
What is sexual harassment and what is its penalty?	682	0:03:33	535	0:02:33
Sexual harassment of children and how to protect them?	493	0:04:57	391	0:03:44
Are women's clothes the cause of sexual harassment?	372	0:03:29	324	0:02:49
Female genital cutting and how to stop it?	286	0:04:39	268	0:04:04
Impact of COVID-19 on increasing domestic violence	235	0:04:33	212	0:02:47
Rape crimes and how to fight them and COVID-19	226	0:03:11	207	0:02:53
The difference between divorce and Khul and when to choose either?	230	0:04:50	268	0:03:22
The importance of work and how to balance work and family life?	268	0:04:47	281	0:03:51
The negative effects of Covid-19 on women's work	96	0:02:52	107	0:02:55
How to deal with workplace harassment?	143	0:04:33	175	0:03:22
How to act if you saw someone harassing a colleague at work?	110	0:04:17	146	0:02:55
Dealing with workplace harassment for new employees	146	0:04:20	172	0:02:44
How can men stand against violence against women?	184	0:06:51	184	0:02:33
Total	3471	0:04:22	3270	0:02:59

Notes: Website and YouTube analytics show that videos received a higher number of website visits and viewing time than YouTube views. The reason is that and the website measures total duration on the site, whereas YouTube measures time spent viewing the content and is much stricter in defining whether a video was viewed.

Results

Table S15: Treatment effect on TV show consumption

Panel A: Controlling by all baseline covariates in the outcome family

	Index of (1,1,1,1,1,1,1,1,1,1,1)	Watched TV evening	Watched channels of TV show	Watched TV show type	Mentioned watched TV show Saturday evening	Watched TV show	Heard of TV show	Heard of TV show via WhatsApp	Received TV show WhatsApp reminder	Whether watched TV show episodes	Number of TV show episodes watched	Accurate content of the TV show	Accurate TV show topic liked
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Facebook and WhatsApp Ind.	0.151***	0.004	0.013	0.051***	0.004	0.035*	0.030	0.051***	0.107***	0.034*	0.094**	0.036**	0.041**
	(0.038)	(0.014)	(0.016)	(0.020)	(0.009)	(0.020)	(0.020)	(0.011)	(0.015)	(0.020)	(0.039)	(0.017)	(0.017)
WhatsApp Group	0.183***	0.010	0.024	0.060***	−0.0001	0.060***	0.050**	0.049***	0.134***	0.056**	0.095**	0.035*	0.043**
	(0.041)	(0.016)	(0.018)	(0.021)	(0.010)	(0.022)	(0.022)	(0.012)	(0.016)	(0.022)	(0.043)	(0.018)	(0.019)
TV Show Reminder	0.861***	0.037**	0.187***	0.126***	0.124***	0.248***	0.250***	0.186***	0.685***	0.241***	0.444***	0.107***	0.130***
	(0.041)	(0.016)	(0.018)	(0.021)	(0.010)	(0.022)	(0.022)	(0.012)	(0.016)	(0.022)	(0.043)	(0.018)	(0.019)
F, WI = WG (p-value)	0.4377	0.7201	0.5518	0.6931	0.6876	0.2593	0.3564	0.8642	0.0954	0.304	0.9753	0.9501	0.924
F, WI = TV (p-value)	0	0.0355	0	4e-04	0	0	0	0	0	0	0	1e-04	0
WG = TV (p-value)	0	0.0884	0	0.0023	0	0	0	0	0	0	0	0	0
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R²	0.262	0.176	0.221	0.170	0.128	0.164	0.148	0.111	0.381	0.143	0.144	0.121	0.135

Panel B: Controlling by the dependent variable at baseline (if available)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Facebook and WhatsApp Ind.	0.171***	0.006	0.016	0.051***	0.006	0.044**	0.037*	0.052***	0.110***	0.040**	0.109***	0.042**	0.047***
	(0.040)	(0.014)	(0.017)	(0.020)	(0.009)	(0.021)	(0.020)	(0.011)	(0.015)	(0.021)	(0.040)	(0.017)	(0.018)
WhatsApp Group	0.201***	0.011	0.025	0.060***	0.001	0.067***	0.056**	0.050***	0.136***	0.062***	0.108**	0.040**	0.049**
	(0.044)	(0.016)	(0.018)	(0.021)	(0.010)	(0.022)	(0.022)	(0.012)	(0.016)	(0.022)	(0.044)	(0.019)	(0.019)
TV Show Reminder	0.866***	0.037**	0.188***	0.126***	0.124***	0.250***	0.251***	0.186***	0.686***	0.242***	0.448***	0.108***	0.134***
	(0.044)	(0.016)	(0.018)	(0.021)	(0.010)	(0.022)	(0.022)	(0.012)	(0.016)	(0.022)	(0.044)	(0.019)	(0.019)
Control Mean	0	0.828	0.19	0.356	0.019	0.387	0.499	0.007	0.035	0.365	0.615	0.17	0.19
F, WI = WG (p-value)	0.501	0.7287	0.5887	0.6773	0.6514	0.2978	0.3906	0.8375	0.0972	0.3412	0.9831	0.9169	0.942
F, WI = TV (p-value)	0	0.0439	0	4e-04	0	0	0	0	0	0	0	4e-04	0
WG = TV (p-value)	0	0.1034	0	0.0025	0	0	0	0	0	0	0	0	0
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R²	0.163	0.173	0.213	0.166	0.113	0.099	0.095	0.109	0.374	0.090	0.091	0.083	0.090

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Watches TV evening, Owns TV satellite, Watches Channels of TV show, Watches TV show type, and Mentioned watched TV show Saturday evening. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Table S16: Treatment effect on videos of women's empowerment and support consumption

Panel A: Controlling by all baseline covariates in the outcome family

	Z-Score (1,1,1,1,1,1,1)	Watched videos on social media	Watched videos on WhatsApp	Received videos on WhatsApp or Facebook	Watched videos on WhatsApp or Facebook	Number of videos watched	Accurate content of the videos	Accurate video topic liked
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Facebook and WhatsApp Ind.	1.027***	0.285***	1.128***	0.490***	0.419***	0.831***	0.268***	0.319***
	(0.038)	(0.051)	(0.051)	(0.016)	(0.019)	(0.042)	(0.018)	(0.019)
WhatsApp Group	0.935***	0.175***	1.077***	0.513***	0.426***	0.669***	0.216***	0.256***
	(0.041)	(0.055)	(0.055)	(0.018)	(0.021)	(0.046)	(0.019)	(0.020)
TV Show Reminder	0.469***	0.148***	0.555***	0.275***	0.228***	0.330***	0.078***	0.102***
	(0.041)	(0.055)	(0.055)	(0.018)	(0.021)	(0.046)	(0.019)	(0.020)
F, WI = WG (p-value)	0.0264	0.0462	0.3661	0.1946	0.7698	5e-04	0.0067	0.0017
F, WI = TV (p-value)	0	0.013	0	0	0	0	0	0
WG = TV (p-value)	0	0.6356	0	0	0	0	0	0
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.273	0.152	0.215	0.276	0.208	0.184	0.136	0.142

Panel B: Controlling by the dependent variable at baseline (if available)

Facebook and WhatsApp Ind.	1.028***	0.282***	1.131***	0.490***	0.419***	0.831***	0.269***	0.320***
	(0.038)	(0.051)	(0.051)	(0.017)	(0.019)	(0.043)	(0.018)	(0.019)
WhatsApp Group	0.955***	0.178***	1.089***	0.517***	0.433***	0.685***	0.219***	0.260***
	(0.042)	(0.055)	(0.056)	(0.018)	(0.021)	(0.047)	(0.019)	(0.020)
TV Show Reminder	0.493***	0.153***	0.566***	0.279***	0.237***	0.349***	0.081***	0.107***
	(0.042)	(0.055)	(0.056)	(0.018)	(0.021)	(0.047)	(0.019)	(0.020)
Control Mean	0	2.794	2.114	0.409	0.302	0.527	0.116	0.133
F, WI = WG (p-value)	0.0842	0.0589	0.4455	0.1309	0.5152	0.0018	0.0098	0.0033
F, WI = TV (p-value)	0	0.0195	0	0	0	0	0	0
WG = TV (p-value)	0	0.665	0	0	0	0	0	0
R^2	0.247	0.148	0.208	0.270	0.191	0.168	0.134	0.136

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Social media videos received and WhatsApp videos received. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Table S17: Treatment effect on knowledge about treatment information

Panel A: Controlling by all baseline covariates in the outcome family

	Index of (1,1,1,1)	Know online: other than ECWR	Know online: ECWR	Know organization: other than ECWR	Know organization: ECWR
	(1)	(2)	(3)	(4)	(5)
Facebook and WhatsApp Ind.	0.227***	0.057***	0.045***	0.066***	0.046***
	(0.037)	(0.018)	(0.010)	(0.018)	(0.011)
WhatsApp Group	0.301***	0.085***	0.069***	0.070***	0.058***
	(0.040)	(0.020)	(0.011)	(0.019)	(0.012)
TV Show Reminder	0.122***	0.037*	0.043***	−0.008	0.029**
	(0.040)	(0.020)	(0.011)	(0.019)	(0.012)
F, WI = WG (p-value)	0.0646	0.1615	0.0362	0.8324	0.3312
F, WI = TV (p-value)	0.0092	0.2886	0.8078	1e-04	0.1459
WG = TV (p-value)	0	0.016	0.0221	1e-04	0.0177
R^2	0.222	0.237	0.092	0.216	0.075

Panel B: Controlling by the dependent variable at baseline (if available)

	Index of (1,1,1,1)	Know online: other than ECWR	Know online: ECWR	Know organization: other than ECWR	Know organization: ECWR
Facebook and WhatsApp Ind.	0.221***	0.054***	0.045***	0.067***	0.047***
	(0.038)	(0.018)	(0.010)	(0.018)	(0.011)
WhatsApp Group	0.293***	0.081***	0.069***	0.071***	0.058***
	(0.042)	(0.020)	(0.011)	(0.019)	(0.012)
TV Show Reminder	0.116***	0.031	0.042***	−0.006	0.030**
	(0.042)	(0.020)	(0.011)	(0.019)	(0.012)
Control Mean	0	0.304	0.032	0.272	0.038
F, WI = WG (p-value)	0.0838	0.1608	0.0355	0.8608	0.3228
F, WI = TV (p-value)	0.0119	0.2573	0.8255	2e-04	0.1555
WG = TV (p-value)	0	0.0132	0.023	1e-04	0.0186
Observations	4,165	4,165	4,165	4,165	4,165
R^2	0.160	0.225	0.090	0.203	0.070

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Know online: other than ECWR, Know online: ECWR, Before COVID-19 used online resources, During COVID-19 used online resources, Know organization: other than ECWR, Know organization: ECWR Before COVID-19 contacted organization, and During COVID-19 contacted organization. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Table S18: Treatment effects on attitudes towards gender and marital equality

Panel A: Controlling by all baseline covariates in the outcome family

	Index of (-1,-1,-1,1,-1,-1,1,1)	Husband final say	Husband earn income	Yelling justified	Gain independence by working outside the household	Circumcision important for women marriage	Female circumcision health benefits	Marriage permitted under age 18 with family consent	Khul: Women can divorce husband without a reason
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Facebook and WhatsApp Ind.	0.023	0.009	-0.008	-0.019	0.009	-0.077**	0.019	0.011	0.018
	(0.036)	(0.035)	(0.036)	(0.036)	(0.035)	(0.037)	(0.016)	(0.016)	(0.020)
WhatsApp Group	0.054	-0.021	-0.027	-0.025	0.030	-0.014	0.010	-0.012	0.016
	(0.039)	(0.038)	(0.040)	(0.039)	(0.039)	(0.040)	(0.017)	(0.017)	(0.022)
TV Show Reminder	-0.019	-0.029	0.032	-0.010	0.014	-0.007	0.010	-0.0002	-0.032
	(0.039)	(0.038)	(0.040)	(0.039)	(0.039)	(0.040)	(0.017)	(0.017)	(0.022)
F, W1 = WG (p-value)	0.436	0.4376	0.6197	0.8792	0.5857	0.1212	0.5901	0.1692	0.9158
F, W1 = TV (p-value)	0.282	0.325	0.3158	0.8256	0.9059	0.0843	0.605	0.5007	0.0254
WG = TV (p-value)	0.0696	0.8399	0.1424	0.7156	0.6756	0.865	0.9825	0.4912	0.0373
R^2	0.306	0.302	0.342	0.310	0.148	0.119	0.092	0.070	0.070

Panel B: Controlling by the dependent variable at baseline (if available)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Facebook and WhatsApp Ind.	0.020	0.001	-0.007	-0.015	0.020	-0.071*	0.018	0.011	0.016
	(0.042)	(0.035)	(0.037)	(0.036)	(0.037)	(0.038)	(0.016)	(0.016)	(0.020)
WhatsApp Group	0.036	-0.024	-0.018	-0.017	0.027	-0.012	0.009	-0.011	0.015
	(0.046)	(0.039)	(0.040)	(0.039)	(0.040)	(0.042)	(0.018)	(0.017)	(0.022)
TV Show Reminder	-0.005	-0.034	0.038	-0.008	0.018	-0.019	0.012	0.003	-0.031
	(0.045)	(0.038)	(0.040)	(0.039)	(0.040)	(0.042)	(0.017)	(0.017)	(0.022)
Control Mean	0	2.511	2.596	2.26	3.913	1.609	0.814	0.821	0.384
F, W1 = WG (p-value)	0.7317	0.5139	0.7982	0.955	0.8676	0.1563	0.6135	0.1938	0.9763
F, W1 = TV (p-value)	0.577	0.3603	0.26	0.847	0.9515	0.2086	0.7745	0.6157	0.0357
WG = TV (p-value)	0.3787	0.7994	0.177	0.8075	0.8238	0.8729	0.8299	0.434	0.0432
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.062	0.283	0.329	0.295	0.062	0.050	0.061	0.061	0.062

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Husband final say, Husband earn income, Yelling justified, Hitting justified, Male education priority, Future equal say, and Future equal rights. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

Table S19: Treatment effect on attitudes on sexual violence

Panel A: Controlling by all baseline covariates in the outcome family

	index of (1,1,-1,1, 1,-1,1,-1)	Colleague comments on female look sexual harassment	Verbal harassment legal consequences	Interfere to support a woman sexually harassed at workplace	Inappropriate clothing or lack of Hijab justifies harassment	Interfere if a man hits a woman on the street	Interfere if a man sexually harasses on the street	Avoid the authorities if your daughter sexually assaulted	Seriousness of a child telling that was sexually harassed by a relative
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Facebook and WhatsApp Ind.	-0.011 (0.040)	-0.023 (0.044)	0.011 (0.012)	-0.027 (0.028)	0.066 (0.050)	-0.042 (0.027)	0.007 (0.031)	-0.052 (0.035)	0.019 (0.030)
WhatsApp Group	0.012 (0.044)	-0.028 (0.047)	0.005 (0.013)	-0.032 (0.031)	0.041 (0.055)	0.026 (0.029)	0.014 (0.033)	-0.012 (0.038)	0.047 (0.032)
TV Show Reminder	0.064 (0.044)	0.011 (0.047)	0.011 (0.013)	0.032 (0.031)	0.012 (0.055)	0.029 (0.029)	0.052 (0.033)	-0.051 (0.038)	-0.004 (0.032)
F, WI = WG (p-value)	0.6085	0.9156	0.6436	0.8598	0.6467	0.0211	0.8401	0.2847	0.396
F, WI = TV (p-value)	0.0912	0.4658	0.9938	0.0582	0.3263	0.0148	0.1818	0.9688	0.4807
WG = TV (p-value)	0.2501	0.414	0.6449	0.0428	0.6094	0.9018	0.2679	0.3126	0.1283
R^2	0.134	0.070	0.062	0.080	0.127	0.079	0.077	0.107	0.088

Panel B: Controlling by the dependent variable at baseline (if available)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Facebook and WhatsApp Ind.	-0.018 (0.042)	-0.028 (0.044)	0.010 (0.012)	-0.027 (0.029)	0.074 (0.052)	-0.046* (0.027)	0.006 (0.031)	-0.047 (0.036)	0.016 (0.030)
WhatsApp Group	0.008 (0.046)	-0.024 (0.048)	0.004 (0.013)	-0.033 (0.031)	0.046 (0.057)	0.022 (0.030)	0.012 (0.034)	-0.010 (0.039)	0.046 (0.033)
TV Show Reminder	0.072 (0.046)	0.017 (0.047)	0.010 (0.013)	0.033 (0.031)	-0.004 (0.056)	0.030 (0.030)	0.051 (0.034)	-0.060 (0.039)	0.0004 (0.032)
Control Mean	0	3.615	0.903	4.57	2.105	4.64	4.464	1.631	4.529
F, WI = WG (p-value)	0.5684	0.9322	0.631	0.8501	0.6291	0.0232	0.876	0.3395	0.3589
F, WI = TV (p-value)	0.0481	0.3459	0.9956	0.0556	0.1714	0.0108	0.1815	0.7343	0.6303
WG = TV (p-value)	0.1702	0.4025	0.642	0.04	0.3882	0.7904	0.2494	0.2053	0.1712
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.061	0.063	0.054	0.059	0.064	0.049	0.058	0.057	0.073

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Husband final say, Husband earn income, Yelling justified, Hitting justified, Male education priority, Future equal say, and Future equal rights. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

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Table S20: Treatment effect on donation to organizations supporting women

	Dependent variable:		
	Index of (1,1)	Donation in EGP	Donating more than 0 EGP
	(1)	(2)	(3)
Facebook and WhatsApp Ind.	−0.009	−0.121	−0.0004
	(0.042)	(0.323)	(0.018)
WhatsApp Group	−0.038	−0.468	−0.006
	(0.045)	(0.352)	(0.019)
TV Show Reminder	−0.025	−0.315	−0.003
	(0.045)	(0.351)	(0.019)
Control Mean	0	4.023	0.232
F, WI = WG (p-value)	0.5158	0.326	0.7789
F, WI = TV (p-value)	0.7166	0.5812	0.8777
WG = TV (p-value)	0.7782	0.6724	0.9009
Observations	4,165	4,165	4,165
R^2	0.075	0.077	0.071

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

Table S21: Treatment effect on hypothetical use of online resources and contact with an organization when responding to domestic violence

Panel A: Controlling by all baseline covariates in the outcome family

	Index of (1,1)	Would use online resources	Would contact organization
	(1)	(2)	(3)
Facebook and WhatsApp Ind.	0.079**	0.107**	0.062
	(0.038)	(0.050)	(0.045)
WhatsApp Group	0.100**	0.116**	0.095**
	(0.042)	(0.054)	(0.049)
TV Show Reminder	0.101**	0.150***	0.067
	(0.041)	(0.054)	(0.049)
F, WI = WG (p-value)	0.6181	0.8716	0.4896
F, WI = TV (p-value)	0.5928	0.4253	0.9082
WG = TV (p-value)	0.9725	0.5348	0.5728
R^2	0.236	0.194	0.210

Panel B: Controlling by the dependent variable at baseline (if available)

Facebook and WhatsApp Ind.	0.054	0.096*	0.057
	(0.042)	(0.050)	(0.045)
WhatsApp Group	0.088*	0.111**	0.092*
	(0.046)	(0.055)	(0.049)
TV Show Reminder	0.108**	0.153***	0.066
	(0.045)	(0.055)	(0.049)
Control Mean	0	3.06	3.607
F, WI = WG (p-value)	0.4622	0.7833	0.4874
F, WI = TV (p-value)	0.2384	0.3005	0.8587
WG = TV (p-value)	0.6662	0.4582	0.6128
Observations	4,165	4,165	4,165
R^2	0.080	0.179	0.198

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Would talk husband, Would talk family, would report authorities, Would use online resources, and Would contact organization. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

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Table S22: Treatment effect on hypothetical use of online resources and contact with an organization when responding to sexual violence

Panel A: Controlling by all baseline covariates in the outcome family

	Index of (1,1)	Would use online resources	Would contact organization
	(1)	(2)	(3)
Facebook and WhatsApp Ind.	0.112***	0.128***	0.100**
	(0.039)	(0.047)	(0.043)
WhatsApp Group	0.123***	0.161***	0.092*
	(0.043)	(0.051)	(0.047)
TV Show Reminder	0.036	0.107**	-0.028
	(0.043)	(0.051)	(0.047)
F, WI = WG (p-value)	0.7987	0.5227	0.8521
F, WI = TV (p-value)	0.0723	0.6878	0.0063
WG = TV (p-value)	0.0449	0.3085	0.0128
R^2	0.197	0.179	0.174

Panel B: Controlling by the dependent variable at baseline (if available)

Facebook and WhatsApp Ind.	0.092**	0.109**	0.077*
	(0.042)	(0.050)	(0.046)
WhatsApp Group	0.113**	0.150***	0.082*
	(0.046)	(0.055)	(0.050)
TV Show Reminder	0.041	0.110**	-0.020
	(0.046)	(0.055)	(0.049)
Control Mean	0	3.322	3.802
F, WI = WG (p-value)	0.6436	0.4616	0.9299
F, WI = TV (p-value)	0.2676	0.9885	0.0488
WG = TV (p-value)	0.1247	0.4797	0.0444
Observations	4,165	4,165	4,165
R^2	0.073	0.072	0.072

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Would talk husband, Would talk family, would report authorities, Would use online resources, and Would contact organization. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

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Table S23: Treatment effect on recent use of online resources and contact with an organization during COVID-19

Panel A: Controlling by all baseline covariates in the outcome family

	Index of (1,1)	Used online resources	Contacted organization
	(1)	(2)	(3)
Facebook and WhatsApp Ind.	0.060*	0.077***	0.015
	(0.031)	(0.029)	(0.023)
WhatsApp Group	0.100***	0.060*	0.069***
	(0.033)	(0.032)	(0.025)
TV Show Reminder	0.089***	0.085***	0.041
	(0.033)	(0.032)	(0.025)
F, WI = WG (p-value)	0.2303	0.5987	0.0305
F, WI = TV (p-value)	0.382	0.801	0.3072
WG = TV (p-value)	0.7506	0.4464	0.264
R^2	0.466	0.518	0.270

Panel B: Controlling by the dependent variable at baseline (if available)

Facebook and WhatsApp Ind.	0.055*	0.069**	0.021
	(0.032)	(0.029)	(0.023)
WhatsApp Group	0.107***	0.057*	0.076***
	(0.034)	(0.032)	(0.025)
TV Show Reminder	0.103***	0.087***	0.049*
	(0.034)	(0.032)	(0.025)
Control Mean	0	1.355	1.118
F, WI = WG (p-value)	0.1241	0.7237	0.0266
F, WI = TV (p-value)	0.1574	0.5701	0.2631
WG = TV (p-value)	0.9033	0.3679	0.283
Observations	4,165	4,165	4,165
R^2	0.432	0.510	0.260

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Know online: other than ECWR, Know online: ECWR, Before COVID-19 used online resources, During COVID-19 used online resources, Know organization: other than ECWR, Know organization: ECWR Before COVID-19 contacted organization, and During COVID-19 contacted organization. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

Table S24: Treatment effect on views on women's future outlook toward gender and marital equality

Panel A: Controlling by all baseline covariates in the outcome family

	Index of (1,1)	Future equal say	Future equal rights
	(1)	(2)	(3)
Facebook and WhatsApp Ind.	0.136***	0.101***	0.097***
	(0.037)	(0.032)	(0.030)
WhatsApp Group	0.042	0.054	0.009
	(0.040)	(0.035)	(0.033)
TV Show Reminder	0.100**	0.094***	0.052
	(0.040)	(0.035)	(0.033)
F, WI = WG (p-value)	0.0195	0.1763	0.0077
F, WI = TV (p-value)	0.3664	0.8439	0.1771
WG = TV (p-value)	0.1598	0.2575	0.196
R^2	0.281	0.259	0.229

Panel B: Controlling by the dependent variable at baseline (if available)

	Index of (1,1)	Future equal say	Future equal rights
Facebook and WhatsApp Ind.	0.153***	0.092***	0.102***
	(0.042)	(0.033)	(0.030)
WhatsApp Group	0.024	0.046	0.009
	(0.046)	(0.036)	(0.033)
TV Show Reminder	0.083*	0.089**	0.054
	(0.046)	(0.036)	(0.033)
Control Mean	0	4.064	4.244
F, WI = WG (p-value)	0.0053	0.2005	0.0045
F, WI = TV (p-value)	0.1289	0.945	0.1386
WG = TV (p-value)	0.2112	0.2353	0.1812
Observations	4,165	4,165	4,165
R^2	0.061	0.228	0.218

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Husband final say, Husband earn income, Yelling justified, Hitting justified, Male education priority, Future equal say, and Future equal rights. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

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Table S25: Treatment effect on domestic and sexual violence experienced during COVID-19

Panel A: Controlling by all baseline covariates in the outcome family

	Index of (1,1,1)	Heard of or experienced yelling	Heard of or experienced hitting	Heard of or experienced sexual abuse
	(1)	(2)	(3)	(4)
Facebook and WhatsApp Ind.	0.029	0.049	0.054	-0.002
	(0.035)	(0.048)	(0.050)	(0.055)
WhatsApp Group	0.009	0.016	0.015	-0.003
	(0.039)	(0.052)	(0.055)	(0.059)
TV Show Reminder	0.039	0.043	0.070	0.025
	(0.038)	(0.052)	(0.054)	(0.059)
F, WI = WG (p-value)	0.6099	0.5216	0.4701	0.9831
F, WI = TV (p-value)	0.7835	0.9068	0.7703	0.6469
WG = TV (p-value)	0.4419	0.6078	0.3204	0.6396
R^2	0.337	0.294	0.317	0.279

Panel B: Controlling by the dependent variable at baseline (if available)

Facebook and WhatsApp Ind.	0.050	0.067	0.068	0.026
	(0.041)	(0.049)	(0.051)	(0.059)
WhatsApp Group	0.009	0.019	0.027	-0.002
	(0.044)	(0.053)	(0.055)	(0.065)
TV Show Reminder	0.045	0.056	0.072	0.039
	(0.044)	(0.053)	(0.055)	(0.064)
Control Mean	0	3.459	3.111	2.719
F, WI = WG (p-value)	0.3474	0.3732	0.4634	0.6675
F, WI = TV (p-value)	0.8986	0.8385	0.9427	0.8383
WG = TV (p-value)	0.4259	0.5012	0.4303	0.5353
Observations	4,165	4,165	4,165	4,165
R^2	0.129	0.264	0.295	0.142

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Before COVID-19 heard of or experienced yelling, Before COVID-19 heard of or experienced hitting, During COVID-19 heard of or experienced yelling, and During COVID-19 heard of or experienced hitting Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

Table S26: Treatment effects on domestic and sexual violence experienced before COVID-19

Panel A: Controlling by all baseline covariates in the outcome family

	Index of (1,1,1)	Heard of or experienced yelling	Heard of or experienced hitting	Heard of or experienced sexual abuse
	(1)	(2)	(3)	(4)
Facebook and WhatsApp Ind.	-0.084**	-0.157***	-0.085*	-0.040
	(0.035)	(0.045)	(0.048)	(0.054)
WhatsApp Group	-0.045	-0.074	-0.071	-0.004
	(0.038)	(0.049)	(0.053)	(0.059)
TV Show Reminder	-0.029	-0.042	-0.036	-0.017
	(0.038)	(0.049)	(0.053)	(0.059)
F, WI = WG (p-value)	0.3048	0.0933	0.8029	0.5391
F, WI = TV (p-value)	0.1458	0.0198	0.3569	0.6945
WG = TV (p-value)	0.6774	0.5266	0.512	0.8275
R^2	0.362	0.322	0.324	0.263

Panel B: Controlling by the dependent variable at baseline (if available)

Facebook and WhatsApp Ind.	-0.057	-0.142***	-0.100**	-0.012
	(0.040)	(0.046)	(0.049)	(0.058)
WhatsApp Group	-0.036	-0.073	-0.082	0.001
	(0.044)	(0.050)	(0.053)	(0.063)
TV Show Reminder	-0.015	-0.039	-0.040	-0.003
	(0.044)	(0.050)	(0.053)	(0.063)
Control Mean	0	3.619	3.242	2.758
F, WI = WG (p-value)	0.6436	0.1737	0.7278	0.8443
F, WI = TV (p-value)	0.3476	0.0404	0.2545	0.8859
WG = TV (p-value)	0.6423	0.5029	0.4397	0.9584
Observations	4,165	4,165	4,165	4,165
R^2	0.139	0.290	0.303	0.141

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Before COVID-19 heard of or experienced yelling, Before COVID-19 heard of or experienced hitting, During COVID-19 heard of or experienced yelling, and During COVID-19 heard of or experienced hitting Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

Table S27: Treatment effect of hypothetical talking to husband and family members, or reporting to authorities when responding to domestic violence

Panel A: Controlling by all baseline covariates in the outcome family

	Index of (1,1,1)	Would talk husband	Would talk family	Would report authorities
	(1)	(2)	(3)	(4)
Facebook and WhatsApp Ind.	−0.035	−0.025	−0.032	−0.010
	(0.040)	(0.042)	(0.041)	(0.048)
WhatsApp Group	−0.043	−0.071	−0.049	0.045
	(0.043)	(0.046)	(0.044)	(0.052)
TV Show Reminder	−0.053	−0.086*	−0.064	0.057
	(0.043)	(0.046)	(0.044)	(0.052)
F, WI = WG (p-value)	0.847	0.3186	0.6996	0.2987
F, WI = TV (p-value)	0.6689	0.182	0.4767	0.1992
WG = TV (p-value)	0.8188	0.7432	0.7508	0.8127
R^2	0.168	0.290	0.176	0.284

Panel B: Controlling by the dependent variable at baseline (if available)

	Index of (1,1,1)	Would talk husband	Would talk family	Would report authorities
Facebook and WhatsApp Ind.	−0.032	−0.016	−0.030	−0.012
	(0.042)	(0.042)	(0.041)	(0.048)
WhatsApp Group	−0.048	−0.065	−0.050	0.051
	(0.046)	(0.046)	(0.044)	(0.053)
TV Show Reminder	−0.062	−0.086*	−0.066	0.068
	(0.046)	(0.046)	(0.044)	(0.052)
Control Mean	0	3.954	3.919	2.828
F, WI = WG (p-value)	0.7321	0.2904	0.6557	0.2325
F, WI = TV (p-value)	0.5194	0.1296	0.4112	0.1265
WG = TV (p-value)	0.7688	0.6561	0.7144	0.7464
Observations	4,165	4,165	4,165	4,165
R^2	0.053	0.276	0.174	0.272

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Would talk husband, Would talk family, would report authorities, Would use online resources, and Would contact organization. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

Table S28: Treatment effect of hypothetical talking to family members or reporting to authorities when responding to sexual violence

Panel A: Controlling by all baseline covariates in the outcome family

	Index of (1,1)	Would talk family	Would report authorities
	(1)	(2)	(3)
Facebook and WhatsApp Ind.	0.003	0.053	-0.054
	(0.041)	(0.042)	(0.048)
WhatsApp Group	-0.048	-0.011	-0.072
	(0.045)	(0.045)	(0.052)
TV Show Reminder	0.018	0.033	-0.006
	(0.045)	(0.045)	(0.052)
F, WI = WG (p-value)	0.2526	0.1578	0.7286
F, WI = TV (p-value)	0.7423	0.6659	0.3498
WG = TV (p-value)	0.1495	0.3364	0.2101
R^2	0.110	0.123	0.115

Panel B: Controlling by the dependent variable at baseline (if available)

Facebook and WhatsApp Ind.	0.0002	0.061	-0.069
	(0.042)	(0.043)	(0.049)
WhatsApp Group	-0.050	-0.010	-0.076
	(0.046)	(0.046)	(0.053)
TV Show Reminder	0.019	0.028	0.002
	(0.046)	(0.046)	(0.053)
Control Mean	0	4.061	3.999
F, WI = WG (p-value)	0.2791	0.1263	0.895
F, WI = TV (p-value)	0.684	0.4763	0.1843
WG = TV (p-value)	0.1451	0.4228	0.154
Observations	4,165	4,165	4,165
R^2	0.065	0.075	0.059

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Would talk husband, Would talk family, would report authorities, Would use online resources, and Would contact organization. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes $p<0.1$, ** denotes $p<0.05$, and *** denotes $p<0.01$.

Table S29: Treatment effects on recent use of online resources and contact with an organization when responding to domestic and sexual violence before COVID-19

Panel A: Controlling by all baseline covariates in the outcome family			
	Index of (1,1)	Used online resources	Contacted organization
	(1)	(2)	(3)
Facebook and WhatsApp Ind.	0.018	0.037	−0.005
	(0.031)	(0.027)	(0.022)
WhatsApp Group	0.033	0.018	0.023
	(0.034)	(0.030)	(0.024)
TV Show Reminder	0.029	0.025	0.013
	(0.034)	(0.030)	(0.024)
F, WI = WG (p-value)	0.6708	0.5173	0.244
F, WI = TV (p-value)	0.7616	0.6839	0.4589
WG = TV (p-value)	0.9055	0.8135	0.6787
R^2	0.468	0.497	0.295
Panel B: Controlling by the dependent variable at baseline (if available)			
Facebook and WhatsApp Ind.	0.005	0.035	−0.012
	(0.032)	(0.028)	(0.022)
WhatsApp Group	0.036	0.016	0.020
	(0.035)	(0.030)	(0.024)
TV Show Reminder	0.043	0.027	0.011
	(0.035)	(0.030)	(0.024)
Control Mean	0	1.342	1.138
F, WI = WG (p-value)	0.3732	0.528	0.175
F, WI = TV (p-value)	0.2684	0.8101	0.3251
WG = TV (p-value)	0.8326	0.7017	0.7165
Observations	4,165	4,165	4,165
R^2	0.424	0.489	0.280

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A include controls for all baseline covariates in the outcome family: Know online: other than ECWR, Know online: ECWR, Before COVID-19 used online resources, During COVID-19 used online resources, Know organization: other than ECWR, Know organization: ECWR Before COVID-19 contacted organization, and During COVID-19 contacted organization. Regressions in Panel B include the dependent variable at baseline (if available) as a control. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Table S30: Endline survey questions used to create all outcome indices.

Treatment Consumption and Knowledge of Resources	TV show consumption	Watched TV at show's time, TV show channels, TV show type
		Watched TV show, Heard of TV show; prompted and unprompted
		Whether watched TV show episodes, and how many
		Accurate recall of content and topics of TV show
	Social media campaign consumption	Watched videos of women's empowerment on social media, WhatsApp
		Received and watched videos on WhatsApp or Facebook, and how many
		Accurate recall of content and topics of videos
	Knowledge about resources	Knowledge about online resources
		Knowledge about organizations
Attitudes toward Gender and Marital Equality, and Sexual Violence	Attitudes toward Gender and Marital Equality	Husband should have final say in all decisions concerning the family, earn income
		Yelling justified
		Women should not gain independence by working outside the household
		FGC is important for marriage, and carries health benefits
		Marriage under age 18 should be permitted with family consent
		Women should be able to divorce husband without a reason
	Attitudes toward Sexual Harassment and Violence	Colleague comments on female look is sexual harassment
		Verbal harassment has legal consequences
		Support a woman sexually harassed at workplace, street, or hit on street
		Inappropriate clothing or lack of Hijab justifies harassment
		One should avoid the authorities if daughter sexually assaulted
		If a child shares that they were sexually harassed by a relative, they should be taken seriously
Donation to organization supporting women		Donation to organization supporting women
Violence Exposure, Hypothetical and Recent Use of Resources and Contact with Organizations	Domestic and sexual violence exposure	Heard of or experienced yelling, hitting, sexual abuse
	Hypothetical behavior around domestic violence	Would recommend using online resources, contacting an organization
	Hypothetical behavior around sexual violence	Would recommend using online resources, contacting an organization
	Recent behavior in response to domestic violence, sexual harassment or assault	Recent use of online resources for affected women by domestic violence, or who faced sexual harassment or assault
		Recent contact with organizations supporting affected women
Future Outlook Toward Gender and Marital Equality		In the future, will women have an equal say with their husbands in all decisions concerning the family?
		In the future, will men and women in Egypt have more equal legal rights, access to education, and economic opportunities?

Table S31: Summary statistics of comparable demographics both in the Arab Barometer sample, the Arab Barometer internet user sample, and the experimental sample

	Arab Barometer sample	Arab Barometer internet user sample	Experimental sample	Arab Barometer survey years
Age	38.457	30.238	31.598	2016, 2018
	13.930	10.440	9.137	
	1826	792	4165	
Education	3.352	4.701	5.344	2016, 2018
	1.768	1.225	1.179	
	1861	801	4165	
Whether single	0.176	0.341	0.290	2016, 2018
	0.381	0.475	0.454	
	1861	801	4165	
Whether engaged	0.053	0.114	0.044	2016, 2018
	0.225	0.318	0.205	
	1861	801	4165	
Whether married	0.606	0.479	0.570	2016, 2018
	0.489	0.500	0.495	
	1861	801	4165	
Whether separated	0.047	0.047	0.081	2016, 2018
	0.211	0.213	0.272	
	1861	801	4165	
Whether widowed	0.118	0.019	0.016	2016, 2018
	0.322	0.137	0.124	
	1861	801	4165	
Relationship status	3.911	2.992	3.253	2016, 2018
	3.049	1.565	1.556	
	1861	801	4165	
Number of children	1.090	0.916	1.274	2016, 2018
	1.376	1.235	1.327	
	1861	801	4165	
Facebook	0.372	0.877	0.884	2016, 2018
	0.484	0.328	0.321	
	1861	801	4165	
WhatsApp	0.303	0.648	0.857	2018
	0.460	0.478	0.351	
	1200	598	4165	
YouTube	0.220	0.471	0.387	2018
	0.415	0.500	0.487	
	1200	598	4165	
Instagram	0.117	0.276	0.199	2016, 2018
	0.321	0.447	0.399	
	1861	801	4165	
Twitter	0.111	0.262	0.080	2016, 2018
	0.315	0.440	0.272	
	1861	801	4165	
Snapchat	0.040	0.085	0.043	2018
	0.195	0.279	0.203	
	1200	598	4165	
Hours spent on social media	1.747	2.595	2.879	2018
	0.942	0.737	0.896	
	1200	598	4165	

Notes: For every variable, each row shows the mean, standard deviation, and number of observations.

Table S32: Summary statistics of comparable outcomes both in the Arab Barometer sample, the Arab Barometer internet user sample, and the experimental sample

	Arab Barometer sample	Arab Barometer internet user sample	Experimental sample	Arab Barometer survey years
Husband final say	2.642	2.972	3.344	2016, 2018
	1.431	1.517	1.020	
	1857	801	4165	
Prioritize the education of men	4.024	4.368	4.575	2016, 2018
	1.230	0.997	0.746	
	1848	801	4165	
Support from a relative	0.629	0.591	0.845	2018
	0.486	0.496	0.362	
	133	79	4165	
Support from local police/authority	0.251	0.288	0.259	2018
	0.436	0.457	0.438	
	133	79	4165	
Support from organization	0.017	0.038	0.455	2018
	0.129	0.194	0.498	
	133	79	4165	
Experienced violence	0.093	0.083	0.891	2018
	0.290	0.276	0.311	
	1200	598	4165	

Notes: For every variable, each row shows the mean, standard deviation, and number of observations. The "Support from" variables differ in both surveys: the Arab Barometer survey asked whether respondents thought that a family member who was abused would be able to receive assistance from each of the actors, and our survey asked whether respondents would recommend a friend or family member who was abused to reach each of the actors. (2) The "Experienced violence" variable differs in both surveys: the Arab Barometer survey asked if in the last twelve months a female member of the household was abused by another member, and our survey asked whether, in the month before the COVID-19 pandemic, they heard of someone or themselves experienced being hit by a man.

Table S33: Heterogeneous effects in main outcomes by baseline indexes on attitudes towards gender and marital equality (Attitudes), domestic violence experienced during COVID-19 (Experienced violence), knowledge on treatment information (Resource knowledge), hypothetical use of online resources and contact with an organization when responding to domestic violence (Hypothetical use and contact), and recent use of online resources and contact with an organization variables (Recent use and contact)

	Dependent variable:										
	Index of TV show consumption	Index of videos of women's empowerment and support consumption	Index of knowledge about treatment information	Index of attitudes toward gender and marital equality	Index of attitudes on sexual violence	Index of donation to organizations supporting women	Index of domestic and sexual violence experienced during COVID-19	Index of hypothetical use of online resources and contact with an organization when responding to domestic violence	Index of hypothetical use of online resources and contact with an organization when responding to sexual violence	Index of recent use of online resources and contact with an organization during COVID-19	Index of views on women's future outlook toward gender and marital equality
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Facebook and WhatsApp Ind.	0.155*** (0.037)	1.031*** (0.037)	0.229*** (0.037)	0.022 (0.036)	−0.007 (0.040)	−0.004 (0.041)	0.030 (0.036)	0.080** (0.038)	0.115*** (0.039)	0.081*** (0.029)	0.135*** (0.037)
WhatsApp Group	0.187*** (0.041)	0.935*** (0.041)	0.308*** (0.040)	0.054 (0.039)	0.011 (0.044)	−0.036 (0.045)	0.009 (0.039)	0.099** (0.042)	0.126*** (0.043)	0.104*** (0.032)	0.037 (0.040)
TV Show Reminder	0.869*** (0.041)	0.475*** (0.041)	0.126*** (0.040)	−0.021 (0.039)	0.060 (0.044)	−0.030 (0.045)	0.044 (0.039)	0.100** (0.041)	0.038 (0.042)	0.103*** (0.032)	0.097** (0.040)
Attitudes x FB and WI	−0.042 (0.038)	0.017 (0.038)	0.043 (0.037)	−0.063* (0.036)	0.038 (0.041)	−0.004 (0.042)	−0.080** (0.036)	−0.046 (0.038)	−0.045 (0.039)	−0.017 (0.030)	−0.040 (0.037)
Attitudes x WG	−0.026 (0.041)	0.022 (0.041)	0.066 (0.041)	0.001 (0.040)	−0.095** (0.044)	−0.019 (0.046)	−0.006 (0.039)	−0.041 (0.042)	−0.077* (0.043)	0.013 (0.032)	0.002 (0.041)
Attitudes x TV	−0.062 (0.041)	−0.064 (0.041)	0.012 (0.041)	−0.007 (0.040)	0.027 (0.044)	−0.082* (0.046)	−0.046 (0.039)	−0.057 (0.042)	−0.045 (0.043)	0.067** (0.032)	0.016 (0.041)
Experienced violence x FB and WI	0.045 (0.038)	−0.007 (0.038)	0.002 (0.038)	0.032 (0.037)	−0.021 (0.041)	−0.001 (0.043)	−0.008 (0.036)	0.032 (0.039)	−0.024 (0.040)	0.012 (0.030)	0.101*** (0.038)
Experienced violence x WG	0.058 (0.041)	−0.032 (0.041)	0.008 (0.041)	0.020 (0.040)	0.003 (0.045)	0.037 (0.046)	−0.035 (0.039)	0.013 (0.042)	0.045 (0.043)	−0.044 (0.033)	−0.037 (0.041)
Experienced violence x TV	0.105** (0.041)	0.038 (0.041)	−0.025 (0.041)	−0.053 (0.040)	−0.076* (0.044)	0.004 (0.046)	0.044 (0.039)	−0.002 (0.042)	0.062 (0.043)	0.048 (0.032)	−0.019 (0.041)
Resource knowledge x FB and WI	−0.055 (0.039)	−0.059 (0.039)	0.014 (0.039)	0.003 (0.038)	0.026 (0.042)	0.031 (0.044)	0.033 (0.037)	0.044 (0.040)	0.019 (0.041)	0.021 (0.031)	0.030 (0.039)
Resource knowledge x WG	−0.039 (0.045)	−0.071 (0.045)	0.105** (0.044)	0.009 (0.043)	0.048 (0.048)	0.005 (0.050)	0.022 (0.043)	0.070 (0.046)	0.055 (0.047)	−0.011 (0.037)	0.005 (0.045)
Resource k nowledge x TV	−0.018 (0.045)	−0.003 (0.045)	0.115*** (0.044)	0.051 (0.043)	0.032 (0.048)	−0.002 (0.050)	0.054 (0.043)	0.050 (0.046)	−0.012 (0.047)	−0.012 (0.036)	−0.008 (0.045)
Hypothetical use and contact x FB and WI	0.019 (0.038)	−0.023 (0.038)	−0.086** (0.038)	0.090** (0.037)	−0.012 (0.041)	−0.005 (0.042)	−0.003 (0.036)	−0.061 (0.039)	−0.049 (0.040)	0.001 (0.030)	−0.024 (0.038)
Hypothetical use and contact x WG	0.003 (0.042)	−0.038 (0.042)	−0.042 (0.041)	0.012 (0.040)	−0.005 (0.045)	−0.022 (0.047)	−0.021 (0.040)	−0.094** (0.043)	−0.075* (0.044)	−0.009 (0.033)	−0.042 (0.042)
Hypothetical use and contact x TV	0.113*** (0.043)	0.065 (0.043)	0.046 (0.042)	0.069* (0.041)	0.030 (0.046)	0.001 (0.047)	0.029 (0.040)	0.029 (0.043)	0.060 (0.045)	0.0001 (0.033)	0.064 (0.042)
Recent use and contact x FB and WI	0.075* (0.041)	−0.012 (0.041)	−0.042 (0.040)	−0.106*** (0.039)	−0.049 (0.044)	−0.013 (0.045)	−0.010 (0.039)	0.001 (0.041)	0.015 (0.042)	0.073** (0.032)	0.013 (0.040)
Recent use and contact x WG	0.019 (0.044)	−0.029 (0.044)	−0.035 (0.043)	−0.009 (0.042)	−0.012 (0.047)	−0.066 (0.048)	0.036 (0.041)	0.042 (0.044)	0.032 (0.046)	0.114*** (0.034)	0.011 (0.043)
Recent use and contact x TV	0.065 (0.044)	−0.050 (0.044)	−0.071 (0.044)	−0.042 (0.043)	−0.060 (0.048)	−0.063 (0.049)	−0.032 (0.042)	−0.005 (0.045)	−0.050 (0.046)	0.123*** (0.035)	0.019 (0.044)
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.275	0.290	0.230	0.312	0.150	0.090	0.343	0.245	0.206	0.515	0.287

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. All regressions include controls for all baseline covariates in the outcome family as stated in their corresponding Tables from Table S13 to Table S23. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Table S34: Heterogeneous effects on main outcomes by comparable variables with the Arab Barometer sample

	Dependent variable:										
	Index of TV show consumption (1)	Index of videos of women's empowerment and support consumption (2)	Index of knowledge about treatment information (3)	Index of attitudes toward gender and marital equality (4)	Index of attitudes on sexual violence (5)	Index of donation to organizations supporting women (6)	Index of domestic and sexual violence experienced during COVID-19 (7)	Index of hypothetical use of online resources and contact with an organization when responding to domestic violence (8)	Index of hypothetical use of online resources and contact with an organization when responding to sexual violence (9)	Index of recent use of online resources and contact with an organization during COVID-19 (10)	Index of views on women's future outlook toward gender and marital equality (11)
Facebook and WhatsApp Ind.	0.152*** (0.037)	1.026*** (0.038)	0.229*** (0.037)	0.022 (0.036)	−0.002 (0.040)	−0.0002 (0.041)	0.034 (0.036)	0.083** (0.038)	0.115*** (0.039)	0.059* (0.031)	0.129*** (0.037)
WhatsApp Group	0.186*** (0.041)	0.933*** (0.041)	0.307*** (0.040)	0.043 (0.039)	0.002 (0.044)	−0.037 (0.045)	0.010 (0.039)	0.096** (0.042)	0.122*** (0.043)	0.098*** (0.033)	0.035 (0.040)
TV Show Reminder	0.871*** (0.041)	0.477*** (0.041)	0.136*** (0.040)	−0.016 (0.039)	0.058 (0.044)	−0.020 (0.045)	0.036 (0.039)	0.099** (0.042)	0.039 (0.043)	0.090*** (0.033)	0.093** (0.040)
Age x FB and WI	0.029 (0.046)	0.018 (0.047)	−0.036 (0.046)	−0.034 (0.045)	−0.028 (0.050)	−0.028 (0.051)	0.027 (0.044)	−0.036 (0.047)	−0.038 (0.049)	0.022 (0.038)	0.077* (0.046)
Age x WG	0.053 (0.050)	−0.011 (0.051)	0.043 (0.049)	−0.064 (0.048)	−0.009 (0.054)	−0.036 (0.055)	−0.023 (0.048)	0.003 (0.051)	−0.041 (0.053)	0.010 (0.041)	0.065 (0.050)
Age x TV	0.101** (0.049)	0.005 (0.049)	0.006 (0.048)	−0.045 (0.047)	−0.019 (0.053)	−0.101* (0.054)	−0.016 (0.047)	0.001 (0.050)	−0.027 (0.051)	0.041 (0.040)	0.029 (0.049)
Education above BA x FB and WI	−0.009 (0.039)	0.010 (0.040)	0.055 (0.039)	0.035 (0.038)	0.049 (0.042)	0.073* (0.043)	0.108*** (0.038)	0.024 (0.040)	0.024 (0.041)	−0.013 (0.032)	0.046 (0.039)
Education above BA x WG	−0.006 (0.042)	−0.011 (0.042)	0.088** (0.041)	−0.040 (0.040)	−0.098** (0.045)	0.018 (0.046)	0.071* (0.040)	−0.012 (0.043)	−0.027 (0.044)	−0.050 (0.034)	0.038 (0.042)
Education above BA x TV	−0.048 (0.042)	−0.042 (0.042)	0.003 (0.041)	−0.024 (0.041)	−0.090** (0.045)	0.009 (0.047)	0.100** (0.040)	−0.001 (0.043)	0.025 (0.044)	−0.014 (0.034)	0.023 (0.042)
Married x FB and WI	−0.055 (0.048)	0.104** (0.048)	−0.001 (0.047)	−0.033 (0.046)	0.018 (0.052)	−0.064 (0.053)	0.084* (0.046)	0.118** (0.049)	0.161*** (0.050)	−0.044 (0.039)	−0.001 (0.048)
Married x WG	0.019 (0.052)	0.135*** (0.052)	−0.048 (0.051)	0.021 (0.050)	0.088 (0.056)	−0.025 (0.057)	0.077 (0.049)	0.058 (0.053)	0.023 (0.054)	−0.075* (0.042)	0.025 (0.051)
Married x TV	0.050 (0.053)	0.104* (0.053)	−0.033 (0.052)	0.002 (0.051)	0.016 (0.057)	0.084 (0.059)	0.066 (0.050)	0.115** (0.054)	0.094* (0.056)	−0.018 (0.043)	0.068 (0.053)
Number of children x FB and WI	−0.007 (0.052)	−0.023 (0.053)	0.074 (0.051)	0.051 (0.050)	−0.047 (0.056)	0.015 (0.058)	−0.031 (0.050)	−0.041 (0.053)	−0.037 (0.055)	−0.005 (0.043)	−0.012 (0.052)
Number of children x WG	−0.067 (0.055)	−0.027 (0.056)	0.067 (0.054)	0.046 (0.053)	−0.081 (0.060)	−0.010 (0.061)	−0.044 (0.053)	−0.026 (0.057)	0.003 (0.058)	0.076* (0.045)	−0.082 (0.055)
Number of children x TV	−0.056 (0.057)	−0.059 (0.057)	0.088 (0.056)	0.042 (0.055)	−0.074 (0.061)	−0.076 (0.063)	−0.008 (0.054)	−0.105* (0.058)	−0.081 (0.060)	−0.048 (0.046)	−0.020 (0.056)
Social media use x FB and WI	0.059 (0.040)	−0.023 (0.040)	0.045 (0.039)	0.062 (0.039)	0.032 (0.043)	0.052 (0.044)	0.0002 (0.038)	0.066 (0.041)	0.097** (0.042)	0.071** (0.033)	0.072* (0.040)
Social media use x WG	0.047 (0.043)	0.021 (0.043)	0.073* (0.042)	0.054 (0.041)	0.003 (0.046)	−0.034 (0.047)	−0.067* (0.041)	0.024 (0.044)	0.066 (0.045)	0.087** (0.035)	0.030 (0.042)
Social media use x TV	0.047 (0.044)	0.011 (0.044)	0.068 (0.043)	0.089** (0.042)	−0.040 (0.047)	−0.016 (0.048)	−0.040 (0.042)	0.016 (0.045)	0.058 (0.046)	0.078** (0.036)	0.043 (0.044)
Social media hours x FB and WI	−0.080* (0.042)	−0.082* (0.042)	−0.003 (0.041)	−0.106*** (0.040)	−0.066 (0.045)	−0.073 (0.046)	0.0003 (0.040)	−0.050 (0.043)	0.001 (0.044)	−0.038 (0.034)	−0.111*** (0.042)
Social media hours x WG	−0.062 (0.045)	−0.087* (0.045)	0.039 (0.044)	−0.099** (0.043)	−0.101** (0.048)	−0.099** (0.049)	0.010 (0.043)	−0.082* (0.046)	−0.067 (0.047)	0.006 (0.036)	−0.103** (0.044)
Social media hours x TV	−0.034 (0.044)	−0.072 (0.045)	−0.010 (0.043)	−0.137*** (0.043)	−0.098** (0.048)	−0.110** (0.049)	0.022 (0.042)	−0.076* (0.045)	−0.050 (0.046)	0.021 (0.036)	−0.046 (0.044)
Husband final say x FB and WI	−0.036 (0.039)	0.007 (0.040)	−0.075* (0.039)	−0.015 (0.038)	−0.034 (0.042)	−0.041 (0.043)	−0.055 (0.038)	−0.040 (0.040)	0.009 (0.041)	0.022 (0.032)	−0.006 (0.039)
Husband final say x WG	−0.061 (0.042)	0.001 (0.043)	−0.005 (0.042)	−0.019 (0.041)	−0.086* (0.046)	−0.081* (0.047)	0.012 (0.040)	−0.040 (0.043)	−0.050 (0.044)	−0.014 (0.034)	−0.027 (0.042)
Husband final say x TV	−0.036 (0.043)	−0.082* (0.043)	−0.099** (0.042)	−0.00005 (0.041)	−0.038 (0.046)	−0.112** (0.047)	−0.072* (0.041)	0.057 (0.044)	0.038 (0.045)	0.039 (0.035)	−0.050 (0.042)
Male education priority x FB and WI	0.011 (0.038)	0.052 (0.038)	0.008 (0.037)	−0.023 (0.037)	0.053 (0.041)	0.014 (0.042)	−0.027 (0.036)	−0.019 (0.039)	−0.055 (0.040)	−0.001 (0.031)	−0.012 (0.038)
Male education priority x WG	0.039 (0.041)	0.027 (0.042)	0.022 (0.041)	0.044 (0.040)	0.003 (0.045)	0.050 (0.046)	−0.082** (0.040)	−0.041 (0.042)	−0.044 (0.043)	0.006 (0.034)	0.013 (0.041)
Male education priority x TV	0.011 (0.041)	0.013 (0.042)	0.010 (0.041)	0.052 (0.040)	0.043 (0.044)	−0.041 (0.046)	0.007 (0.039)	−0.065 (0.042)	−0.033 (0.043)	0.062* (0.034)	−0.001 (0.041)
Seek support x FB and WI	0.048 (0.038)	0.018 (0.038)	−0.013 (0.037)	0.017 (0.036)	0.011 (0.041)	0.009 (0.042)	−0.022 (0.036)	−0.105*** (0.039)	−0.071* (0.040)	−0.044 (0.031)	0.020 (0.037)
Seek support x WG	0.005 (0.041)	0.055 (0.042)	0.034 (0.041)	0.023 (0.040)	−0.015 (0.045)	−0.004 (0.046)	0.0001 (0.040)	−0.095** (0.042)	−0.098** (0.043)	0.018 (0.034)	−0.044 (0.041)
Seek support x TV	0.106*** (0.041)	0.107*** (0.041)	0.075* (0.040)	0.066* (0.039)	−0.008 (0.044)	0.007 (0.045)	−0.012 (0.039)	−0.070* (0.042)	−0.006 (0.043)	−0.031 (0.033)	0.068* (0.041)
Experienced violence x FB and WI	−0.036 (0.038)	−0.015 (0.038)	0.036 (0.037)	−0.021 (0.036)	0.113*** (0.041)	0.023 (0.042)	0.005 (0.036)	0.032 (0.039)	0.017 (0.040)	0.011 (0.031)	0.049 (0.037)
Experienced violence x WG	0.010 (0.039)	−0.015 (0.040)	0.002 (0.039)	−0.004 (0.038)	0.047 (0.042)	0.043 (0.044)	−0.067* (0.038)	−0.020 (0.040)	−0.006 (0.041)	0.021 (0.032)	0.017 (0.039)
Experienced violence x TV	0.076* (0.040)	−0.055 (0.041)	−0.014 (0.040)	−0.081** (0.039)	0.079* (0.04)	0.033 (0.044)	−0.045 (0.039)	0.052 (0.041)	0.055 (0.042)	0.025 (0.033)	0.010 (0.040)
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.289	0.287	0.243	0.320	0.159	0.108	0.352	0.250	0.211	0.486	0.294

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. All regressions include controls for all baseline covariates in the outcome family as stated in their corresponding Tables from Table S13 to Table S23. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.