

# 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) is particularly acute due to COVID-19, especially in the Global South. We test whether edutainment interventions that have been shown to successfully combat GBV and IPV when delivered in person can be effectively delivered using social (WhatsApp and Facebook) and traditional (TV) media. To do so, we randomized the mode of implementation of an intervention conducted by an Egyptian women’s rights non-governmental organization seeking to support women while accommodating social distancing amid COVID-19. We found WhatsApp to be a more effective way to deliver the intervention than Facebook, but no credible evidence of differences across outcomes between social media and TV dissemination. Our findings show little credible evidence that these media campaigns had an impact on women’s attitudes toward gender or marital equality, and on the justifiability of violence. However, the campaign did increase women’s knowledge, hypothetical, and reported use of resources available to those exposed to GBV and IPV.**

# 1 Main

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. As high-profile social movements have led to rapid shifts in reporting of violence in some contexts (8), systematic reviews have emphasized the need to shift norms that accept violence (6, 9), remedy the economic and political marginalization of women (10–12), and consider community-based interventions including public engagement and advocacy (13–15).

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 (16), we assess the impact of a social media and traditional TV campaign aimed at increasing women's rejection of violence, deepening knowledge of resources and support services available to those impacted by GBV and IPV, and increasing their willingness and frequency of contact with those services.

Our study draws on findings that the expansion of entertainment programming along with cable TV has durably shifted gender norms and outcomes across contexts (17, 18). Closely connected research on edutainment posits that exposure to role models or dramatized, entertaining content can change attitudes and motivate shifts in behavior by changing individuals' beliefs about the social desirability of a given behavior (19–22). While some studies emphasize the relevance of individual role-modeling within dramatized media (17, 18, 23), others emphasize the importance of peer effects, whereby communal delivery of information shapes individuals' perceptions about the attitudes and behaviors of others in their immediate community (22, 24, 25). Studies that apply informational or edutainment interventions around GBV and IPV (23, 25–27) have produced mixed findings around the degree to which these interventions lead to attitudinal or behavioral shifts. Some have found that interventions generated attitudinal shifts like increasing rejection of violence (23, 25), especially when delivered via communal channels. Related studies, meanwhile, have found these interventions do not shift attitudes but increase individuals' willingness to report violence (26, 27).

However, while scholars have used social media to examine phenomena like misinformation (28, 29) and political accountability (30), we are not aware of any study that probes whether social media platforms like Facebook and WhatsApp can be effectively used to deliver edutainment interventions, which often rely on traditional film distribution or in-person gatherings for communal screenings. Similarly, we are unaware of any study that compares the relative effectiveness of social and traditional media in delivering such interventions.

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 (31), reflecting the high rates of GBV and IPV in the broader Arab world despite relative scarcity of research on their prevalence (32, 33). Though structural factors like poverty, education and husbands' education, age at marriage, and proximity to supportive family members have been linked to ever-married women's risk of experiencing GBV and IPV (34–36), women across socioeconomic backgrounds report high levels of violence (36). According to the most recent national demographic survey, 36% of ever-married women between the ages of 15-49 surveyed report having experienced physical domestic violence (37). A nationally representative survey of Egyptian women showed that violence likely became even more acute amid the COVID-19 pandemic, with 19% of women reporting increased violence in the first weeks of mobility restrictions (38).

Despite this high prevalence of violence, (35), only one-third of women surveyed nationally report seeking help to stop violence and only 18% reported it (37). Several phenomena that explain 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 (39, p. 1128). Social norms that blame women who are exposed to intimate partner violence, sanction women who report violence to authorities, and stigmatize divorce also present obstacles to women who would seek support (34, p.43). Those who would report violence must further contend with the challenges of navigating the Egyptian legal system amid the absence of some legal protections against IPV (33–35).

Advocacy organizations acknowledging the challenges of reporting individually to authorities also support women directly, by providing them with resources, referrals, and counseling on ways to safely respond to violence. Amid COVID-19, evidence shows that these organizations are in high demand, as mobility limitations led to increased searches for online resources around domestic violence (2). The social distancing of COVID-19 also presented existing organizations with broader challenges in attempting to reach isolated audiences, as social distancing renders women without knowledge of resources and organizations especially vulnerable (5). Our initial 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, views 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 shifted attitudes, knowledge, and responses to violence. Moreover, we tested the relative effectiveness of videos disseminated on two types of media. The first was a weekly television show featuring Aboul Qomsan airing on a popular satellite channel, with episodes around 25-30 minutes in length. For the second set, ECWR and Aboul Qomsan produced thirteen videos to be disseminated over social media and hosted online. Unlike a range of edutainment interventions that featured dramatized characters (23–27), the intervention differs slightly in that Aboul Qomsan directly delivers factual information, without behavioral change techniques explicitly designed to be embedded in the program (22, 24, 27). However, her conversational and direct tone, with a setting akin to a daytime television show, aimed to cue the role modeling effects emphasized in edutainment interventions.

We followed Aboul Qomsan's experience in crafting messages and content appropriate for the Egyptian context when designing the video content. While naturally 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 (for more details, see Tables S1 and S2). Although the video content does not solely focus on IPV and GBV, the vast majority of Aboul Qomsan's content centers on discussing social norms that existing research highlights are linked to sustaining violence (34–36, 39, 40). 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, identifying areas where it needs reform; discusses different legal options around divorce following GBV or IPV; and instructs friends and families who become aware of violence to support victims.

Importantly, the videos often emphasize how women can access NGOs, like through an ECWR-sponsored hotline, that can connect women with support resources, including legal consultations. When discussing high-level violence like rape, Aboul Qomsan also underscores procedures to preserve evidence and immediately notify the police. She 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 provide legal representation.

Our intervention resembled those fielded in person in contexts as diverse as India (41), Mexico (25), and Uganda (26, 27), but distinctively differed in how we recruited participants into the study and especially in how we delivered the content. We identified 5,618 Egyptian women recruited through Facebook advertisements, which initially invited respondents to share their opinion about women's rights in Egypt and receive a small financial compensation in mobile credit. From there, women who completed a baseline survey and expressed interest in receiving

information and about women’s issues in Egypt were randomly assigned to different treatment arms described below.

This recruitment and treatment dissemination mechanism means that our sample is from the population of female Facebook users in Egypt, rather than the entire female population. To reach a broad sample of female Facebook users across Egypt, we placed ads in every governorate and across Facebook’s age brackets. Egypt is a site of widespread and fast-growing internet adoption: World Bank data shows that 72% used the internet in 2020.<sup>1</sup> In the 2018 Arab Barometer, a nationally-representative, face-to-face survey, Facebook and WhatsApp were the two most widely-used social media platforms, and Facebook reported 48 million active users in Egypt in 2020. As Figure 1 shows, these women are demographically representative of the female internet users in Egypt. After delivering the intervention content, we conducted an endline survey to explore how the content shaped their attitudes, knowledge, hypothetical and reported behaviors, and future outlook toward gender equality and empowerment.

We made the important decision to include only women in the study, for three reasons. First, Aboul Qomsan’s content is explicitly designed to speak to women; for instance, she almost always refers to her viewers as female. Second, as discussed above, the COVID-19 pandemic had increased NGOs’ and ECWR’s insurgency in developing channels to reach women with pertinent information, given the challenges of adapting to social distancing. Finally, we wanted to avoid exposing women to the potential for harassment on social media by including them in mixed-gender groups. Below we discuss the need for future research on how to best facilitate mixed-gender programming in online spaces.

We randomly assigned individuals to receive the content in one of five ways (see Tables S3 - S12 for details on the randomization and balance in demographics and initial attitudes across treatment arms). The first, a control group, received all intervention content upon completion of the endline survey. The second, a treatment group, received WhatsApp messages reminding them about the TV show, with information about when the show would air and the channel it would air on, over an eight-week period. In the remaining three treatment arms, we delivered video messages via the two most popular social media platforms in Egypt: WhatsApp and Facebook (42). 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 unknown users. In the WhatsApp group treatment, women were invited to join groups of Egyptian women receiving the content and given instructions on how to leave the group, if they preferred to receive the information individually. 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

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<sup>1</sup>World Bank Data, Accessed April 2022, <https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=EG>, with at least 47% using social media.<sup>2</sup>

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. In all Individual and Group treatments moderators answered basic questions about the goals of the research. There was no in-depth moderation as is otherwise the case with in-person, community-level interventions (13, 15).

We examine whether a mode of delivery was particularly effective in generating treatment consumption and ultimately shifting attitudes, increasing knowledge of 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 (25, 43). In using the Group functionality of WhatsApp, we aimed to measure whether communally transmitted information on social media functions similarly to offline groups. In the discussion below, we note substantive differences between WhatsApp groups and other communally-delivered interventions, which might account for possible the lower effectiveness of WhatsApp groups. Moreover, observing conversation in groups before endline, we noted very low levels of aggregate conversation (for more details, see Table S13).

Because our study is unlike 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, 26, 27), a first challenge was whether individuals would consume the content, given their limited attention and especially the significant amount of information and notifications they receive online. For those in the social media treatment arms, who received messages with links to a server that showed videos hosted on YouTube, we are able to measure their aggregate visits to the server and total YouTube views. While this data is subject to error around the website's calculation of unique users, Figure S1 and Tables S14 and S15 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.

This same 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. Using a difference-in-difference design that compares website views between participants assigned to different treatment arms before and after we transitioned the initial Facebook treatment group to receive videos individually via WhatsApp, we show that, in addition to the technical issue necessitating the switch, WhatsApp also was a more effective method to deliver the intervention content in terms of generating video views. For more details, see Figures S2 and S3.

After delivering the content over an eight-week period from July 18th through September 10th, 2020, we studied its impact via an online endline survey we fielded from September 10th to October 11th, 2020. We first measure the extent to which treated participants internalized the treatment information through indexes of directly and indirectly reported consumption of videos and factual knowledge about treatment information (Tables S16-S17). Then, to examine how About Qomsan's discussion and endorsement shifts attitudes and behaviors, we focus on the

following standardized 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 factually list organizations and online resources available to support women (Table S18).

We measured attitudinal outcomes linked to social norms that sustain the overall prevalence of violence in Egypt (34–36, 39, 40) via two indexes, both centered around content explicitly discussed and endorsed 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 S19). 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 S20). In line with other studies' use of donations to measure commitment to a cause (44, 45), 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 S21).

Our main behavioral outcomes centered around hypothetical and recent use of resources in response to domestic or sexual violence (Tables S22 to S24). We pre-registered the intervention's focus on accessing support organizations or online resources, which were emphasized in the intervention content. Finally, we measured outcomes related to respondents' beliefs about whether Egyptian women would achieve gender equality and gender rights in the future (Table S25). 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 S26 - S27), hypothetical reporting behaviors to family members or authorities (Tables S28 - S29), as well as reporting behaviors prior to COVID-19 (Table S30), which we use as placebo outcomes to ease concerns about demand effects. Because we sought to avoid re-traumatization, we avoided asking questions about direct personal experience of violence, opting for more indirect language on whether "you or someone you know" has been exposed to violence. It was nevertheless important to include these questions about exposure, or knowledge of exposure, to shed additional light on the mechanisms that drive our findings. Finally, we included a broad range of covariates representing structural factors our intervention could not impact, but that are linked to IPV and GBV exposure, including age, marital status, cohabitation, age at marriage, education, husbands' education, number of people in the household, income, and income loss due to COVID-19. Table S31 displays all of the questions used to generate these endline indices.

## 2 Results

We first show that there was a successful treatment-information delivery, as individuals in the various treatment arms were more likely to report receiving and viewing the intervention content, and were able to accurately describe the content of either the videos disseminated over social media or the TV show. These results in Figure 2 underscore the utility of using both social and traditional media to deliver this type of content (Panels 1-2, 0.86-1.02 SD increase,  $p < 0.01$ ; see disaggregated results for the individual outcomes aggregated into the index in Tables S16 and S17). Relative to the control mean, individuals receiving the intervention content via social media were 185-230%, more likely to accurately recall the content of a particular video episode, and those who received reminders of the TV show were 63% more likely to accurately recall the content of a particular TV show episode. 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).

Individuals who received the videos or reminders to watch the TV show reported increased knowledge about information on resources for women subjected to violence (Figure 2, Panel 3, 0.12-.30 SD increase,  $p < 0.01$ ; see disaggregated results for the individual outcomes aggregated into the index in Table S18), including knowledge of both ECWR and other organizations providing support to women subjected to violence. These resources were continuously emphasized in the intervention content, and individuals would have been unlikely to learn about them otherwise, underscoring that these responses were driven by content consumption. Treated individuals reported between 131% and 216% greater accurate knowledge of ECWR online resources, and between 12% and 28% greater knowledge of online resources other than ECWR, relative to the control mean. As in the results that follow, generally, there is no credible evidence of a difference in knowledge acquisition between those receiving the intervention content via social media (individually or in groups) or the TV shows, with the exception that there was less knowledge acquisition of organizations other than ECWR among those who received reminders of the TV show.

Figures 3 through 5 display our results in terms of attitudes, resource use, and future outlook. The results in Figure 3 show that there is little credible evidence that the receipt of the videos over social media or reminders to watch the TV show shifted individuals' beliefs toward gender and marital equality, increased rejection of sexual violence, or increased willingness to donate to support organizations. The results only show that those assigned to receive videos disseminated over social media groups exhibit a 0.05 SD increase,  $p < 0.1$ , in their gender and marital equality index, while those who received reminders of the TV show showed a 0.06 SD increase,  $p < 0.1$ , in their for sexual violence attitude index. Tables S19 through S21 show disaggregated results for each attitudinal outcome separately, and similarly show overall null results across all outcomes. Only 3 out of 54 coefficients have a  $p < 0.1$ . All other coefficients are generally substantively small, and their lack of statistical significance at conventional levels is not due to lack of statistical power. We similarly see no credible evidence that 'ceiling effects' among



individuals who at baseline hold attitudes rejecting violence or were more in favor of gender and marital equality drive these null results (Columns 5-7 in Table S35). 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 (45, 46).

In contrast, 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 Figure 4 shows 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 a support organization (0.08-0.12 SD increase, at least  $p < 0.05$ ; Tables S22 and S23 report disaggregated results).

However, as we expected, there is no credible evidence that the intervention had an impact on individuals' hypothetical responses to violence via talking to family members or contacting the authorities (for more details, see Figure S4 and Tables S28 and S29). These estimates are substantively small, and we are sufficiently powered to detect meaningful effects. The preregistration anticipated these results, as the intervention 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. Similarly, interventions elsewhere that have increased reporting to formal authorities have often involved the inclusion of men, who play a critical role in sustaining social norms (13–15). Given this contextual background and the absence of inclusion of men in our study, 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 supportive organization or use online resources for women affected by violence, treated women were also more likely to report recent contact with a support organization and use of these resources (right column of Figure 4, 0.06 SD increase,  $p < 0.05$ , for SMI, 0.1,  $p < 0.01$ , for SMG, and 0.09 SD,  $p < 0.01$ , for TV). Relative to the control mean, treated individuals were between 4% and 6% more likely to use online resources and to contact a support organization. These results are unlikely to reflect mechanical responses to treatment activities, given the active phrasing of these questions around "looked for or accessed" and "contacted," which differs from outcomes related to consumption of intervention content. The left panel of Figure 4 shows that these changes in behavior are not due to increased exposure to violence; as we anticipated, we found no credible evidence of an effect on reported experience of domestic and sexual violence during COVID-19 (see Table S26 for disaggregated results). While we discuss the potential for demand effects in more depth below, we note that these questions asked about the use of organizations and online resources generally, rather than ECWR specifically.

Finally, despite having a limited impact on women's attitudes toward gender and marital equal-

ity and rejection of violence, those who received messages via social media individually or who received WhatsApp reminders about the TV show expressed increased beliefs that women would achieve greater gender and marital equality in the future for participants who received individual messages via social media, or who received reminders of the TV show (Figure 5, 0.1 - 0.13 SD increase,  $p < 0.05$ ). However, this result does not extend to those who received the messages via social media groups. As discussed in greater detail below, this null result in WhatsApp Groups may be due to either the absence of substantial interactions in those groups, or the inability of social media groups to recreate community interactions.

Comparison with cross-national surveys and analysis of how results differed according to key initial attitudinal and demographic variables show that our results likely extend beyond those in our sample to the broader population of female internet users in Egypt. While the distribution of outcomes and summary statistics in Figure 1 and Table S32 show that the women in our study demographically reflect female internet users in Egypt, Figure 6 and Table S33 display 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 expressed 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 a support organization, and are more likely to report knowing of or experiencing violence; however, these questions are worded differently across the questionnaires.

To further examine the generalizability of our experimental findings to the broader population of Egyptian female internet users, we examine heterogeneous effects according to baseline demographics and attitudes, to ensure that our samples' slightly more favorable attitudes toward gender or marriage equality at baseline are not producing 'ceiling effects' that drive our null finding. We similarly examine how age shaped individuals' responses to the content, as our experimental sample is slightly younger than that of those women who reported having access to the internet in the Arab Barometer survey (Tables S32 and S33). 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 (21). As Nehad Aboul Qomsan is an accomplished professional and a mother, we might have expected to see stronger results among older women. However, we find no credible evidence that there are heterogeneous effects on our findings by these baseline attitudes or demographic variables (Tables S34 and S35), nor by any of the other key demographic variables we measured, like education or marital status. The common support and similar distribution of the comparable covariates in Figures 1 and 2, together with this absence of heterogeneous effects, suggest any compositional differences in our sample are unlikely to impact the generalizability of our results to the broader population of Egyptian women on the internet.

To additionally assess the generalizability of our experimental findings to the broader population of Egyptian women on the internet, and in particular on Facebook, we recompute our

main estimates by weighting the experimental sample to match the governorate-age distribution of Facebook users that saw the recruitment Facebook advertisements. Figure S8B shows that, relative to the Facebook users reached by Facebook advertisements used to recruit participants, participants in the experimental sample are younger and are more likely to be drawn from Cairo. The results in Table S36 indicate that there is little credible evidence that such sample differences affect the representativeness of our results for the broader population of Egyptian female Facebook users, specifically, and of Egyptian women on the internet, more generally. Combined, these robustness checks underscore that our findings are generalizable to our relevant population – Egyptian women with internet access.

One persistent concern for experiments of this nature is the potential for demand effects, or individuals' desire to report attitudinal or behavioral shifts in accordance with their understanding of the study's goals, in ways that bias the study's results. We point to several reasons why demand effects are unlikely to explain the results we discuss above. First, our survey instrument was carefully designed to avoid demand effects to the extent possible, and to test for them as well as social desirability bias. It included both direct and indirect (including hypothetical) questions, and questions that tested accurate recall. Results are consistent across these different types of questions throughout. We also find that individuals' increased their knowledge of ECWR *alongside* other organizations directly featured in the content (Table S19), strongly suggesting that these results are driven via consumption of the intervention content.

Second, individuals' responses to the intervention content amount to selective and nuanced adoption of the content endorsed by Aboul Qomsan. Recruitment content did not differentiate among outcomes, and yet treated participants expressed an increase in knowledge, no salient shifts in attitudes, and increased hypothetical willingness and reported use of certain forms of engagement and reporting. Aboul Qomsan explicitly endorses measured attitudes. For instance, she states that women's clothing does not cause harassment, and discusses ECWR data that Egyptian women are harassed at equal rates regardless of how they dress (Video 3, Table S1). She also discusses how the financial independence women can gain working outside of the home can benefit the family (Video 8, Table S1). That there is no evidence these endorsements shifted respondent attitudes underscores that demand effects are unlikely to drive the broader findings.

Finally, the precise nulls on placebo outcomes that our intervention should have no impact on - the reported experience of violence during COVID-19, recalled experiences of violence before COVID-19, and in particular the use of resources before COVID-19 (for more details see, Figure S5, Tables S26, S27, and S30) - emphasize that demand effects and social desirability bias are not driving the shifts we detect in hypothetical or recently reported use of resources.

### 3 Discussion

Our findings align, first and foremost, with those that find dramatized interventions can generate increased reporting of violence without necessarily impacting underlying attitudes (26, 27). However, our study differs from others via its non-dramatized nature, or delivery of factual content via a high status figure in a relatable and familiar tone. Further, unlike these other studies, we focus more specifically on the use of online resources and access to support organizations that can provide help, possibly remotely, to women subjected to GBV and IPV in a context of rising levels of such violence.

Our study builds on findings from edutainment interventions - especially those addressing GBV and IPV - by underscoring that these campaigns can be cost-effectively distributed via social media and TV. Interventions delivered via social media and TV differ considerably relative to those delivered via communal film screenings (23, 26, 27) or radio transmission (25), as they may not induce discussion or cue perceptions that others' norms are shifting, limiting their behavioral impact. Alongside traditional media such as TV and despite these differences, our study shows that social media platforms can be highly impactful where they are increasingly popular, in Egypt (47) and elsewhere, allowing for low-cost—even free—information dissemination. While digital outreach cannot replace in-person programming - especially given the large numbers of women in Egypt who do not have access to the internet - these results show that organizations can usefully disseminate content over both social media and TV to generate deeper knowledge and cue greater outreach to supportive organizations.

These results have particular policy significance during a period of more limited mobility given COVID-19, when public health agencies globally increased the use of online outreach and hotlines in response to GPV and IPV (48). They are also more broadly substantive given the relatively low cost of this intervention in relation to interventions requiring community screenings. As illustrated by Figure S10, we fielded the intervention during a period where national mobility had recovered slightly after the drastic mobility declines from March through May, but remained approximately 20% below mobility averages during pre-pandemic periods, according to Google's mobility data, and NGOs' in-person programming remained very limited. This recovery in baseline mobility during our period limits our concerns that our results are uniformly attributable to individuals' increased willingness to consume video content during this particular period, so that similar social media interventions could be effective outside of COVID-19 contexts.

The "group-level" intervention differs from communal interventions (13–15) or screenings (23–25) where individuals are viewing content next to those they consider their neighbors and personal contacts, which might lead to more rapid changes in beliefs about social norms. This difference might account for the lack of differential effects between the individual and group dissemination of the intervention information via social media. The limited conversation in these groups may also underpin the absence of credible evidence that those in the group intervention positively shift their future outlook toward gender and marital equality. However, it

reflects the intervention's focus on the content and the potential for low cost, scalable modes of delivery, as well as the technical impossibility of creating groups of those who know one another offline. We identify at least two additional, resource-intensive steps that would be needed to more directly mirror these modes of communal delivery. First, organizations and researchers would need information on community structure in order to place individuals in groups online that reflect their communities offline. Second, future programming would need to consider how to create and moderate meaningful, safe, and respectful interaction in these online spaces.

While our research provides evidence that these forms of distribution can have normatively positive effects in encouraging outreach to local organizations skilled at navigating the social context and cognizant of the barriers women face when exposed to and reporting violence, these results should not be understood to mean that future interventions should not address men. Beyond improving victims' access to resources, men's attitudes and behaviors are critical to shifting social norms and legal structures and durably reducing violence. Future work should extend our findings by considering how to deliver similar programming to men or in mixed-gender groups heightening the risk of online harassment. Encouragingly, several recent, successful interventions that purposefully include men and male community leaders have shifted women's access to the labor market (49) and exposure to violence (14), or shown that edutainment's impacts can work through shifts in male attitudes (23). Like these offline interventions, future online interventions must carefully consider how to appropriately include men without cueing fears or heightening the risk of online harassment.

## 4 Methods

### Sample recruitment and Surveys

We placed 76 Facebook advertisements across combinations of Egyptian governorates and age groups to recruit 9,431 valid responses from a broad sample of Egyptian women to a baseline survey, implemented online via Qualtrics. This excludes precisely duplicated responses, as we feared that those individuals were not genuinely interested, and male respondents whose metadata and response timing indicated they were impersonating women after being informed that only women were eligible to participate. The Facebook page that promoted the recruitment advertisements was titled in Arabic *Inti mish liwahdik* or You are not alone, and featured a forty-second video by Aboul Qomsan. In the video, she invited individuals to complete the survey, in order to gather information on women's issues in Egypt, especially in light of ECWR's efforts to respond to the burdens confronting women in the COVID-19 outbreak. In the informed consent of the baseline survey, respondents were told the survey was part of an "evaluation in collaboration with the Egyptian Center for Women's Rights," focused "on the views and behaviors of Egyptian women such as yourself." Near completion 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 to a project Facebook account to request receiving additional information and

videos about women's issues in Egypt. To incentivize participation, respondents who completed the survey received 25 Egyptian Pounds (1.2 USD) in mobile phone credit.

We identified 5,618 Egyptian women interested in receiving such information and videos. The enrollment of approximately 60% of participants in the experiment was in-line with our expectations and that of our partner. Table S37 explores how the baseline responses of those who opted in to receive additional information and videos about women's issues in Egypt differ from those who did not. The results indicate that, on average, those women interested in being part of the study were younger, more likely to have experienced GBV and IPV during COVID-19, had more knowledge and recent use of online resources for women and were more likely contact a support organization. However, there is no credible evidence that there are differences in other covariates, attitudes towards gender and marital equality, and hypothetical use of resources and contact with support organization. Despite some average differences in baseline characteristics, given that Figure S9 shows the distribution of those outcomes across the two samples is very similar and that Tables S34 and S35 show no credible evidence that there are heterogeneous effects on our findings by such baseline characteristics, any compositional differences in our sample are unlikely to impact the generalizability of our results to the broader population of Egyptian women on the internet.

In collaboration with our partner, the baseline survey outcomes are designed to build on research on the impact of edutainment interventions and community screenings on attitudes toward gender equality, GBV, and IPV (23, 25–27) and research in public health concentrating on the determinants of violence in Egypt (34, 39). We also added outcomes from recent modules from the nationally-representative Arab Barometer survey in Egypt and broader research around access community-level interventions (14, 50) and economic empowerment (12). The outcomes we measure in our study are not meant to accurately measure the overall prevalence of violence in Egypt nor among Egyptian female internet users.

The endline survey was conducted also online via Qualtrics between September 10 and October 11, 2020. While endline data collection started five days after delivery from the final video, to minimize demand effects and social desirability bias, participants were not informed that they would not receive additional videos, and the TV show remained ongoing. Endline response rates were balanced among treatment conditions at 75% yielding a final sample of 4,165 participants. Relative to the initial experimental sample, we dropped 227 respondents who had responded twice to the endline, , which are balanced across treatment conditions. Estimates available upon request show that results are robust to the inclusion of these participants. In addition to repeating the baseline outcomes, the endline survey measured video consumption and recall of the social media videos and TV show content, both directly and indirectly to minimize demand effects. Moreover, it included a series of placebo outcomes to assess the extent of demand effects and social desirability bias. The full questionnaire is available in the supplemental appendix.

Figure S8B shows that, relative to those female Facebook users who initially viewed the advertisements, female Facebook users between the ages of 18 and 34, as well as those in Cairo,

were more likely to ultimately enter the experimental sample. Similarly, Figure S6 shows 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.

## **Treatment Assignment, Content and Distribution**

To ensure balance among treatment arms according to baseline demographics and attitudes, we used block randomization to assign baseline respondents who showed interest in receiving information and videos about women’s issues in Egypt to one of our five treatment conditions. Appendix Table S3 displays details on the block randomization procedure, assignment to treatment, and endline response rates across treatment arms. Appendix Tables S4 - S12 show that our block randomization procedure resulted in covariate balance across experimental conditions.

Treated participants received nudges to consume one of two sets of videos with intervention information. 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. The second set was thirteen 5-9 minute videos disseminated over social media, which featured a similar narrative style as the TV show. Appendix Tables S1 and S2 summarize the content of each TV episode and video disseminated over social media, while Figure S7 shows an example of the landing page that social media users accessed.

The control group received no videos. The absence of an “attention control” condition stemmed from practical realities: our partner specializes in content related to women’s issues in Egypt and could not have produced similarly-structured content on a different topic. Given this impossibility, we focus our analysis on the differences across modes of intervention content delivery.

Participants in the TV Reminder treatment received a WhatsApp message every 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. Since we received IRB approval three weeks after the TV show started, the first of eight messages we delivered also pointed to the location of videos from the first three episodes. This might explain why respondents in the TV condition report viewing additional content on social media in Table Figure 2, to a greater degree than those in control. 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 period. Results indicate a small increase

in TV show consumption by these treatment groups, which we adjudicate to increased interest in About Qomsan’s content.

## Relative Effectiveness of Facebook vis-a-vis WhatsApp

To explore the relative effectiveness of Facebook vis-a-vis WhatsApp in generating consumption of the treatment information, we use server-visit data and conduct a difference-in-differences analysis that exploits the fact that participants assigned to receive videos through Facebook were transitioned to WhatsApp Individual delivery after the delivery of four videos due to a technical issue. Figure S2 displays visits per assigned user across videos distinguishing for Facebook and WhatsApp Individual treatments. Figure S3 reports the corresponding means for the first four weeks and the last eight weeks. The difference in means between those two periods and across Facebook and WhatsApp Individual treatments indicates that the individual dissemination of videos via WhatsApp was much more effective than through Facebook, with 0.126 ( $p < 0.05$ ) more visits per assigned user 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 intervention content in terms of generating video views.

## Empirical Specification for Statistical Analysis

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

$$Y_i = \alpha_0 + \alpha_1 \text{SMI} + \alpha_2 \text{SMG} + \alpha_3 \text{TV} + \Omega X_i + \gamma_b + \varepsilon_i,$$

where  $Y_i$  is an outcome of interest of individual  $i$ ;  $\text{SMI}$ ,  $\text{SMG}$ , and  $\text{TV}$  are respectively indicators for treatment assignment to Social Media (Facebook or WhatsApp) Individual, Social Media (WhatsApp) Group, and TV reminders;  $X_i$  are baseline-individual controls from the corresponding family of outcomes,  $\gamma_b$  are block-randomization fixed effects. The regression weights correspond to the inverse probability of treatment assignment, as detailed in Appendix Table S3. Our primary estimates ( $\alpha_{1-3}$ ) recover the treatment effects for the Social Media Individual, Social Media Group, and TV Reminder treatments. Throughout, we perform one-sided tests of statistical significance wherever we hypothesized the direction of a statistically significant effect and two-sided otherwise.

In our main results, our outcome of interests are z-score indexes whereby we first standardize each variable of the index, we then take the average of these standardized variables, and we finally standardize such an average. While rare, we code missing answers as zero and include controls for such instances, which we interact with other regressors whenever appropriate. In each table where we report treatment effects, we consider three different versions of  $X_i$ . In Panel A, we control by the lagged dependent variable (if available) and LASSO-selected covariates



from the outcome family. This is our preferred specification and whose coefficients we use in figures 2-5. In Panel B, we control by the lagged dependent variable (if available). In Panel C, we do not control for any covariates.

This study was pre-registered at the Evidence in Governance and Politics repository, <https://osf.io/tekyr>.

## Data and Code Availability

All the data and code developed by the authors using the statistical software R are available in the Harvard Dataverse repository, <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/VFFZRM>. These include the de-identified original and derived data sets, and the code developed for data construction and analysis (i.e., to generate figures, tables, and other summary statistics).

## Ethics

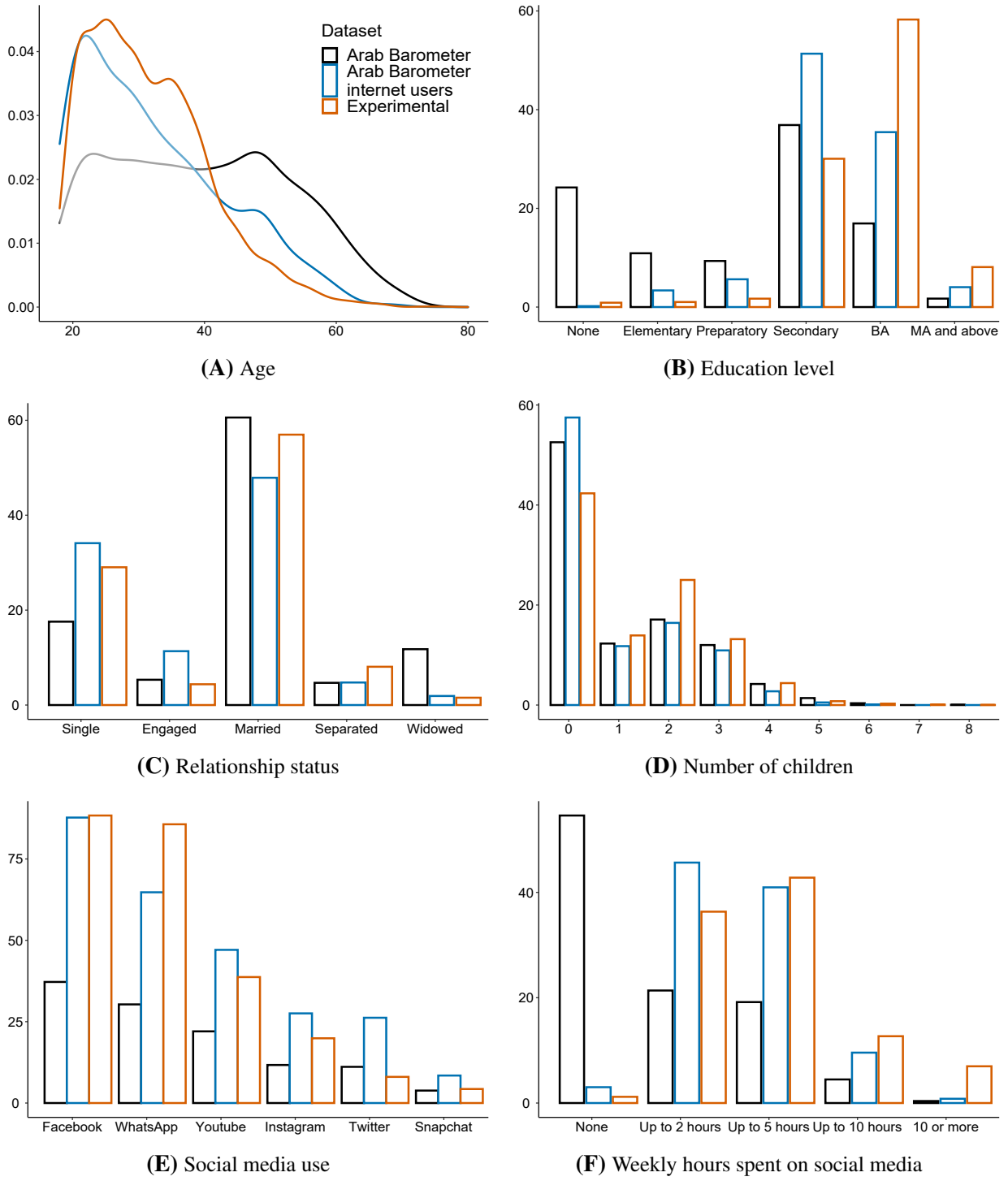
This project received approval from MIT's Committee on the Use of Humans as Experimental Subjects (COUHES) 2006000174 and from the American University of Cairo (AUC) Institutional Review Board 2020-2021-003. Participants provided informed consent at the beginning of the study, and subsequently manually opted-in to receipt of further videos on “women’s empowerment and support” by sending a text a project WhatsApp account, adding the number to their contacts, and following and sending a message a project Facebook account. In keeping with Egyptian data protection laws and our COUHES approval, all personally-identifiable information was digitally stored using encryption, and all of this information was destroyed upon completion of the project. After informed consent, once women were sent content, they were also informed that they could unsubscribe or opt-out from receiving content at any time, and given instructions for how to do so. Moreover, participants could block the sender and stop receiving content at any time.

Beyond these considerations, we sought to minimize the risks of re-traumatization in both the survey instruments and the intervention content, while providing resources to those impacted by GBV and IPV. Drawing on ECWR’s experience in the context, we avoided asking sensitive questions about *personal* experience with GBV and IPV. This decision limited comparability relative to nationally-representative surveys like Arab Barometer that asked more direct questions, and means that our questions do not resemble those GBV or IPV screening tools used in in-patient medical settings (51). Additionally, participants could skip any questions they felt uncomfortable answering. Further, the content we distributed was directly tailored to the Egyptian context and the decisions women make around responding to violence. While addressing sensitive topics like violence against women, Aboul Qomsan consistently and conversationally discusses methods for women to safeguard their mental health, and discusses the connections’ between women’s health and family health. Finally, all of the videos distributed over social media displayed the short titles of the videos (Table S1), and individuals needed to actively click

on the links in order to view content, so women in the study could avoid consuming content on any topic.

Most directly, our enumerator team also referred women to support when requested by providing them instruction on how to contact ECWR directly. All of these requests occurred during data collection, in response to the Facebook advertisement. In total, approximately five women messaged our page or our WhatsApp number directly seeking support. Our enumerators immediately referred these individuals to ECWR for support. In this way, these advertisements facilitated the provision of supportive resources that these women would have otherwise struggled to access, while underlining the need for additional outreach. We received no additional messages requesting support.

Fig. 1: Comparison of demographics between Arab Barometer and experimental sample respondents



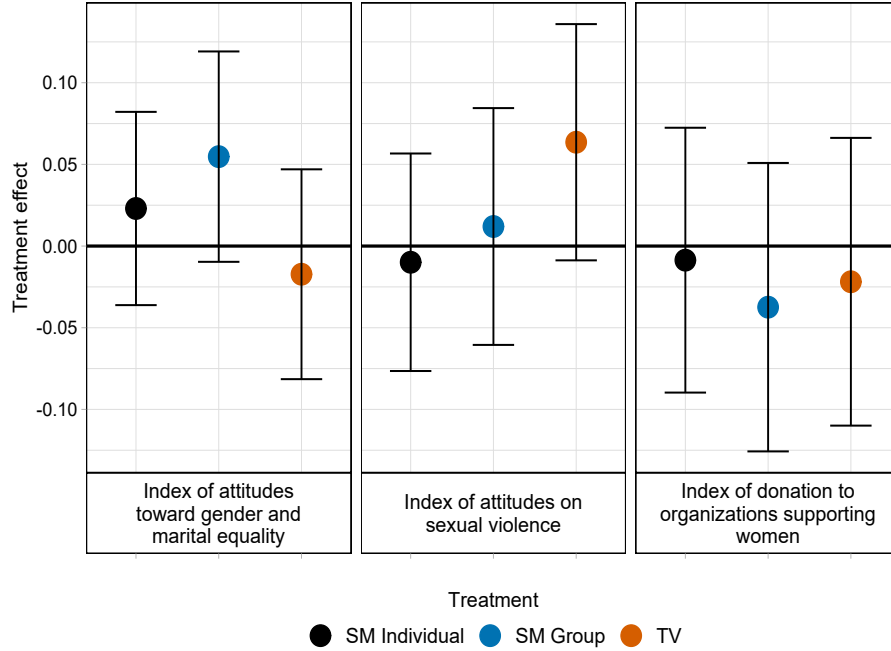
Notes: The Arab Barometer data belongs to the 2016 and 2018 waves. Additional summary statistic comparisons are in Table S32.

Fig. 2: Treatment effects on TV show consumption, Facebook and WhatsApp treatment consumption, and knowledge of resources delivered in treatment



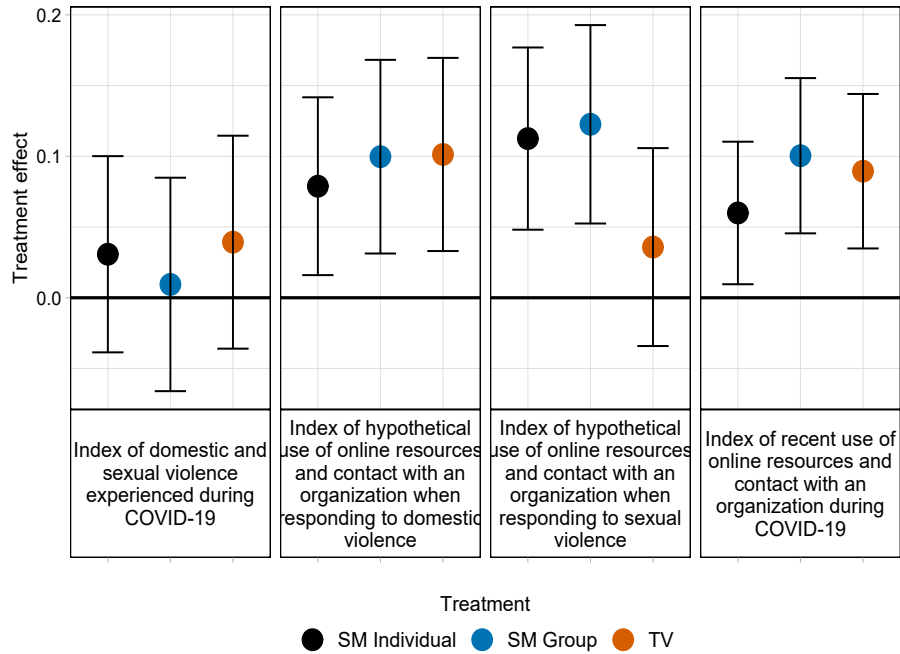
*Notes:* The estimates and 95% confidence intervals in each box are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent variables regressed on treatment indicators (SM Individual = Facebook or WhatsApp individual message, SM Group = WhatsApp group message, TV = TV show reminder), controls as in Panel A of the corresponding tables, and randomization block fixed effects. The outcomes included in the index of TV show consumption are in Table S16. The outcomes included in the index of videos of women's empowerment and support are in Table S17. The outcomes included in the index of knowledge about treatment information are in Table S18.

Fig. 3: Treatment effects on attitudes toward gender and marital equality, and sexual violence



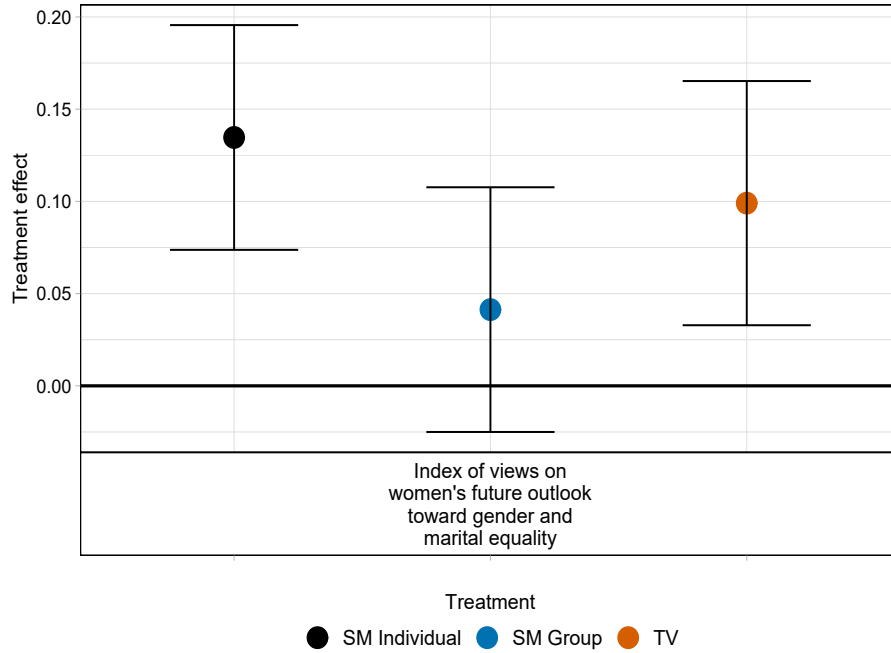
*Notes:* The estimates and 95% confidence intervals in each box are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent variables regressed on treatment indicators (SM Individual = Facebook or WhatsApp individual message, SM Group = WhatsApp group message, TV = TV show reminder), controls as in Panel A of the corresponding tables, and randomization block fixed effects. The outcomes included in the index of attitudes toward gender and marital equality are in Table S19. The outcomes included in the index of attitudes on sexual violence are in Table S20. The outcomes included in the index of donation to organizations supporting women are in Table S21.

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



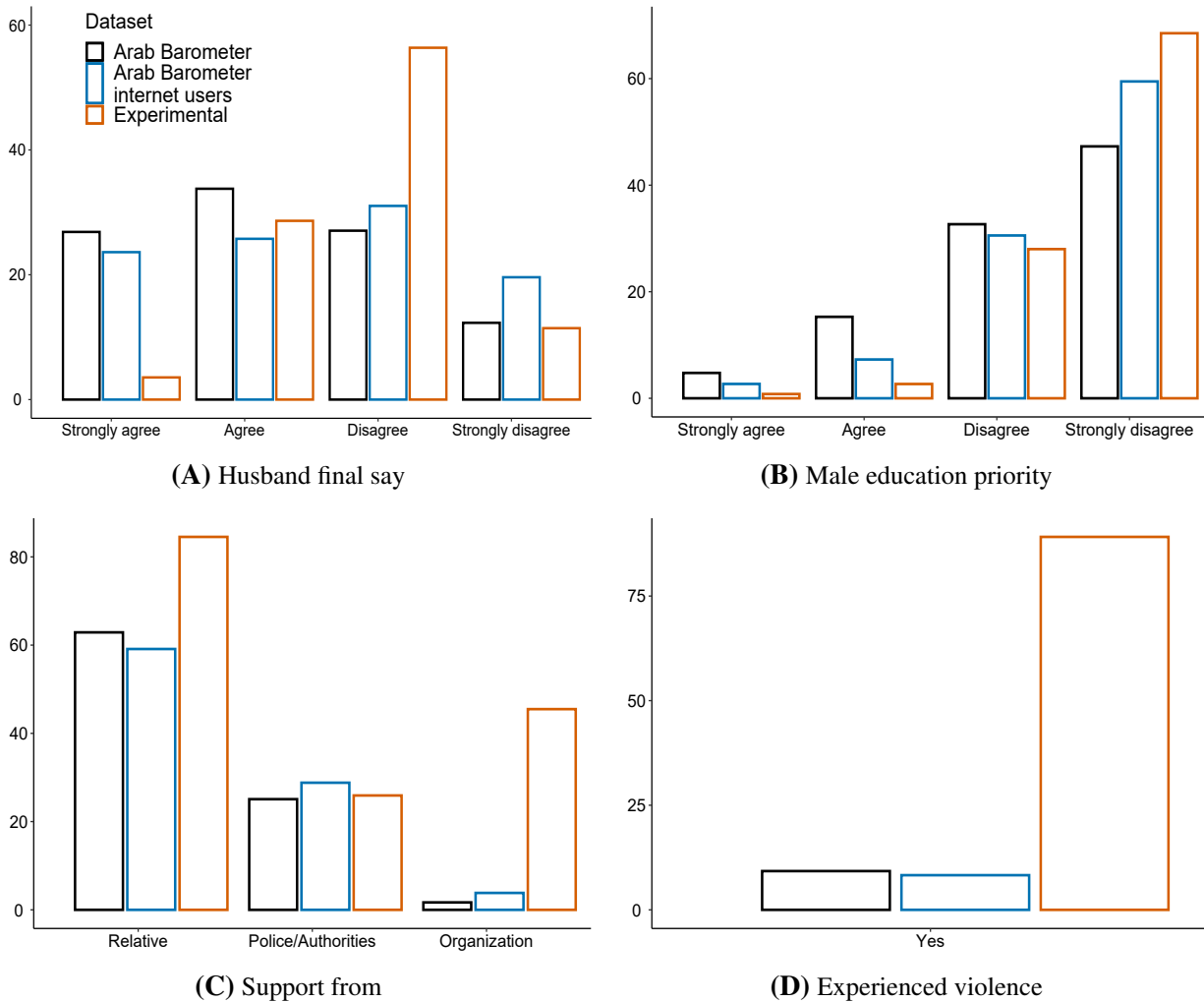
*Notes:* The estimates and 95% confidence intervals in each box are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent variables regressed on treatment indicators (SM Individual = Facebook or WhatsApp individual message, SM Group = WhatsApp group message, TV = TV show reminder), controls as in Panel A of the corresponding tables, and randomization block fixed effects. The outcomes included in the index of domestic and sexual violence experienced during COVID-19 are in Table S26. The outcomes included in the index of hypothetical use of online resources and contact with a support organization when responding to domestic violence are in Table S22. The outcomes included in the index of hypothetical use of online resources and contact with a support organization when responding to sexual violence are in Table S23. The outcomes included in the index of recent use of online resources and contact with a support organization during COVID-19 are those in Table S24.

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 (SM Individual = Facebook or WhatsApp individual message, SM Group = WhatsApp group message, TV = TV show reminder), controls as in Panel A of the corresponding tables, 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 S25.

Fig. 6: Comparison of attitudes and behavior between Arab Barometer and experimental sample respondents



*Notes:* The Arab Barometer data belongs to the 2016 and 2018 waves. Additional summary statistic comparisons are in Table S33. 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.



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# Supplementary Materials

Fig. S1: Number of treatment web pages visited per web page user across treatments

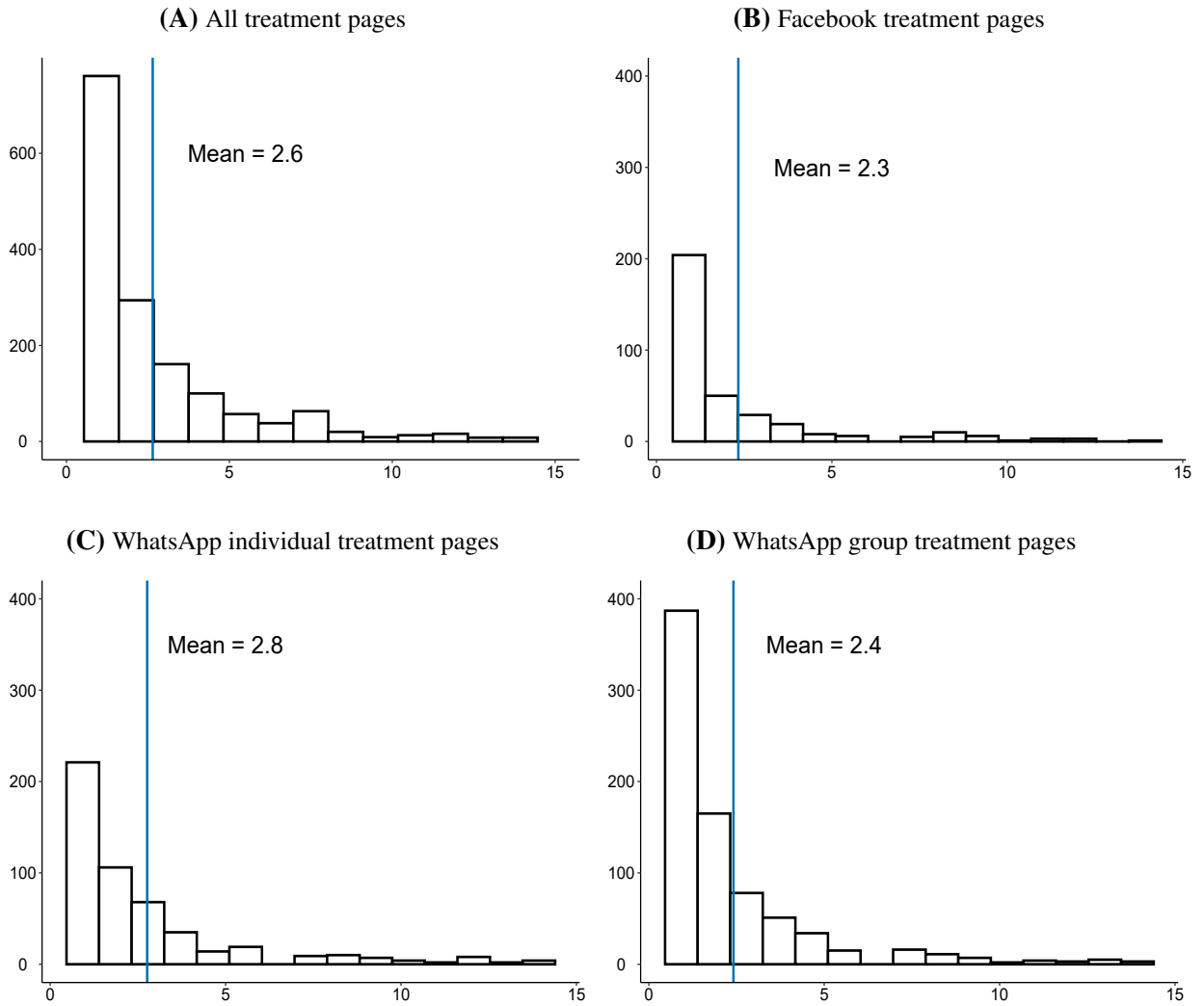


Fig. S2: Video landing web page visits for Facebook and WhatsApp Individual treatment before and after participants assigned to the Facebook treatment were shifted to the WhatsApp Individual treatment

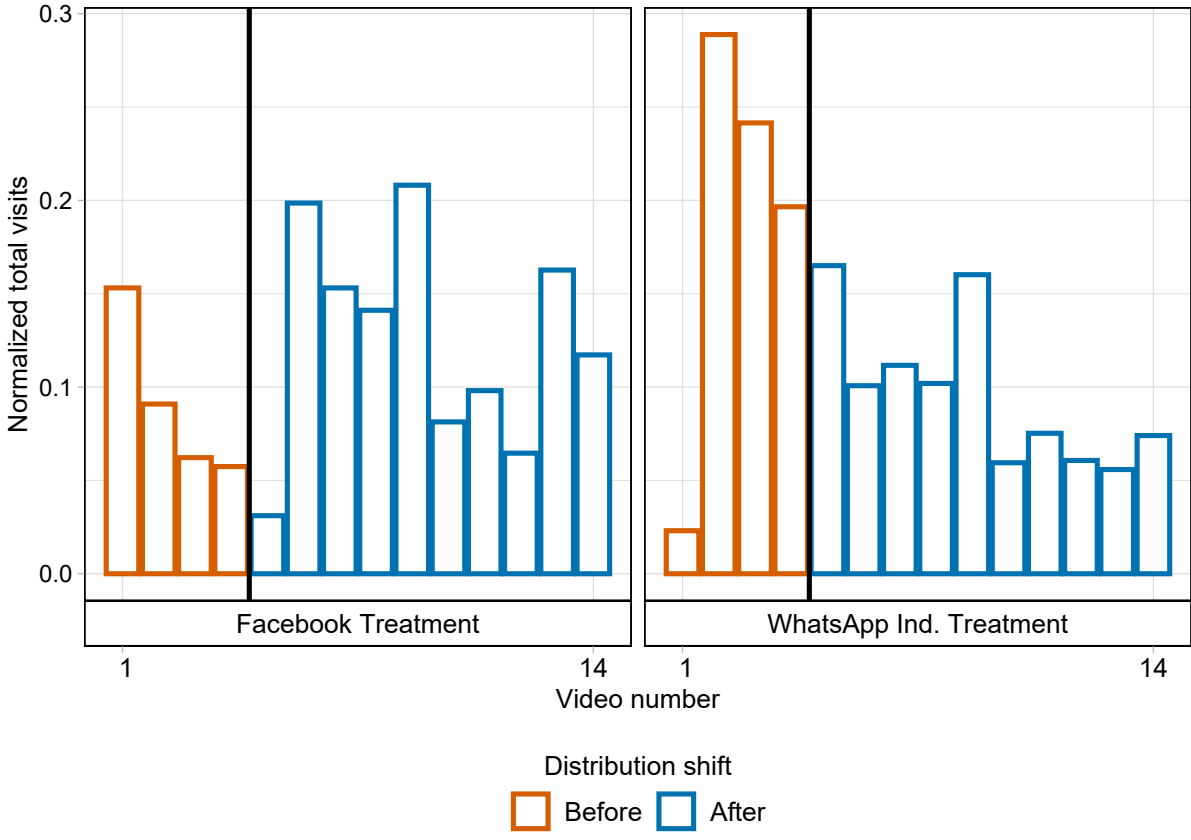
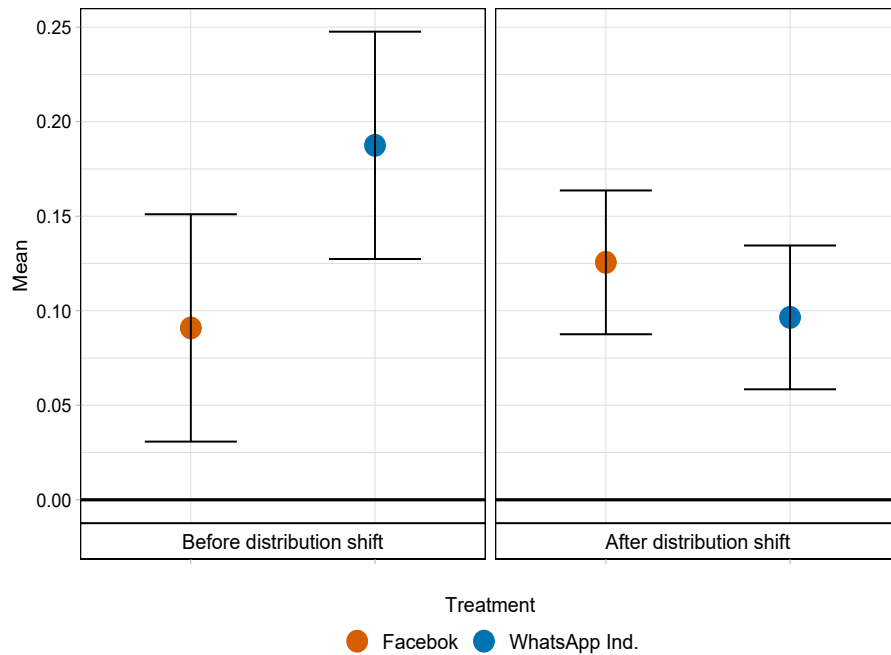
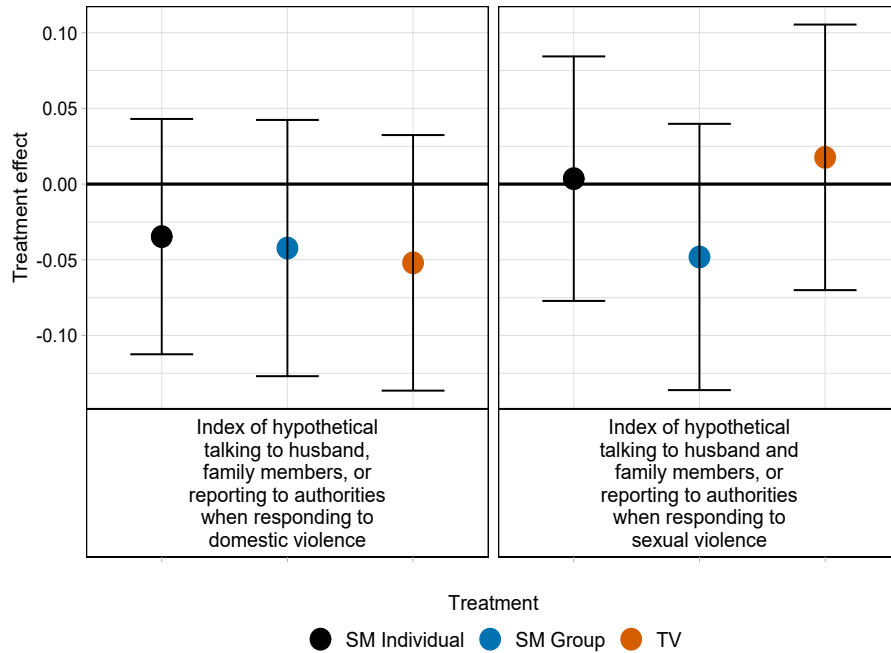


Fig. S3: Difference in difference effects of WhatsApp Individual treatment on video landing web page visits



*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 ( $p < 0.05$ ).

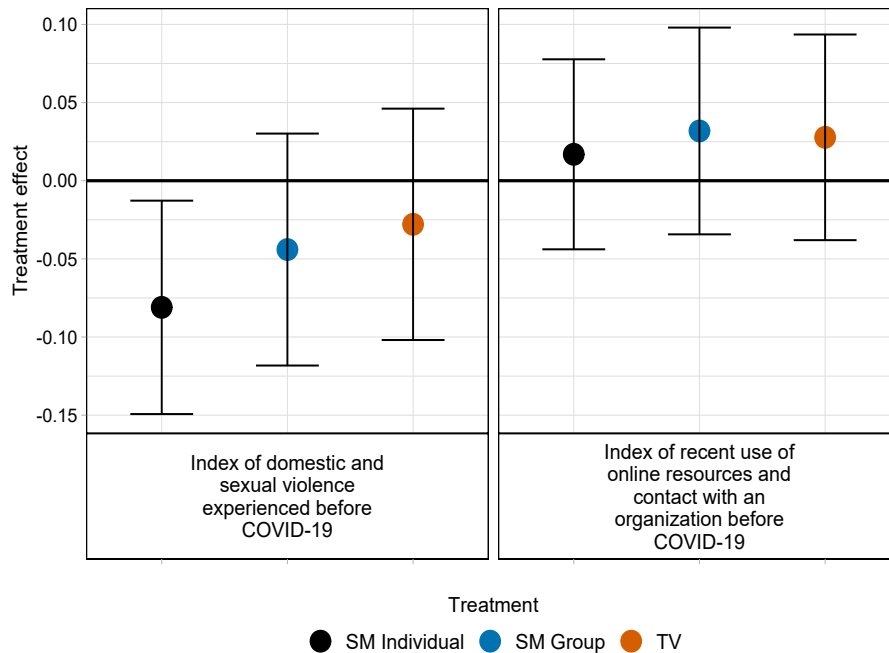
Fig. S4: Treatment effects on hypothetical talking to husband and family members, or reporting to authorities when responding to domestic and sexual violence



*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 (SM Individual = Facebook or WhatsApp individual message, SM Group = WhatsApp group message, TV = TV show reminder), controls as in Panel A of the corresponding tables, 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 S28. 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 S29.



Fig. S5: Treatment effects on violence experienced before COVID-19 and recent use of online resources or contact with a support 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 (SM Individual = Facebook or WhatsApp individual message, SM Group = WhatsApp group message, TV = TV show reminder), controls as in Panel A of the corresponding tables, and randomization block fixed effects. The outcomes included in the index of domestic and sexual violence experienced before COVID-19 are in Table S27. The outcomes included in the index of recent use of online resources and contact with a support organization before COVID-19 are in Table S30.

Fig. S6: Survey responses by Egyptian Governorate

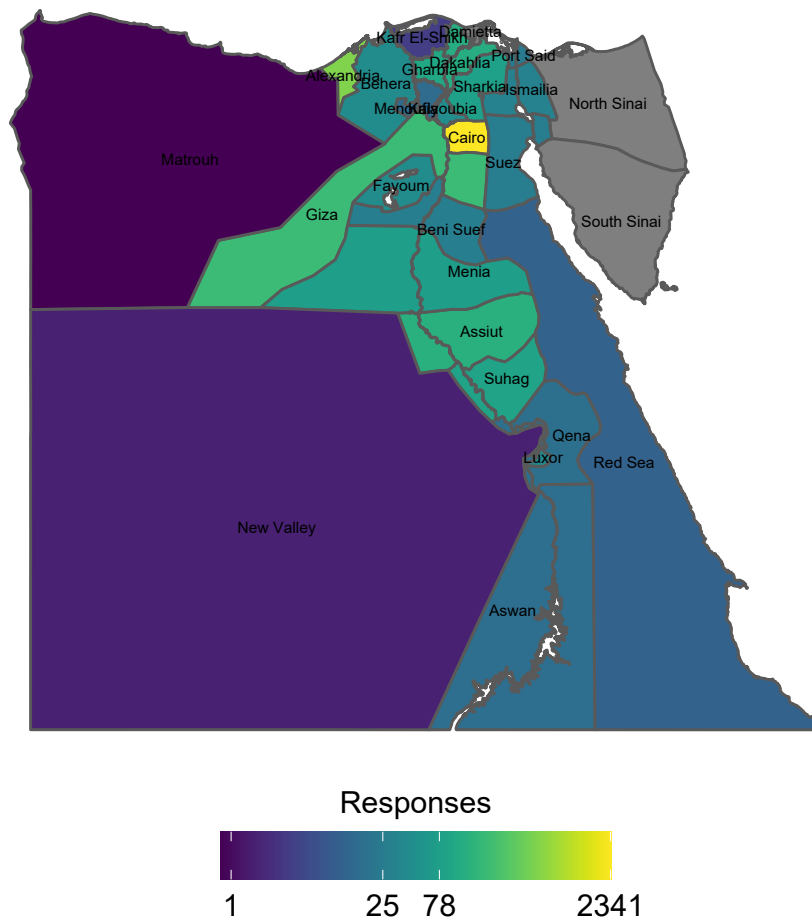


Fig. S7: Example of a treatment video whose link was disseminated to individuals assigned to the Facebook, WhatsApp Individual, and WhatsApp Group treatments

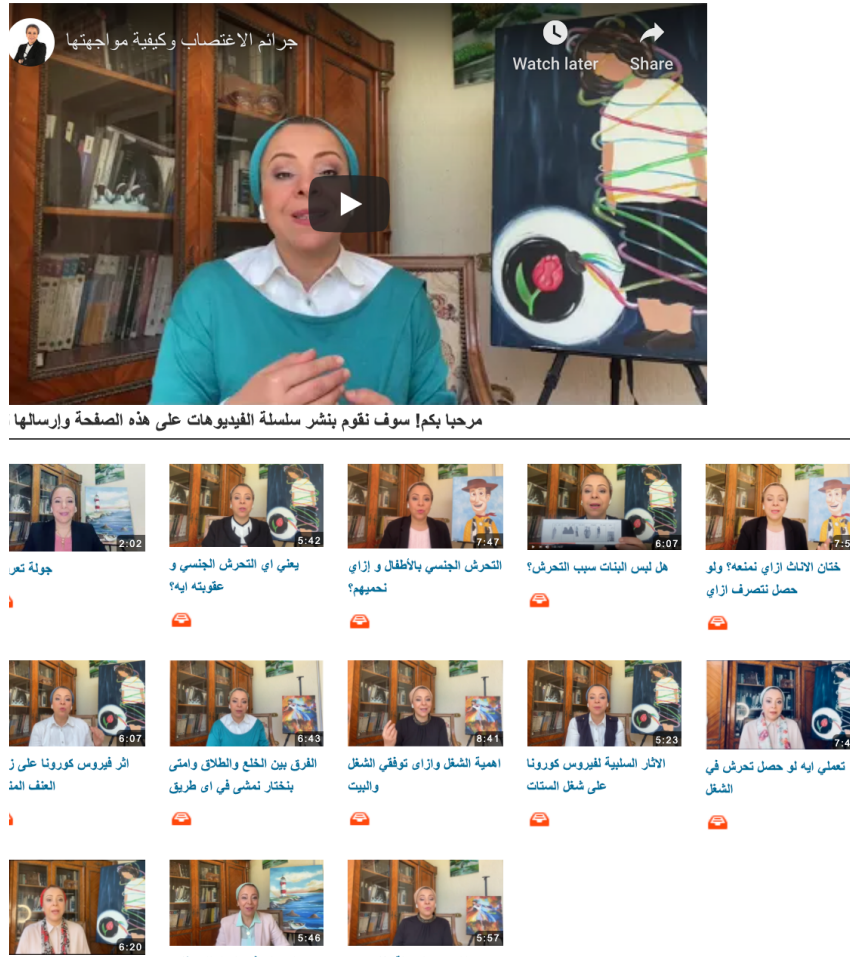
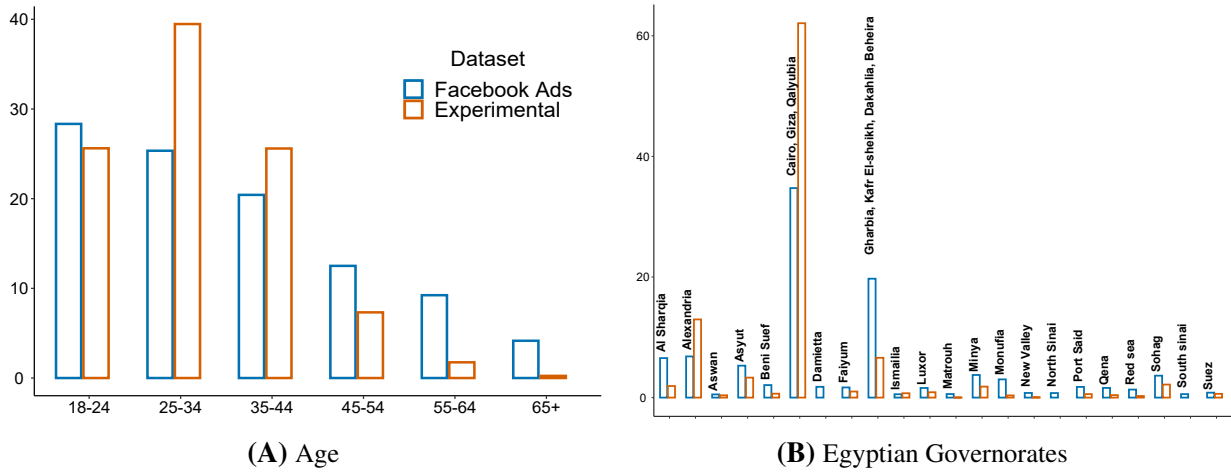
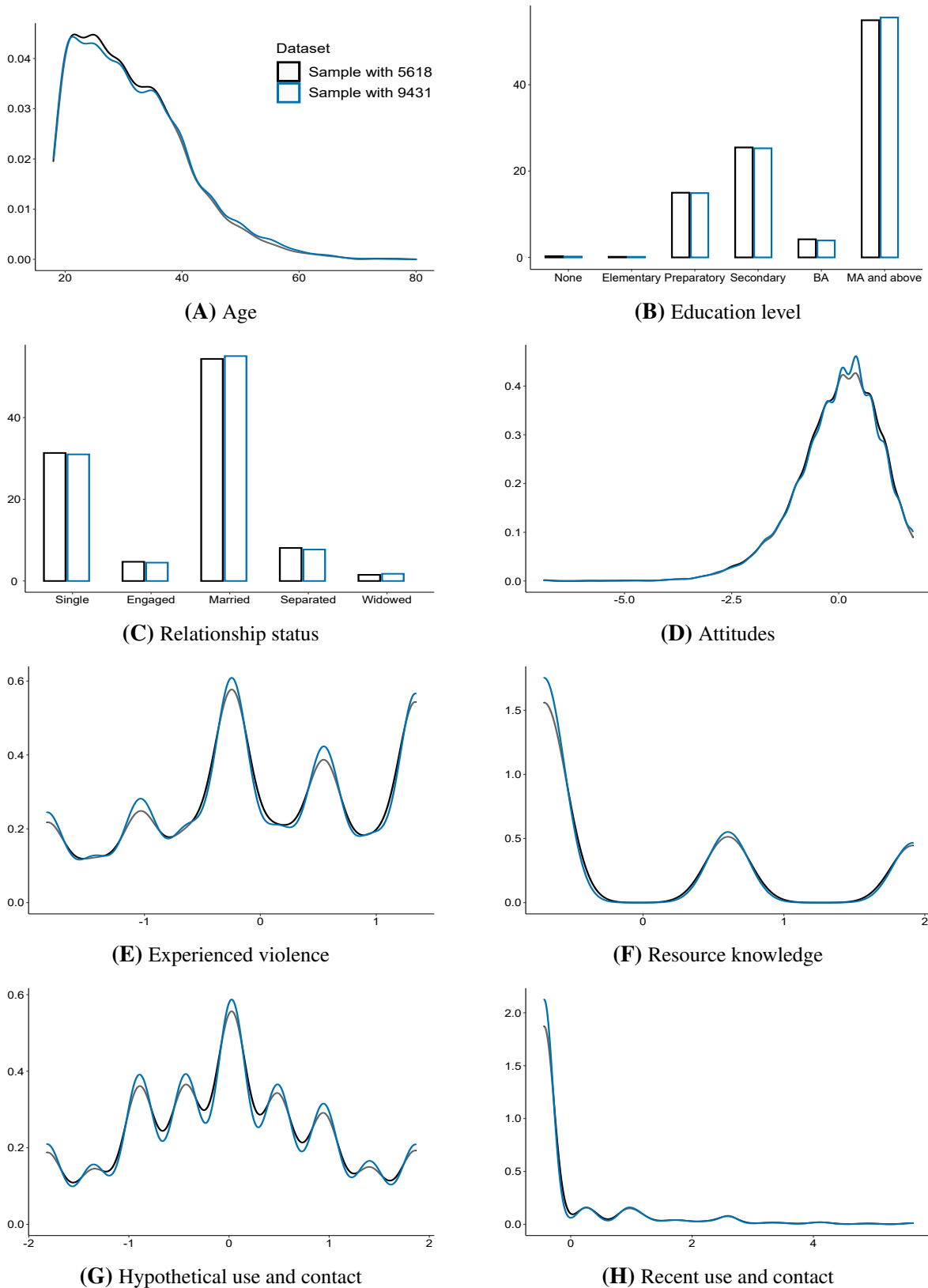


Fig. S8: Comparison of demographics between those reached by Facebook Advertisements used to recruit participants and experimental sample



Notes: The demographics of those reached by Facebook Advertisements use to recruit participants comes from the analytics that Facebook gives to advertisers.

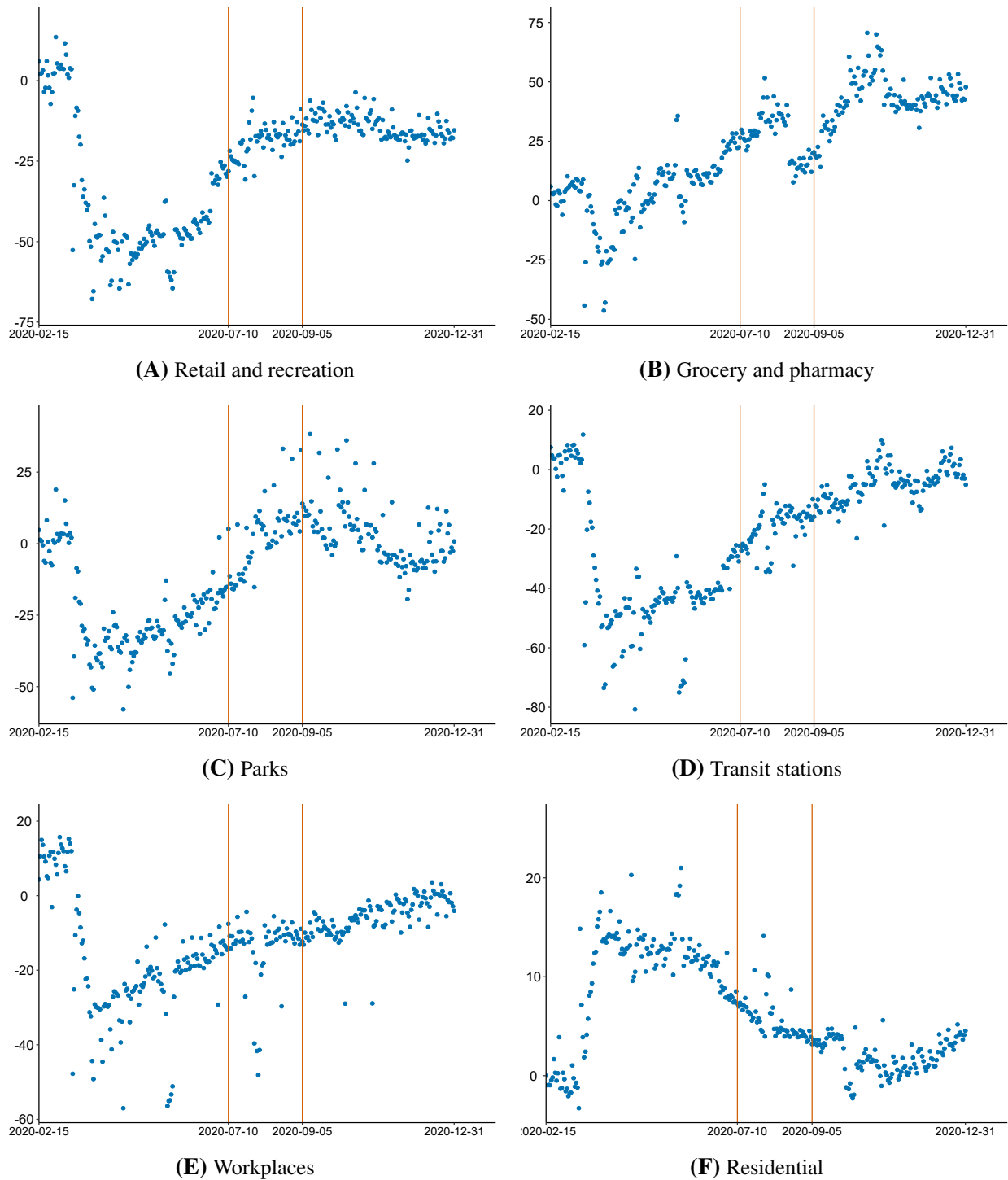
Fig. S9: Baseline covariates comparison between participants who provided valid responses and those who opted in to receive additional information and videos about women's issues in Egypt



Notes: Plots (A), (B), and (C) correspond to the main demographic variables. Plots (D) to (H) correspond to the main 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 a support organization when responding to domestic violence (Hypothetical use and contact), and recent use of online resources and contact with a support organization variables (Recent use and contact). Additional information can be found on Table S37.

# Mobility

Fig. S10: Mobility in Egypt during the intervention



Notes: We plot the daily percent change in mobility relative to the prior to the COVID-19 pandemic across different industries in Egypt during the first year of the the COVID-19 pandemic. Vertical lines demarcate the intervention, which ran from July 10, 2020, to September 05, 2020. All data comes from Google Mobility public data.

## **Content Tables and Randomization**

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

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 S2: Content of TV shows hosted on satellite channel.

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

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

*Notes:* We block randomized treatment assignment separately according to whether we could identify the Facebook account of the baseline survey respondent. Blocks are of size 10 when Facebook accounts are available, and of size 50 when only WhatsApp accounts are available.

# Balance Tables

Table S4: Balance tests

	Treatment group: Mean (s.d.)				Mean Differences (p-value)		
	Control	SM Individual	SM Group	TV	Control – SM Individual	Control – SM Group	Control – TV
	Age	31.51 (8.96)	31.36 (9.42)	31.74 (8.88)	31.59 (9.25)	0.15 (0.714)	-0.23 (0.556)
Education (BA)	0.75 (0.43)	0.73 (0.45)	0.73 (0.44)	0.74 (0.44)	0.02 (0.307)	0.02 (0.292)	0.01 (0.654)
Number of male children	0.69 (0.91)	0.63 (0.82)	0.71 (0.88)	0.66 (0.85)	0.06 (0.125)	-0.02 (0.611)	0.03 (0.504)
Number of female children	0.56 (0.84)	0.61 (0.88)	0.61 (0.82)	0.6 (0.86)	-0.05 (0.192)	-0.05 (0.17)	-0.04 (0.358)
Other family members	2.65 (3.06)	2.64 (3.08)	2.54 (3.1)	2.46 (2.92)	0.01 (0.942)	0.11 (0.414)	0.19 (0.214)
Married	0.56 (0.5)	0.54 (0.5)	0.59 (0.49)	0.58 (0.49)	0.02 (0.371)	-0.03 (0.168)	-0.02 (0.429)
Husband's Age	31.63 (10.16)	37.25 (108.78)	34.65 (69.94)	31.26 (10.82)	-5.62 (0.071)	-3.02 (0.115)	0.37 (0.492)
Husband education (BA)	10.06 (7.5)	10 (7.77)	10.18 (7.96)	10.71 (8.08)	0.06 (0.86)	-0.12 (0.721)	-0.65 (0.105)
Marriage duration with current husband	0.8 (0.4)	0.82 (0.39)	0.82 (0.38)	0.81 (0.39)	-0.02 (0.259)	-0.02 (0.245)	-0.01 (0.62)
Husband lives at home	0.82 (0.39)	0.77 (0.42)	0.75 (0.43)	0.78 (0.41)	0.05 (0.006)	0.07 (0)	0.04 (0.052)
Before COVID-19 Full time at home	0.37 (0.48)	0.35 (0.48)	0.37 (0.48)	0.35 (0.48)	0.02 (0.351)	0 (1)	0.02 (0.416)
Before COVID-19 Partially at home	0.45 (0.5)	0.46 (0.5)	0.44 (0.5)	0.45 (0.5)	-0.01 (0.655)	0.01 (0.648)	0 (1)
Before COVID-19 Husband full time at home	0.1 (0.3)	0.1 (0.3)	0.12 (0.33)	0.11 (0.32)	0 (1)	-0.02 (0.143)	-0.01 (0.53)
Before COVID-19 Husband partially at home	0.22 (0.42)	0.23 (0.42)	0.22 (0.42)	0.18 (0.38)	-0.01 (0.594)	0 (1)	0.04 (0.05)
During COVID-19 Full time at home	0.74 (0.44)	0.72 (0.45)	0.74 (0.44)	0.73 (0.45)	0.02 (0.314)	0 (1)	0.01 (0.661)
During COVID-19 Partially at home	0.19 (0.4)	0.21 (0.41)	0.19 (0.39)	0.2 (0.4)	-0.02 (0.268)	0 (1)	-0.01 (0.625)
During COVID-19 Husband full time at home	0.23 (0.42)	0.24 (0.43)	0.28 (0.45)	0.26 (0.44)	-0.01 (0.598)	-0.05 (0.008)	-0.03 (0.174)
During COVID-19 Husband partially at home	0.34 (0.48)	0.36 (0.48)	0.33 (0.47)	0.3 (0.46)	-0.02 (0.351)	0.01 (0.632)	0.04 (0.096)
COVID-19 income decline	0.76 (0.43)	0.77 (0.42)	0.77 (0.42)	0.78 (0.41)	-0.01 (0.6)	-0.01 (0.592)	-0.02 (0.351)
Watches TV morning	0.14 (0.34)	0.14 (0.35)	0.15 (0.36)	0.16 (0.36)	0 (1)	-0.01 (0.511)	-0.02 (0.266)
Watches TV afternoon	0.32 (0.47)	0.3 (0.46)	0.31 (0.46)	0.27 (0.44)	0.02 (0.337)	0.01 (0.624)	0.05 (0.032)
Watches TV evening	0.78 (0.41)	0.77 (0.42)	0.78 (0.41)	0.78 (0.41)	0.01 (0.589)	0 (1)	0 (1)
Own TV satellite	0.93 (0.25)	0.94 (0.23)	0.94 (0.23)	0.93 (0.25)	-0.01 (0.356)	-0.01 (0.347)	0 (1)
Watches Channels of TV show	0.15 (0.36)	0.16 (0.36)	0.16 (0.37)	0.15 (0.35)	-0.01 (0.534)	-0.01 (0.53)	0 (1)
Watches TV show type	0.27 (0.44)	0.31 (0.46)	0.29 (0.45)	0.27 (0.45)	-0.04 (0.046)	-0.02 (0.303)	0 (1)
Mentioned watched TV show Saturday evening	0 (0)	0 (0.05)	0 (0.05)	0.01 (0.08)	0 (1)	0 (1)	-0.01 (0.001)
Hours spent on social media	1.84 (0.89)	1.89 (0.88)	1.89 (0.89)	1.92 (0.92)	-0.05 (0.207)	-0.05 (0.2)	-0.08 (0.085)
Uses WhatsApp	0.86 (0.35)	0.87 (0.33)	0.84 (0.36)	0.86 (0.34)	-0.01 (0.513)	0.02 (0.197)	0 (1)
Uses Facebook	0.89 (0.31)	0.9 (0.3)	0.89 (0.32)	0.86 (0.35)	-0.01 (0.465)	0 (1)	0.03 (0.078)
Uses Instagram	0.2 (0.4)	0.22 (0.42)	0.2 (0.4)	0.18 (0.39)	-0.02 (0.273)	0 (1)	0.02 (0.322)
Uses Youtube	0.4 (0.49)	0.41 (0.49)	0.4 (0.49)	0.35 (0.48)	-0.01 (0.648)	0 (1)	0.05 (0.044)
Uses Twitter	0.09 (0.29)	0.1 (0.29)	0.07 (0.26)	0.06 (0.23)	-0.01 (0.441)	0.02 (0.102)	0.03 (0.024)
Uses Snapchat	0.03 (0.18)	0.05 (0.21)	0.05 (0.21)	0.04 (0.21)	-0.02 (0.02)	-0.02 (0.017)	-0.01 (0.321)
Uses Telegram	0.14 (0.35)	0.13 (0.33)	0.12 (0.33)	0.12 (0.33)	0.01 (0.513)	0.02 (0.183)	0.02 (0.249)
Watched videos on social media	2.86 (1.17)	3.01 (1.22)	2.92 (1.2)	2.93 (1.22)	-0.15 (0.005)	-0.06 (0.246)	-0.07 (0.254)
Watched videos on WhatsApp	1.71 (1.01)	1.73 (1.02)	1.74 (1.01)	1.76 (1.03)	-0.02 (0.659)	-0.03 (0.498)	-0.05 (0.339)
Husband final say	2.62 (1.02)	2.63 (1.02)	2.72 (1.02)	2.66 (1.02)	-0.01 (0.826)	-0.1 (0.025)	-0.04 (0.444)
Husband earn income	2.57 (1.07)	2.48 (1.08)	2.58 (1.06)	2.53 (1.04)	0.09 (0.061)	-0.01 (0.83)	0.04 (0.458)
Yelling justified	2.13 (0.96)	2.13 (0.97)	2.15 (0.99)	2.1 (0.96)	0 (1)	-0.02 (0.638)	0.03 (0.541)
Hitting justified	1.18 (0.48)	1.16 (0.43)	1.17 (0.45)	1.15 (0.41)	0.02 (0.331)	0.01 (0.626)	0.03 (0.186)
Male education priority	1.42 (0.77)	1.41 (0.75)	1.43 (0.72)	1.44 (0.74)	0.01 (0.769)	-0.01 (0.761)	-0.02 (0.604)
Future equal say	4.1 (0.92)	4.17 (0.87)	4.08 (0.91)	4.08 (0.92)	-0.07 (0.082)	0.02 (0.618)	0.02 (0.671)
Future equal rights	4.31 (0.8)	4.32 (0.78)	4.28 (0.79)	4.27 (0.79)	-0.01 (0.778)	0.03 (0.39)	0.04 (0.325)
Before COVID-19 heard of or experienced yelling	3.66 (1.17)	3.74 (1.13)	3.63 (1.16)	3.62 (1.16)	-0.08 (0.121)	0.03 (0.557)	0.04 (0.502)
Before COVID-19 heard of or experienced hitting	3.3 (1.29)	3.47 (1.26)	3.29 (1.28)	3.29 (1.24)	-0.17 (0.003)	0.01 (0.859)	0.01 (0.877)
During COVID-19 heard of or experienced yelling	3.48 (1.27)	3.55 (1.26)	3.43 (1.27)	3.41 (1.3)	-0.07 (0.216)	0.05 (0.369)	0.07 (0.288)
During COVID-19 heard of or experienced hitting	3.18 (1.39)	3.27 (1.37)	3.1 (1.38)	3.16 (1.37)	-0.09 (0.145)	0.08 (0.188)	0.02 (0.777)
Would talk husband	3.82 (1.18)	3.79 (1.21)	3.82 (1.18)	3.79 (1.17)	0.03 (0.574)	0 (1)	0.03 (0.618)
Would talk family	3.74 (1.12)	3.77 (1.13)	3.77 (1.1)	3.75 (1.1)	-0.03 (0.551)	-0.03 (0.538)	-0.01 (0.86)
Would report authorities	2.64 (1.33)	2.65 (1.33)	2.54 (1.3)	2.59 (1.32)	-0.01 (0.866)	0.1 (0.084)	0.05 (0.461)
Would use online resources	2.65 (1.27)	2.69 (1.28)	2.57 (1.24)	2.59 (1.23)	-0.04 (0.483)	0.08 (0.147)	0.06 (0.348)
Would contact organization	3.33 (1.27)	3.37 (1.24)	3.26 (1.24)	3.31 (1.22)	-0.04 (0.477)	0.07 (0.204)	0.02 (0.753)
Know online: other than ECWR	0.27 (0.45)	0.3 (0.46)	0.25 (0.44)	0.26 (0.44)	-0.03 (0.14)	0.02 (0.306)	0.01 (0.66)
Know online: ECWR	0.02 (0.12)	0.02 (0.14)	0.01 (0.1)	0.01 (0.12)	0 (1)	0.01 (0.043)	0.01 (0.104)
Before COVID-19 used online resources	2.4 (0.94)	2.46 (0.97)	2.4 (0.93)	2.41 (0.92)	-0.06 (0.159)	0 (1)	-0.01 (0.833)
During COVID-19 used online resources	2.27 (0.76)	2.35 (0.83)	2.3 (0.82)	2.3 (0.8)	-0.08 (0.024)	-0.03 (0.382)	-0.03 (0.454)
Know organization: other than ECWR	0.23 (0.42)	0.25 (0.43)	0.2 (0.4)	0.19 (0.39)	-0.02 (0.292)	0.03 (0.097)	0.04 (0.053)
Know organization: ECWR	0.01 (0.09)	0.01 (0.12)	0.01 (0.1)	0.01 (0.1)	0 (1)	0 (1)	0 (1)
Before COVID-19 contacted organization	2.18 (0.67)	2.2 (0.67)	2.19 (0.67)	2.21 (0.72)	-0.02 (0.504)	-0.01 (0.733)	-0.03 (0.401)
During COVID-19 contacted organization	2.18 (0.68)	2.17 (0.63)	2.16 (0.62)	2.17 (0.62)	0.01 (0.735)	0.02 (0.488)	0.01 (0.763)

Table S5: Balance on demographics variables

<b>Panel A: Respondent's outcomes</b>					
	Age	Education (BA)	Number of male children	Number of female children	Other family members
	(1)	(2)	(3)	(4)	(5)
SM Individual	0.096 (0.363)	-0.021 (0.013)	-0.028 (0.035)	0.062* (0.035)	-0.135 (0.125)
SM Group	-0.008 (0.396)	-0.012 (0.014)	-0.014 (0.038)	0.021 (0.038)	-0.050 (0.136)
TV	-0.144 (0.395)	-0.020 (0.014)	-0.058 (0.038)	0.027 (0.037)	-0.141 (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 <sup>2</sup>	0.161	0.518	0.136	0.120	0.101
<b>Panel B: Whether married and husband' outcomes</b>					
	Married	Age	Education (BA)	Marriage duration	Husband lives at home
	(1)	(2)	(3)	(4)	(5)
SM Individual	0.012 (0.017)	7.235* (4.352)	-0.035** (0.017)	-0.336 (0.431)	0.021 (0.023)
SM Group	0.005 (0.018)	2.469 (4.614)	-0.053*** (0.018)	-0.091 (0.456)	0.032 (0.024)
TV	0.002 (0.018)	-1.299 (4.660)	-0.042** (0.018)	0.427 (0.461)	0.018 (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 <sup>2</sup>	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 S6: 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				COVID-19 income decline
	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	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
SM Individual	-0.001 (0.020)	0.001 (0.021)	0.002 (0.018)	0.011 (0.024)	-0.014 (0.018)	0.005 (0.017)	0.012 (0.025)	0.029 (0.027)	0.018 (0.018)
SM Group	-0.017 (0.021)	-0.003 (0.022)	0.017 (0.019)	0.002 (0.025)	-0.013 (0.020)	-0.001 (0.018)	0.054** (0.027)	-0.026 (0.029)	0.015 (0.019)
TV	-0.035* (0.021)	0.007 (0.022)	0.007 (0.019)	-0.040 (0.025)	-0.027 (0.020)	0.015 (0.018)	0.045* (0.027)	-0.062** (0.029)	0.032* (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 <sup>2</sup>	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 S7: 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
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	SM Individual	0.010 (0.015)	-0.029 (0.019)	-0.011 (0.017)	0.009 (0.010)	0.014 (0.015)	0.039** (0.019)
SM Group	0.010 (0.016)	-0.007 (0.021)	-0.006 (0.019)	0.009 (0.011)	0.012 (0.017)	0.027 (0.021)	0.002 (0.002)
TV	0.013 (0.016)	-0.045** (0.021)	-0.004 (0.019)	-0.004 (0.011)	-0.001 (0.017)	0.009 (0.021)	0.005** (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 <sup>2</sup>	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 S8: Balance on social media habits and videos received variables

	Hours spent on social media (1)	Uses WhatsApp (2)	Uses Facebook (3)	Uses Instagram (4)	Uses YouTube (5)	Uses Twitter (6)	Uses Snapchat (7)	Uses Telegram (8)	Watched videos on social media (9)	Watched videos on WhatsApp (10)
SM Individual	0.011 (0.037)	-0.006 (0.015)	-0.006 (0.013)	0.004 (0.017)	-0.024 (0.020)	-0.013 (0.011)	0.011 (0.009)	-0.027* (0.014)	0.028 (0.049)	-0.021 (0.041)
SM Group	0.082** (0.040)	-0.001 (0.016)	0.005 (0.015)	0.024 (0.018)	0.021 (0.022)	-0.009 (0.012)	0.020** (0.009)	-0.004 (0.015)	0.133** (0.053)	0.069 (0.045)
TV	0.116*** (0.040)	0.016 (0.016)	-0.026* (0.015)	0.003 (0.018)	-0.032 (0.022)	-0.024* (0.012)	0.016* (0.009)	-0.005 (0.015)	0.139*** (0.053)	0.096** (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 <sup>2</sup>	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 S9: Balance on attitudes toward gender and marital equality

	Husband final say (1)	Husband earn income (2)	Yelling justified (3)	Hitting justified (4)	Male education priority (5)	Future equal say (6)	Future equal rights (7)
SM Individual	0.035 (0.043)	-0.035 (0.044)	0.037 (0.040)	0.015 (0.019)	0.010 (0.031)	0.067* (0.038)	0.004 (0.033)
SM Group	0.084* (0.046)	-0.020 (0.048)	0.003 (0.043)	-0.015 (0.021)	0.005 (0.034)	-0.019 (0.042)	-0.024 (0.036)
TV	0.026 (0.046)	-0.057 (0.048)	-0.047 (0.043)	-0.037* (0.020)	0.014 (0.034)	-0.016 (0.042)	-0.035 (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 <sup>2</sup>	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 S10: 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)
SM Individual	0.011 (0.048)	0.117** (0.052)	-0.012 (0.053)	0.039 (0.057)
SM Group	0.023 (0.053)	0.045 (0.057)	-0.001 (0.058)	-0.021 (0.062)
TV	0.010 (0.052)	0.046 (0.057)	-0.021 (0.058)	0.030 (0.062)
Control Mean	3.659	3.3	3.479	3.176
Observations	4,165	4,165	4,165	4,165
R <sup>2</sup>	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 S11: 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

	Would talk husband	Would Talk family	Would report authorities	Would use online resources	Would contact organization
	(1)	(2)	(3)	(4)	(5)
SM Individual	0.017 (0.050)	0.037 (0.047)	-0.064 (0.055)	-0.036 (0.051)	-0.070 (0.050)
SM Group	-0.050 (0.054)	0.030 (0.051)	-0.022 (0.060)	-0.028 (0.055)	-0.022 (0.055)
TV	-0.084 (0.054)	0.011 (0.051)	0.024 (0.060)	0.001 (0.055)	0.032 (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 <sup>2</sup>	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 S12: 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)
SM Individual	0.003 (0.013)	-0.0001 (0.005)	-0.013 (0.032)	0.037 (0.027)	-0.018 (0.013)	0.002 (0.004)	-0.002 (0.024)	-0.039* (0.023)
SM Group	0.001 (0.015)	-0.005 (0.005)	0.045 (0.035)	0.058* (0.030)	-0.020 (0.014)	0.002 (0.005)	0.033 (0.026)	-0.003 (0.025)
TV	0.011 (0.015)	-0.0004 (0.005)	0.055 (0.035)	0.059** (0.030)	-0.030** (0.014)	0.002 (0.005)	0.056** (0.026)	0.002 (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 <sup>2</sup>	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 S13: 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
<b>Total</b>	<b>200</b>	

Table S14: Unique Ips, users, visits, and average visit time by treatment assignment

Treatment assignment	Assigned	Unique IPs	Unique users	Total visits	Average 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
<b>Total</b>	<b>3695</b>	<b>3446</b>	<b>1635</b>	<b>7090</b>	<b>4:01</b>

*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 S3 as it includes assignments to individuals who responded twice to the endline survey, and thus were excluded from the study.

Table S15: 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
<b>Total</b>	<b>3471</b>	<b>0:04:22</b>	<b>3270</b>	<b>0:02:59</b>

*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 S16: Treatment effect on TV show consumption

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO													
	Index of (1,1,1,1,1,1, 1,1,1,1,1,1) (1)	Watched TV evening (2)	Watched channels of TV show (3)	Watched TV show type (4)	Mentioned watched TV show Saturday evening (5)	Watched TV show (6)	Heard of TV show (7)	Heard of TV show via WhatsApp (8)	Received TV show WhatsApp reminder (9)	Whether watched TV show episodes (10)	Number of TV show episodes watched (11)	Accurate content of the TV show (12)	Accurate TV show topic liked (13)
SM Individual	0.148*** (0.037)	0.004 (0.014)	0.012 (0.016)	0.051*** (0.019)	0.004 (0.009)	0.034** (0.020)	0.029* (0.020)	0.052*** (0.011)	0.107*** (0.015)	0.033* (0.020)	0.093*** (0.039)	0.035** (0.017)	0.040** (0.017)
SM Group	0.182*** (0.041)	0.010 (0.016)	0.023* (0.018)	0.060*** (0.021)	-0.0001 (0.010)	0.060*** (0.022)	0.050** (0.021)	0.049*** (0.012)	0.134*** (0.016)	0.056*** (0.022)	0.095** (0.043)	0.035** (0.018)	0.043** (0.019)
TV	0.862*** (0.041)	0.038*** (0.016)	0.187*** (0.018)	0.127*** (0.021)	0.124*** (0.010)	0.248*** (0.021)	0.251*** (0.021)	0.186*** (0.012)	0.685*** (0.016)	0.241*** (0.022)	0.445*** (0.042)	0.107*** (0.018)	0.132*** (0.019)
SM Individual = SM Group (p-value)	0.4027	0.6986	0.5397	0.6656	0.7001	0.242	0.3368	0.8514	0.0896	0.2861	0.9496	0.9811	0.8872
SM Individual = TV (p-value)	0	0.031	0	3e-04	0	0	0	0	0	0	0	1e-04	0
SM Group= TV (p-value)	0	0.0841	0	0.002	0	0	0	0	0	0	0	1e-04	0
Num. Lasso covariates	6	3	3	6	5	6	5	0	5	5	7	6	6
R <sup>2</sup>	0.277	0.181	0.224	0.178	0.130	0.172	0.157	0.110	0.385	0.150	0.152	0.132	0.148
Panel B: Controlling by the dependent variable at baseline (if available)													
SM Individual	0.154*** (0.038)	0.006 (0.014)	0.016 (0.017)	0.051*** (0.020)	0.006 (0.009)	0.044** (0.021)	0.037** (0.020)	0.052*** (0.011)	0.110*** (0.015)	0.040** (0.021)	0.109*** (0.040)	0.042*** (0.017)	0.047*** (0.018)
SM Group	0.182*** (0.042)	0.011 (0.016)	0.025* (0.018)	0.060*** (0.021)	0.001 (0.010)	0.067*** (0.022)	0.056*** (0.022)	0.050*** (0.012)	0.136*** (0.016)	0.062*** (0.022)	0.108*** (0.044)	0.040** (0.019)	0.049*** (0.019)
TV	0.856*** (0.041)	0.037*** (0.016)	0.188*** (0.018)	0.126*** (0.021)	0.124*** (0.010)	0.250*** (0.022)	0.251*** (0.022)	0.186*** (0.012)	0.686*** (0.016)	0.242*** (0.022)	0.448*** (0.044)	0.108*** (0.019)	0.134*** (0.019)
SM Individual = SM Group (p-value)	0.4998	0.7287	0.5887	0.6773	0.6514	0.2978	0.3906	0.8375	0.0972	0.3412	0.9831	0.9169	0.942
SM Individual = TV (p-value)	0	0.0439	0	4e-04	0	0	0	0	0	0	0	4e-04	0
SM Group= TV (p-value)	0	0.1034	0	0.0025	0	0	0	0	0	0	0	4e-04	0
R <sup>2</sup>	0.241	0.173	0.213	0.166	0.113	0.099	0.095	0.109	0.374	0.090	0.091	0.083	0.090
Panel C: No covariates													
SM Individual	0.171*** (0.040)	0.002 (0.015)	0.022 (0.018)	0.064*** (0.021)	0.006 (0.009)	0.044** (0.021)	0.037** (0.020)	0.052*** (0.011)	0.110*** (0.015)	0.040** (0.021)	0.109*** (0.040)	0.042*** (0.017)	0.047*** (0.018)
SM Group	0.201*** (0.044)	0.009 (0.017)	0.031* (0.019)	0.069*** (0.022)	0.003 (0.010)	0.067*** (0.022)	0.056*** (0.022)	0.050*** (0.012)	0.136*** (0.016)	0.062*** (0.022)	0.108*** (0.044)	0.040** (0.019)	0.049*** (0.019)
TV	0.866*** (0.044)	0.036** (0.017)	0.187*** (0.019)	0.129*** (0.022)	0.127*** (0.010)	0.250*** (0.022)	0.251*** (0.022)	0.186*** (0.012)	0.686*** (0.016)	0.242*** (0.022)	0.448*** (0.044)	0.108*** (0.019)	0.134*** (0.019)
Control Mean	-0.271	0.828	0.19	0.356	0.019	0.387	0.499	0.007	0.035	0.365	0.615	0.17	0.19
SM Individual = SM Group (p-value)	0.501	0.6776	0.6389	0.8194	0.7132	0.2978	0.3906	0.8375	0.0972	0.3412	0.9831	0.9169	0.942
SM Individual = TV (p-value)	0	0.0428	0	0.0034	0	0	0	0	0	0	0	4e-04	0
SM Group= TV (p-value)	0	0.1161	0	0.0085	0	0	0	0	0	0	0	4e-04	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
R <sup>2</sup>	0.163	0.062	0.081	0.083	0.102	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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.

Table S17: Treatment effect on videos of women's empowerment and support consumption

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>								
	Index of (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)
SM Individual	1.026*** (0.038)	0.287*** (0.051)	1.125*** (0.051)	0.490*** (0.016)	0.419*** (0.019)	0.830*** (0.042)	0.267*** (0.018)	0.319*** (0.018)
SM Group	0.935*** (0.041)	0.176*** (0.055)	1.076*** (0.055)	0.513*** (0.018)	0.425*** (0.021)	0.668*** (0.046)	0.215*** (0.019)	0.255*** (0.020)
TV	0.471*** (0.041)	0.149*** (0.055)	0.554*** (0.055)	0.276*** (0.018)	0.229*** (0.021)	0.332*** (0.046)	0.078*** (0.019)	0.103*** (0.020)
SM Individual = SM Group (p-value)	0.0265	0.0441	0.3734	0.1968	0.7677	5e-04	0.0066	0.0017
SM Individual = TV (p-value)	0	0.0122	0	0	0	0	0	0
SM Group= TV (p-value)	0	0.6319	0	0	0	0	0	0
Num. Lasso covariates	4	4	2	2	3	4	3	4
R <sup>2</sup>	0.277	0.157	0.217	0.277	0.212	0.187	0.149	0.151
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>								
SM Individual	1.027*** (0.038)	0.282*** (0.051)	1.131*** (0.051)	0.490*** (0.017)	0.419*** (0.019)	0.831*** (0.043)	0.269*** (0.018)	0.320*** (0.019)
SM Group	0.936*** (0.041)	0.178*** (0.055)	1.089*** (0.056)	0.517*** (0.018)	0.433*** (0.021)	0.685*** (0.047)	0.219*** (0.019)	0.260*** (0.020)
TV	0.470*** (0.041)	0.153*** (0.055)	0.566*** (0.056)	0.279*** (0.018)	0.237*** (0.021)	0.349*** (0.047)	0.081*** (0.019)	0.107*** (0.020)
SM Individual = SM Group (p-value)	0.0264	0.0589	0.4455	0.1309	0.5152	0.0018	0.0098	0.0033
SM Individual = TV (p-value)	0	0.0195	0	0	0	0	0	0
SM Group= TV (p-value)	0	0.665	0	0	0	0	0	0
R <sup>2</sup>	0.273	0.148	0.208	0.270	0.191	0.168	0.134	0.136
<b>Panel C: No covariates</b>								
SM Individual	1.028*** (0.038)	0.290*** (0.052)	1.128*** (0.052)	0.490*** (0.017)	0.419*** (0.019)	0.831*** (0.043)	0.269*** (0.018)	0.320*** (0.019)
SM Group	0.955*** (0.042)	0.212*** (0.057)	1.100*** (0.056)	0.517*** (0.018)	0.433*** (0.021)	0.685*** (0.047)	0.219*** (0.019)	0.260*** (0.020)
TV	0.493*** (0.042)	0.190*** (0.057)	0.581*** (0.056)	0.279*** (0.018)	0.237*** (0.021)	0.349*** (0.047)	0.081*** (0.019)	0.107*** (0.020)
Control Mean	-0.703	2.794	2.114	0.409	0.302	0.527	0.116	0.133
SM Individual = SM Group (p-value)	0.0842	0.1758	0.6179	0.1309	0.5152	0.0018	0.0098	0.0033
SM Individual = TV (p-value)	0	0.0787	0	0	0	0	0	0
SM Group= TV (p-value)	0	0.6955	0	0	0	0	0	0
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R <sup>2</sup>	0.247	0.095	0.194	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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes  $p < 0.1$ , \*\* denotes  $p < 0.05$ , and \*\*\* denotes  $p < 0.01$ .

Table S18: Treatment effect on knowledge about treatment information

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>					
	Index of (1,1,1,1) (1)	Know online: other than ECWR (2)	Know online: ECWR (3)	Know organization: other than ECWR (4)	Know organization: ECWR (5)
SM Individual	0.225*** (0.037)	0.057*** (0.018)	0.045*** (0.010)	0.066*** (0.017)	0.046*** (0.011)
SM Group	0.299*** (0.040)	0.084*** (0.020)	0.069*** (0.011)	0.070*** (0.019)	0.057*** (0.012)
TV	0.122*** (0.040)	0.037** (0.019)	0.042*** (0.011)	-0.007 (0.019)	0.029*** (0.012)
SM Individual = SM Group (p-value)	0.0623	0.1588	0.0352	0.8451	0.3312
SM Individual = TV (p-value)	0.0102	0.3169	0.7923	1e-04	0.1493
SM Group= TV (p-value)	0	0.0184	0.0204	1e-04	0.0183
Num. Lasso covariates	9	8	5	9	7
R <sup>2</sup>	0.234	0.247	0.094	0.233	0.078
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>					
SM Individual	0.222*** (0.037)	0.054*** (0.018)	0.045*** (0.010)	0.067*** (0.018)	0.047*** (0.011)
SM Group	0.299*** (0.041)	0.081*** (0.020)	0.069*** (0.011)	0.071*** (0.019)	0.058*** (0.012)
TV	0.119*** (0.041)	0.031* (0.020)	0.042*** (0.011)	-0.006 (0.019)	0.030*** (0.012)
SM Individual = SM Group (p-value)	0.0607	0.1608	0.0355	0.8608	0.3228
SM Individual = TV (p-value)	0.0113	0.2573	0.8255	2e-04	0.1555
SM Group= TV (p-value)	0	0.0132	0.023	1e-04	0.0186
R <sup>2</sup>	0.200	0.225	0.090	0.203	0.070
<b>Panel C: No covariates</b>					
SM Individual	0.221*** (0.038)	0.055*** (0.019)	0.045*** (0.010)	0.061*** (0.018)	0.047*** (0.011)
SM Group	0.293*** (0.042)	0.082*** (0.021)	0.068*** (0.011)	0.063*** (0.020)	0.059*** (0.012)
TV	0.116*** (0.042)	0.035** (0.020)	0.042*** (0.011)	-0.017 (0.020)	0.030*** (0.012)
Control Mean	-0.193	0.304	0.032	0.272	0.038
SM Individual = SM Group (p-value)	0.0838	0.1897	0.044	0.8829	0.3235
SM Individual = TV (p-value)	0.0119	0.3493	0.8219	1e-04	0.1542
SM Group= TV (p-value)	0	0.028	0.0284	1e-04	0.0184
Observations	4,165	4,165	4,165	4,165	4,165
R <sup>2</sup>	0.160	0.161	0.081	0.146	0.069

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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes  $p < 0.1$ , \*\* denotes  $p < 0.05$ , and \*\*\* denotes  $p < 0.01$ .

Table S19: Treatment effects on attitudes towards gender and marital equality

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>									
	Index of (-1,-1,-1,1, -1,-1,-1,1) (1)	Husband final say (2)	Husband earn income (3)	Yelling justified (4)	Gain independence by working outside the household (5)	Circumcision important for women marriage (6)	Female circumcision health benefits (7)	Marriage permitted under age 18 with family consent (8)	Khul: Women can divorce husband without a reason (9)
SM Individual	0.023 (0.036)	0.009 (0.035)	-0.009 (0.036)	-0.018 (0.035)	0.009 (0.035)	-0.078 (0.037)	0.019 (0.016)	0.011 (0.016)	0.016 (0.020)
SM Group	0.055* (0.039)	-0.021 (0.038)	-0.027 (0.040)	-0.025 (0.039)	0.030 (0.039)	-0.015 (0.040)	0.010 (0.017)	-0.012 (0.017)	0.016 (0.022)
TV	-0.017 (0.039)	-0.029 (0.038)	0.032 (0.040)	-0.013 (0.039)	0.013 (0.038)	-0.010 (0.040)	0.012 (0.017)	0.001 (0.017)	-0.030 (0.022)
SM Individual = SM Group (p-value)	0.4185	0.4355	0.6437	0.8457	0.5914	0.1196	0.6135	0.1776	0.9792
SM Individual = TV (p-value)	0.304	0.316	0.3002	0.8988	0.9145	0.0939	0.6807	0.567	0.0359
SM Group= TV (p-value)	0.0724	0.8285	0.1428	0.7529	0.6738	0.9092	0.9265	0.4468	0.0429
Num. Lasso covariates	3	9	5	7	5	9	7	8	6
R <sup>2</sup>	0.308	0.303	0.343	0.314	0.148	0.123	0.102	0.076	0.095
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>									
SM Individual	0.030 (0.036)	0.001 (0.035)	-0.007 (0.037)	-0.015 (0.036)	0.020 (0.037)	-0.071 (0.038)	0.018 (0.016)	0.011 (0.016)	0.016 (0.020)
SM Group	0.052* (0.040)	-0.024 (0.039)	-0.018 (0.040)	-0.017 (0.039)	0.027 (0.040)	-0.012 (0.042)	0.009 (0.018)	-0.011 (0.017)	0.015 (0.022)
TV	-0.024 (0.039)	-0.034 (0.038)	0.038 (0.040)	-0.008 (0.039)	0.018 (0.040)	-0.019 (0.042)	0.012 (0.017)	0.003 (0.017)	-0.031 (0.022)
SM Individual = SM Group (p-value)	0.573	0.5139	0.7982	0.955	0.8676	0.1563	0.6135	0.1938	0.9763
SM Individual = TV (p-value)	0.1766	0.3603	0.26	0.847	0.9515	0.2086	0.7745	0.6157	0.0357
SM Group= TV (p-value)	0.0614	0.7994	0.177	0.8075	0.8238	0.8729	0.8299	0.434	0.0432
R <sup>2</sup>	0.292	0.283	0.329	0.295	0.062	0.050	0.061	0.061	0.062
<b>Panel C: No covariates</b>									
SM Individual	0.020 (0.042)	0.018 (0.041)	-0.026 (0.043)	0.004 (0.041)	0.020 (0.037)	-0.071 (0.038)	0.018 (0.016)	0.011 (0.016)	0.016 (0.020)
SM Group	0.036 (0.046)	0.016 (0.044)	-0.028 (0.047)	-0.016 (0.045)	0.027 (0.040)	-0.012 (0.042)	0.009 (0.018)	-0.011 (0.017)	0.015 (0.022)
TV	-0.005 (0.045)	-0.022 (0.044)	0.008 (0.047)	-0.031 (0.045)	0.018 (0.040)	-0.019 (0.042)	0.012 (0.017)	0.003 (0.017)	-0.031 (0.022)
Control Mean	-0.016	2.511	2.596	2.26	3.913	1.609	0.814	0.821	0.384
SM Individual = SM Group (p-value)	0.7317	0.9621	0.9592	0.6668	0.8676	0.1563	0.6135	0.1938	0.9763
SM Individual = TV (p-value)	0.577	0.3724	0.4736	0.4355	0.9515	0.2086	0.7745	0.6157	0.0357
SM Group= TV (p-value)	0.3787	0.4097	0.4533	0.7339	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 <sup>2</sup>	0.062	0.055	0.069	0.075	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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.

Table S20: Treatment effect on attitudes on sexual violence

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>									
	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)
SM Individual	-0.010 (0.040)	-0.024 (0.044)	0.010 (0.012)	-0.027 (0.028)	0.062 (0.050)	-0.043 (0.027)	0.008 (0.031)	-0.054 (0.035)	0.018 (0.030)
SM Group	0.012 (0.044)	-0.029 (0.047)	0.005 (0.013)	-0.033 (0.031)	0.040 (0.054)	0.025 (0.029)	0.014 (0.033)	-0.012 (0.038)	0.047* (0.032)
TV	0.064* (0.044)	0.010 (0.047)	0.011 (0.013)	0.031 (0.031)	0.009 (0.054)	0.028 (0.029)	0.049* (0.033)	-0.053 (0.038)	-0.003 (0.032)
SM Individual = SM Group (p-value)	0.6203	0.9266	0.6662	0.8544	0.6797	0.0203	0.8542	0.2705	0.3755
SM Individual = TV (p-value)	0.0957	0.4697	0.953	0.0629	0.3285	0.0159	0.2103	0.9728	0.5078
SM Group= TV (p-value)	0.2525	0.4256	0.6313	0.0457	0.5815	0.9337	0.2959	0.2956	0.1296
Num. Lasso covariates	8	4	2	6	9	8	9	9	6
R <sup>2</sup>	0.134	0.070	0.062	0.080	0.138	0.081	0.080	0.111	0.092
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>									
SM Individual	-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)
SM 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	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)
SM Individual = SM Group (p-value)	0.5684	0.9322	0.631	0.8501	0.6291	0.0232	0.876	0.3395	0.3589
SM Individual = TV (p-value)	0.0481	0.3459	0.9956	0.0556	0.1714	0.0108	0.1815	0.7343	0.6303
SM Group= TV (p-value)	0.1702	0.4025	0.642	0.04	0.3882	0.7904	0.2494	0.2053	0.1712
R <sup>2</sup>	0.061	0.063	0.054	0.059	0.064	0.049	0.058	0.057	0.073
<b>Panel C: No covariates</b>									
SM Individual	-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)
SM 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	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	-0.015	3.615	0.903	4.57	2.105	4.64	4.464	1.631	4.529
SM Individual = SM Group (p-value)	0.5684	0.9322	0.631	0.8501	0.6291	0.0232	0.876	0.3395	0.3589
SM Individual = TV (p-value)	0.0481	0.3459	0.9956	0.0556	0.1714	0.0108	0.1815	0.7343	0.6303
SM Group= 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 <sup>2</sup>	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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.

Table S21: Treatment effect on donation to organizations supporting women

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>			
	Index of (1,1) (1)	Donation in EGP (2)	Donating more than 0 EGP (3)
SM Individual	-0.009 (0.041)	-0.124 (0.319)	-0.0004 (0.018)
SM Group	-0.037 (0.045)	-0.461 (0.348)	-0.006 (0.019)
TV	-0.022 (0.045)	-0.293 (0.347)	-0.002 (0.019)
SM Individual = SM Group (p-value)	0.5237	0.3323	0.7873
SM Individual = TV (p-value)	0.7691	0.6249	0.9273
SM Group= TV (p-value)	0.7357	0.6371	0.8611
Num. Lasso covariates	2	1	2
R <sup>2</sup>	0.090	0.097	0.080
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>			
SM Individual	-0.009 (0.042)	-0.121 (0.323)	-0.0004 (0.018)
SM Group	-0.038 (0.045)	-0.468 (0.352)	-0.006 (0.019)
TV	-0.025 (0.045)	-0.315 (0.351)	-0.003 (0.019)
SM Individual = SM Group (p-value)	0.5158	0.326	0.7789
SM Individual = TV (p-value)	0.7166	0.5812	0.8777
SM Group= TV (p-value)	0.7782	0.6724	0.9009
R <sup>2</sup>	0.075	0.077	0.071
<b>Panel C: No covariates</b>			
SM Individual	-0.009 (0.042)	-0.121 (0.323)	-0.0004 (0.018)
SM Group	-0.038 (0.045)	-0.468 (0.352)	-0.006 (0.019)
TV	-0.025 (0.045)	-0.315 (0.351)	-0.003 (0.019)
Control Mean	0.01	4.023	0.232
SM Individual = SM Group (p-value)	0.5158	0.326	0.7789
SM Individual = TV (p-value)	0.7166	0.5812	0.8777
SM Group= TV (p-value)	0.7782	0.6724	0.9009
Observations	4,165	4,165	4,165
R <sup>2</sup>	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. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes  $p < 0.1$ , \*\* denotes  $p < 0.05$ , and \*\*\* denotes  $p < 0.01$ .



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

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>			
	Index of (1,1) (1)	Would use online resources (2)	Would contact organization (3)
SM Individual	0.079** (0.038)	0.107** (0.050)	0.062* (0.045)
SM Group	0.100*** (0.042)	0.115** (0.054)	0.096** (0.049)
TV	0.101*** (0.041)	0.150*** (0.054)	0.069* (0.048)
SM Individual = SM Group (p-value)	0.6166	0.875	0.4873
SM Individual = TV (p-value)	0.5896	0.4226	0.8967
SM Group= TV (p-value)	0.9706	0.529	0.5801
Num. Lasso covariates	5	7	6
R <sup>2</sup>	0.236	0.195	0.212
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>			
SM Individual	0.075** (0.038)	0.096** (0.050)	0.057 (0.045)
SM Group	0.097*** (0.042)	0.111** (0.055)	0.092** (0.049)
TV	0.101*** (0.042)	0.153*** (0.055)	0.066* (0.049)
SM Individual = SM Group (p-value)	0.5886	0.7833	0.4874
SM Individual = TV (p-value)	0.5237	0.3005	0.8587
SM Group= TV (p-value)	0.9258	0.4582	0.6128
R <sup>2</sup>	0.229	0.179	0.198
<b>Panel C: No covariates</b>			
SM Individual	0.054* (0.042)	0.084* (0.053)	0.033 (0.048)
SM Group	0.088** (0.046)	0.102** (0.058)	0.084* (0.053)
TV	0.108*** (0.045)	0.153*** (0.058)	0.078* (0.052)
Control Mean	-0.058	3.06	3.607
SM Individual = SM Group (p-value)	0.4622	0.7563	0.3337
SM Individual = TV (p-value)	0.2384	0.2285	0.3961
SM Group= TV (p-value)	0.6662	0.3832	0.9062
Observations	4,165	4,165	4,165
R <sup>2</sup>	0.080	0.075	0.074

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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes  $p < 0.1$ , \*\* denotes  $p < 0.05$ , and \*\*\* denotes  $p < 0.01$ .

Table S23: Treatment effect on hypothetical use of online resources and contact with an organization when responding to sexual violence

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>			
	Index of (1,1) (1)	Would use online resources (2)	Would contact organization (3)
SM Individual	0.113*** (0.039)	0.128*** (0.047)	0.101*** (0.043)
SM Group	0.123*** (0.043)	0.160*** (0.051)	0.092** (0.047)
TV	0.036 (0.043)	0.107** (0.051)	-0.027 (0.047)
SM Individual = SM Group (p-value)	0.8129	0.5348	0.855
SM Individual = TV (p-value)	0.0721	0.6878	0.0065
SM Group= TV (p-value)	0.0468	0.3173	0.0131
Num. Lasso covariates	3	5	5
R <sup>2</sup>	0.197	0.182	0.176
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>			
SM Individual	0.092** (0.042)	0.109** (0.050)	0.077** (0.046)
SM Group	0.113*** (0.046)	0.150*** (0.055)	0.082** (0.050)
TV	0.041 (0.046)	0.110** (0.055)	-0.020 (0.049)
SM Individual = SM Group (p-value)	0.6436	0.4616	0.9299
SM Individual = TV (p-value)	0.2676	0.9885	0.0488
SM Group= TV (p-value)	0.1247	0.4797	0.0444
R <sup>2</sup>	0.073	0.072	0.072
<b>Panel C: No covariates</b>			
SM Individual	0.092** (0.042)	0.109** (0.050)	0.077** (0.046)
SM Group	0.113*** (0.046)	0.150*** (0.055)	0.082** (0.050)
TV	0.041 (0.046)	0.110** (0.055)	-0.020 (0.049)
Control Mean	-0.07	3.322	3.802
SM Individual = SM Group (p-value)	0.6436	0.4616	0.9299
SM Individual = TV (p-value)	0.2676	0.9885	0.0488
SM Group= TV (p-value)	0.1247	0.4797	0.0444
Observations	4,165	4,165	4,165
R <sup>2</sup>	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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.

Table S24: Treatment effect on recent use of online resources and contact with an organization during COVID-19

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>			
	Index of (1,1) (1)	Used online resources (2)	Contacted organization (3)
SM Individual	0.060** (0.031)	0.076*** (0.029)	0.015 (0.023)
SM Group	0.100*** (0.033)	0.060** (0.032)	0.069*** (0.025)
TV	0.089*** (0.033)	0.085*** (0.032)	0.041* (0.025)
SM Individual = SM Group (p-value)	0.2241	0.6056	0.0292
SM Individual = TV (p-value)	0.3754	0.7761	0.2953
SM Group= TV (p-value)	0.748	0.4335	0.2676
Num. Lasso covariates	7	10	8
R <sup>2</sup>	0.467	0.519	0.271
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>			
SM Individual	0.059** (0.031)	0.069*** (0.029)	0.021 (0.023)
SM Group	0.102*** (0.033)	0.057** (0.032)	0.076*** (0.025)
TV	0.094*** (0.033)	0.087*** (0.032)	0.049** (0.025)
SM Individual = SM Group (p-value)	0.2021	0.7237	0.0266
SM Individual = TV (p-value)	0.2961	0.5701	0.2631
SM Group= TV (p-value)	0.8213	0.3679	0.283
R <sup>2</sup>	0.462	0.510	0.260
<b>Panel C: No covariates</b>			
SM Individual	0.055** (0.032)	0.074*** (0.030)	0.013 (0.023)
SM Group	0.107*** (0.034)	0.066** (0.032)	0.075*** (0.025)
TV	0.103*** (0.034)	0.097*** (0.032)	0.049** (0.025)
Control Mean	-0.147	1.355	1.118
SM Individual = SM Group (p-value)	0.1241	0.8081	0.015
SM Individual = TV (p-value)	0.1574	0.4919	0.1528
SM Group= TV (p-value)	0.9033	0.3636	0.3265
Observations	4,165	4,165	4,165
R <sup>2</sup>	0.432	0.497	0.238

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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.

Table S25: Treatment effect on views on women’s future outlook toward gender and marital equality

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>			
	Index of (1,1) (1)	Used online resources (2)	Contacted organization (3)
SM Individual	0.135*** (0.037)	0.100*** (0.032)	0.096*** (0.030)
SM Group	0.041 (0.040)	0.053* (0.035)	0.008 (0.033)
TV	0.099*** (0.040)	0.095*** (0.035)	0.051* (0.033)
SM Individual = SM Group (p-value)	0.021	0.1873	0.0078
SM Individual = TV (p-value)	0.3777	0.8799	0.1715
SM Group= TV (p-value)	0.1619	0.2527	0.2045
Num. Lasso covariates	10	9	7
R <sup>2</sup>	0.283	0.262	0.230
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>			
SM Individual	0.131*** (0.037)	0.092*** (0.033)	0.102*** (0.030)
SM Group	0.038 (0.040)	0.046 (0.036)	0.009 (0.033)
TV	0.100*** (0.040)	0.089*** (0.036)	0.054* (0.033)
SM Individual = SM Group (p-value)	0.0219	0.2005	0.0045
SM Individual = TV (p-value)	0.4371	0.945	0.1386
SM Group= TV (p-value)	0.1372	0.2353	0.1812
R <sup>2</sup>	0.276	0.228	0.218
<b>Panel C: No covariates</b>			
SM Individual	0.153*** (0.042)	0.119*** (0.036)	0.104*** (0.033)
SM Group	0.024 (0.046)	0.038 (0.040)	-0.001 (0.036)
TV	0.083** (0.046)	0.083** (0.039)	0.040 (0.036)
Control Mean	-0.076	4.064	4.244
SM Individual = SM Group (p-value)	0.0053	0.0426	0.0036
SM Individual = TV (p-value)	0.1289	0.3685	0.0737
SM Group= TV (p-value)	0.2112	0.268	0.2685
Observations	4,165	4,165	4,165
R <sup>2</sup>	0.061	0.061	0.061

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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.

Table S26: Treatment effect on domestic and sexual violence experienced during COVID-19

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>				
	Index of (1,1,1) (1)	Heard of or experienced yelling (2)	Heard of or experienced hitting (3)	Heard of or experienced sexual abuse (4)
SM Individual	0.031 (0.035)	0.049 (0.048)	0.056 (0.050)	0.004 (0.054)
SM Group	0.009 (0.038)	0.016 (0.052)	0.015 (0.055)	-0.002 (0.059)
TV	0.039 (0.038)	0.043 (0.052)	0.071 (0.054)	0.025 (0.059)
SM Individual = SM Group (p-value)	0.5803	0.5216	0.4567	0.9223
SM Individual = TV (p-value)	0.8249	0.9068	0.7889	0.7264
SM Group= TV (p-value)	0.4483	0.6078	0.3216	0.6618
Num. Lasso covariates	7	3	6	5
R <sup>2</sup>	0.340	0.294	0.318	0.289
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>				
SM Individual	0.044 (0.036)	0.067 (0.049)	0.068 (0.051)	0.026 (0.059)
SM Group	0.015 (0.039)	0.019 (0.053)	0.027 (0.055)	-0.002 (0.065)
TV	0.047 (0.039)	0.056 (0.053)	0.072 (0.055)	0.039 (0.064)
SM Individual = SM Group (p-value)	0.4624	0.3732	0.4634	0.6675
SM Individual = TV (p-value)	0.9348	0.8385	0.9427	0.8383
SM Group= TV (p-value)	0.4236	0.5012	0.4303	0.5353
R <sup>2</sup>	0.317	0.264	0.295	0.142
<b>Panel C: No covariates</b>				
SM Individual	0.050 (0.041)	0.063 (0.053)	0.089 (0.057)	0.026 (0.059)
SM Group	0.009 (0.044)	0.019 (0.058)	0.017 (0.062)	-0.002 (0.065)
TV	0.045 (0.044)	0.048 (0.058)	0.081 (0.062)	0.039 (0.064)
Control Mean	-0.014	3.459	3.111	2.719
SM Individual = SM Group (p-value)	0.3474	0.4482	0.2429	0.6675
SM Individual = TV (p-value)	0.8986	0.7881	0.898	0.8383
SM Group= TV (p-value)	0.4259	0.6312	0.3082	0.5353
Observations	4,165	4,165	4,165	4,165
R <sup>2</sup>	0.129	0.131	0.128	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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes  $p < 0.1$ , \*\* denotes  $p < 0.05$ , and \*\*\* denotes  $p < 0.01$ .

Table S27: Treatment effects on domestic and sexual violence experienced before COVID-19

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>				
	Index of (1,1,1) (1)	Heard of or experienced yelling (2)	Heard of or experienced hitting (3)	Heard of or experienced sexual abuse (4)
SM Individual	-0.081** (0.035)	-0.157*** (0.045)	-0.082* (0.048)	-0.034 (0.054)
SM Group	-0.044 (0.038)	-0.074 (0.049)	-0.071 (0.053)	-0.002 (0.058)
TV	-0.028 (0.038)	-0.042 (0.049)	-0.036 (0.052)	-0.015 (0.058)
SM Individual = SM Group (p-value)	0.3298	0.0933	0.8305	0.5878
SM Individual = TV (p-value)	0.1606	0.0198	0.3806	0.752
SM Group= TV (p-value)	0.677	0.5266	0.5176	0.8243
Num. Lasso covariates	7	3	6	6
R <sup>2</sup>	0.366	0.322	0.326	0.273
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>				
SM Individual	-0.085** (0.036)	-0.142*** (0.046)	-0.100** (0.049)	-0.012 (0.058)
SM Group	-0.051 (0.039)	-0.073 (0.050)	-0.082 (0.053)	0.001 (0.063)
TV	-0.028 (0.039)	-0.039 (0.050)	-0.040 (0.053)	-0.003 (0.063)
SM Individual = SM Group (p-value)	0.3871	0.1737	0.7278	0.8443
SM Individual = TV (p-value)	0.1463	0.0404	0.2545	0.8859
SM Group= TV (p-value)	0.5669	0.5029	0.4397	0.9584
R <sup>2</sup>	0.337	0.290	0.303	0.141
<b>Panel C: No covariates</b>				
SM Individual	-0.057 (0.040)	-0.134*** (0.051)	-0.044 (0.055)	-0.012 (0.058)
SM Group	-0.036 (0.044)	-0.062 (0.055)	-0.060 (0.060)	0.001 (0.063)
TV	-0.015 (0.044)	-0.032 (0.055)	-0.018 (0.059)	-0.003 (0.063)
Control Mean	0.049	3.619	3.242	2.758
SM Individual = SM Group (p-value)	0.6436	0.1922	0.7934	0.8443
SM Individual = TV (p-value)	0.3476	0.0657	0.6593	0.8859
SM Group= TV (p-value)	0.6423	0.6027	0.4919	0.9584
Observations	4,165	4,165	4,165	4,165
R <sup>2</sup>	0.139	0.135	0.133	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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes  $p < 0.1$ , \*\* denotes  $p < 0.05$ , and \*\*\* denotes  $p < 0.01$ .

Table S28: Treatment effect of hypothetical talking to husband and family members, or reporting to authorities when responding to domestic violence

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>				
	Index of (1,1,1) (1)	Would talk husband (2)	Would talk family (3)	Would report authorities (4)
SM Individual	-0.035 (0.040)	-0.026 (0.042)	-0.033 (0.041)	-0.008 (0.048)
SM Group	-0.042 (0.043)	-0.071 (0.046)	-0.049 (0.044)	0.045 (0.052)
TV	-0.052 (0.043)	-0.086* (0.046)	-0.062 (0.044)	0.057 (0.052)
SM Individual = SM Group (p-value)	0.8612	0.3214	0.7076	0.3095
SM Individual = TV (p-value)	0.6881	0.1842	0.5101	0.2126
SM Group= TV (p-value)	0.8251	0.744	0.7822	0.8234
Num. Lasso covariates	1	4	7	6
R <sup>2</sup>	0.168	0.291	0.180	0.291
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>				
SM Individual	-0.032 (0.040)	-0.016 (0.042)	-0.030 (0.041)	-0.012 (0.048)
SM Group	-0.042 (0.043)	-0.065 (0.046)	-0.050 (0.044)	0.051 (0.053)
TV	-0.054 (0.043)	-0.086* (0.046)	-0.066 (0.044)	0.068 (0.052)
SM Individual = SM Group (p-value)	0.824	0.2904	0.6557	0.2325
SM Individual = TV (p-value)	0.6206	0.1296	0.4112	0.1265
SM Group= TV (p-value)	0.7905	0.6561	0.7144	0.7464
R <sup>2</sup>	0.166	0.276	0.174	0.272
<b>Panel C: No covariates</b>				
SM Individual	-0.032 (0.042)	-0.008 (0.048)	-0.018 (0.043)	-0.042 (0.055)
SM Group	-0.048 (0.046)	-0.088* (0.052)	-0.040 (0.047)	0.040 (0.059)
TV	-0.062 (0.046)	-0.124** (0.052)	-0.063 (0.047)	0.079 (0.059)
Control Mean	0.032	3.954	3.919	2.828
SM Individual = SM Group (p-value)	0.7321	0.1291	0.6443	0.1686
SM Individual = TV (p-value)	0.5194	0.0265	0.3451	0.0422
SM Group= TV (p-value)	0.7688	0.4958	0.6383	0.5247
Observations	4,165	4,165	4,165	4,165
R <sup>2</sup>	0.053	0.065	0.064	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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes  $p < 0.1$ , \*\* denotes  $p < 0.05$ , and \*\*\* denotes  $p < 0.01$ .

Table S29: Treatment effect of hypothetical talking to husband and family members, or reporting to authorities when responding to sexual violence

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>			
	Index of (1,1) (1)	Would talk family (2)	Would report authorities (3)
SM Individual	0.004 (0.041)	0.054 (0.042)	-0.054 (0.048)
SM Group	-0.048 (0.045)	-0.011 (0.045)	-0.073 (0.052)
TV	0.018 (0.045)	0.034 (0.045)	-0.008 (0.052)
SM Individual = SM Group (p-value)	0.2499	0.1511	0.7183
SM Individual = TV (p-value)	0.7536	0.6628	0.3739
SM Group= TV (p-value)	0.1518	0.3273	0.2219
Num. Lasso covariates	4	2	6
R <sup>2</sup>	0.111	0.123	0.120
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>			
SM Individual	0.0002 (0.042)	0.061 (0.043)	-0.069 (0.049)
SM Group	-0.050 (0.046)	-0.010 (0.046)	-0.076 (0.053)
TV	0.019 (0.046)	0.028 (0.046)	0.002 (0.053)
SM Individual = SM Group (p-value)	0.2791	0.1263	0.895
SM Individual = TV (p-value)	0.684	0.4763	0.1843
SM Group= TV (p-value)	0.1451	0.4228	0.154
R <sup>2</sup>	0.065	0.075	0.059
<b>Panel C: No covariates</b>			
SM Individual	0.0002 (0.042)	0.061 (0.043)	-0.069 (0.049)
SM Group	-0.050 (0.046)	-0.010 (0.046)	-0.076 (0.053)
TV	0.019 (0.046)	0.028 (0.046)	0.002 (0.053)
Control Mean	0.004	4.061	3.999
SM Individual = SM Group (p-value)	0.2791	0.1263	0.895
SM Individual = TV (p-value)	0.684	0.4763	0.1843
SM Group= TV (p-value)	0.1451	0.4228	0.154
Observations	4,165	4,165	4,165
R <sup>2</sup>	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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.



Table S30: Treatment effects on recent use of online resources and contact with an organization when responding to domestic and sexual violence before COVID-19

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>			
	Index of (1,1) (1)	Used online resources (2)	Contacted organization (3)
SM Individual	0.017 (0.031)	0.036 (0.027)	-0.006 (0.022)
SM Group	0.032 (0.034)	0.017 (0.030)	0.023 (0.024)
TV	0.028 (0.034)	0.025 (0.030)	0.013 (0.024)
SM Individual = SM Group (p-value)	0.6573	0.5232	0.2372
SM Individual = TV (p-value)	0.7471	0.6963	0.449
SM Group= TV (p-value)	0.906	0.8077	0.6784
Num. Lasso covariates	8	11	7
R <sup>2</sup>	0.468	0.498	0.295
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>			
SM Individual	0.010 (0.031)	0.035 (0.028)	-0.012 (0.022)
SM Group	0.025 (0.034)	0.016 (0.030)	0.020 (0.024)
TV	0.024 (0.034)	0.027 (0.030)	0.011 (0.024)
SM Individual = SM Group (p-value)	0.6531	0.528	0.175
SM Individual = TV (p-value)	0.676	0.8101	0.3251
SM Group= TV (p-value)	0.9755	0.7017	0.7165
R <sup>2</sup>	0.459	0.489	0.280
<b>Panel C: No covariates</b>			
SM Individual	0.005 (0.032)	0.031 (0.028)	-0.014 (0.023)
SM Group	0.036 (0.035)	0.022 (0.031)	0.025 (0.025)
TV	0.043 (0.035)	0.036 (0.030)	0.021 (0.025)
Control Mean	-0.09	1.342	1.138
SM Individual = SM Group (p-value)	0.3732	0.7507	0.1142
SM Individual = TV (p-value)	0.2684	0.8848	0.1567
SM Group= TV (p-value)	0.8326	0.6511	0.8733
Observations	4,165	4,165	4,165
R <sup>2</sup>	0.424	0.471	0.255

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 use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.

Table S31: 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 a support organization
	Hypothetical behavior around sexual violence	Would recommend using online resources, contacting a support 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 S32: 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 13.930 1826	30.238 10.440 792	31.598 9.137 4165	2016, 2018
Education	3.352 1.768 1861	4.701 1.225 801	5.344 1.179 4165	2016, 2018
Whether single	0.176 0.381 1861	0.341 0.475 801	0.290 0.454 4165	2016, 2018
Whether engaged	0.053 0.225 1861	0.114 0.318 801	0.044 0.205 4165	2016, 2018
Whether married	0.606 0.489 1861	0.479 0.500 801	0.570 0.495 4165	2016, 2018
Whether separated	0.047 0.211 1861	0.047 0.213 801	0.081 0.272 4165	2016, 2018
Whether widowed	0.118 0.322 1861	0.019 0.137 801	0.016 0.124 4165	2016, 2018
Relationship status	3.911 3.049 1861	2.992 1.565 801	3.253 1.556 4165	2016, 2018
Number of children	1.090 1.376 1861	0.916 1.235 801	1.274 1.327 4165	2016, 2018
Facebook	0.372 0.484 1861	0.877 0.328 801	0.884 0.321 4165	2016, 2018
WhatsApp	0.303 0.460 1200	0.648 0.478 598	0.857 0.351 4165	2018
YouTube	0.220 0.415 1200	0.471 0.500 598	0.387 0.487 4165	2018
Instagram	0.117 0.321 1861	0.276 0.447 801	0.199 0.399 4165	2016, 2018
Twitter	0.111 0.315 1861	0.262 0.440 801	0.080 0.272 4165	2016, 2018
Snapchat	0.040 0.195 1200	0.085 0.279 598	0.043 0.203 4165	2018
Hours spent on social media	1.747 0.942 1200	2.595 0.737 598	2.879 0.896 4165	2018

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

Table S33: 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 S34: Heterogeneous effects in main outcomes by main baseline indexes

	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)
SM Individual	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)
SM 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	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 SM Individual	-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 SM Group	-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 SM Individual	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 SM Group	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 (0.043)	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 SM Individual	-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 SM Group	-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 knowledge 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 SM Individual	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 SM Group	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 SM Individual	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 SM Group	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 <sup>2</sup>	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 S16 to Table S26. The main baseline indexes are 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). \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.

Table S35: Heterogeneous effects on main outcomes by comparable variables with the Arab Barometer sample

	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)
SM Individual	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)
SM 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	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 SM Individual	0.029 (0.046)	0.018 (0.047)	-0.036 (0.046)	-0.034 (0.045)	-0.028 (0.045)	-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 SM Group	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 SM Individual	-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 SM Group	-0.006 (0.042)	-0.011 (0.042)	0.088** (0.041)	-0.040 (0.040)	-0.098** (0.053)	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 SM Individual	-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 SM Group	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 SM Individual	-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 SM Group	-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 SM Individual	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 SM Group	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 SM Individual	-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 SM Group	-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 SM Individual	-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 SM Group	-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 SM Individual	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 SM Group	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 (0.043)	-0.033 (0.043)	0.062* (0.034)	-0.001 (0.041)
Seek support x SM Individual	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 SM Group	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 SM Individual	-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 SM Group	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* (0.043)	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 <sup>2</sup>	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.

Table S36: Treatment effect on main indexes with post-stratification weights to mimic Facebook advertisement sample distribution across Egyptian governorates and age groups

<b>Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO</b>											
	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)
SM Individual	0.153*** (0.039)	1.024*** (0.039)	0.211*** (0.038)	-0.015 (0.037)	-0.018 (0.043)	-0.077* (0.046)	0.025 (0.037)	0.035 (0.040)	0.106*** (0.041)	0.037 (0.031)	0.173*** (0.039)
SM Group	0.194*** (0.043)	0.932*** (0.043)	0.310*** (0.041)	0.019 (0.040)	-0.018 (0.046)	-0.087* (0.049)	0.007 (0.040)	0.060* (0.043)	0.103** (0.044)	0.119*** (0.034)	0.067* (0.042)
TV	0.835*** (0.043)	0.477*** (0.043)	0.153*** (0.042)	-0.040 (0.041)	0.031 (0.046)	-0.079 (0.049)	0.067* (0.040)	0.055* (0.043)	0.017 (0.044)	0.093*** (0.034)	0.052 (0.043)
SM Individual = SM Group (p-value)	0.3333	0.0289	0.0152	0.3882	0.988	0.8339	0.6481	0.5553	0.9315	0.0149	0.0119
SM Individual = TV (p-value)	0	0	0.1647	0.544	0.2802	0.9706	0.2834	0.638	0.0414	0.1009	0.0041
SM Group= TV (p-value)	0	0	2e-04	0.1535	0.2983	0.8673	0.1363	0.9105	0.0569	0.4508	0.7136
Num. Lasso covariates	6	4	9	3	8	2	7	5	3	7	10
R <sup>2</sup>	0.332	0.302	0.265	0.348	0.162	0.198	0.366	0.270	0.217	0.488	0.276
<b>Panel B: Controlling by the dependent variable at baseline (if available)</b>											
SM Individual	0.175*** (0.040)	1.028*** (0.040)	0.227*** (0.039)	0.004 (0.038)	-0.038 (0.044)	-0.046 (0.047)	0.043 (0.037)	0.024 (0.040)	0.104*** (0.044)	0.030 (0.032)	0.167*** (0.039)
SM Group	0.194*** (0.044)	0.934*** (0.043)	0.321*** (0.042)	0.026 (0.041)	-0.034 (0.048)	-0.065 (0.050)	-0.00002 (0.040)	0.049 (0.043)	0.090** (0.048)	0.116*** (0.034)	0.064* (0.042)
TV	0.835*** (0.044)	0.475*** (0.043)	0.151*** (0.043)	-0.037 (0.041)	0.030 (0.048)	-0.080 (0.050)	0.070* (0.041)	0.057* (0.043)	0.035 (0.048)	0.101*** (0.034)	0.047 (0.043)
SM Individual = SM Group (p-value)	0.6574	0.0258	0.0248	0.5899	0.9384	0.7019	0.2844	0.5643	0.7643	0.0102	0.0142
SM Individual = TV (p-value)	0	0	0.0693	0.3138	0.1521	0.5039	0.5047	0.4423	0.1449	0.0365	0.0043
SM Group= TV (p-value)	0	0	1e-04	0.1328	0.1867	0.7792	0.0913	0.8491	0.2585	0.6565	0.6848
R <sup>2</sup>	0.289	0.295	0.225	0.328	0.101	0.158	0.340	0.261	0.089	0.479	0.270
<b>Panel C: No covariates</b>											
SM Individual	0.207*** (0.043)	1.034*** (0.040)	0.229*** (0.040)	-0.037 (0.044)	-0.038 (0.044)	-0.046 (0.047)	0.030 (0.043)	0.027 (0.044)	0.104*** (0.044)	0.028 (0.033)	0.190*** (0.044)
SM Group	0.253*** (0.046)	0.951*** (0.043)	0.313*** (0.044)	-0.008 (0.047)	-0.034 (0.048)	-0.065 (0.050)	-0.015 (0.046)	0.041 (0.047)	0.090** (0.048)	0.136*** (0.035)	0.059 (0.047)
TV	0.850*** (0.046)	0.506*** (0.043)	0.163*** (0.044)	-0.051 (0.047)	0.030 (0.048)	-0.080 (0.050)	0.051 (0.046)	0.078** (0.047)	0.035 (0.048)	0.126*** (0.035)	0.043 (0.048)
Control Mean	-0.271	-0.703	-0.193	-0.016	-0.015	0.01	-0.014	-0.058	-0.07	-0.147	-0.076
SM Individual = SM Group (p-value)	0.3109	0.0535	0.0513	0.5388	0.9384	0.7019	0.322	0.7658	0.7643	0.0019	0.0051
SM Individual = TV (p-value)	0	0	0.1256	0.7653	0.1521	0.5039	0.6479	0.2775	0.1449	0.0052	0.0018
SM Group= TV (p-value)	0	0	7e-04	0.3755	0.1867	0.7792	0.1599	0.4416	0.2585	0.7817	0.7431
Observations	3,910	3,910	3,910	3,910	3,910	3,910	3,910	3,910	3,910	3,910	3,910
R <sup>2</sup>	0.206	0.275	0.176	0.107	0.101	0.158	0.149	0.109	0.089	0.437	0.088

Notes: We report estimates from WGLS regressions where the weights are the product of the inverse probability of treatment assignment and weights to mimic Facebook advertisement sample distribution across Egyptian governorates and age groups. Specifications include randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.



Table S37: Baseline covariates comparison between participants who provided valid responses and those who opted in to receive receive additional information and videos about women’s issues in Egypt

	Age (1)	Married (2)	Education (BA) (3)	Attitudes (4)	Experienced violence (5)	Resource knowledge (6)	Hypothetical use and contact (7)	Recent use and contact (8)
In sample	-0.747*** (0.203)	-0.018* (0.011)	0.012 (0.010)	-0.003 (0.021)	0.060*** (0.021)	0.076*** (0.021)	0.007 (0.021)	0.042** (0.021)
Outcome Mean	31.45	0.551	0.292	0	0	0	0	0
Outcome Range	[18,77]	0,1	0,1	[-6.88,1.73]	[-1.84,1.34]	[-0.7,1.92]	[-1.82,1.86]	[-0.44,5.64]
Observations	9,431	9,431	9,431	9,431	9,431	9,431	9,431	9,431
R <sup>2</sup>	0.001	0.0003	0.0002	0.00000	0.001	0.001	0.00001	0.0004

*Notes:* We report estimates from OLS regressions. Columns 1 to 3 are demographic variables. Column 4 to 8 are the main 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 a support organization when responding to domestic violence (Hypothetical use and contact), and recent use of online resources and contact with a support organization variables (Recent use and contact). \* denotes  $p < 0.1$ , \*\* denotes  $p < 0.05$ , and \*\*\* denotes  $p < 0.01$ .