# Can Media Campaigns Empower Women Facing Gender-Based Violence amid COVID-19?

Christia, Fotini, <sup>1</sup> Larreguy, Horacio, <sup>2\*</sup> Parker-Magyar, Elizabeth, <sup>3</sup> Quintero, Manuel <sup>4</sup>

<sup>1</sup> Department of Political Science and IDSS, MIT.

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.

Departments of Economics and Political Science, Instituto Tecnológico Autónomo de México.
 Department of Political Science, MIT.

<sup>&</sup>lt;sup>4</sup> Department of Pure Mathematics and Mathematical Statistics, University of Cambridge. \*To whom correspondence should be addressed; E-mail: horacio.larreguy@itam.mx

#### 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 encouragement to consume 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 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 differred 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. 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 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 messages about the videos, which were hosted on Youtube, viaWhatsApp 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 Youtube 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 in-

<sup>&</sup>lt;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>

dividual 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 reminder 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 the relative effectiveness of the different modes of the delivery, which are natural bundles of the mode of reminder—Facebook or WhatsApp—and the mode of dissemination—Youtube or TV, 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 Aboul 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 S33 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 show that those assigned to receive videos disseminated over social media groups exhibit a marginally significant increase in their index of rejection of support for gender and marital equality (Figure 3, Panel 1, 0.05 SD, p < 0.1), while those who received reminders of the TV show showed a marginal increase in their index of rejection of sexual violence (Figure 3, Panel 2, 0.06 SD, p < 0.1). For the rest of the estimated coefficients, we found that the data supported the null model over the alternative when using Bayes factors (Table S31). The minimum detectable effects of our power analysis (Table S32, 0.123-0.143) further support that our analysis is sufficiently powered to detect meaningful effects. Tables S19

through S21 show disaggregated results for each attitudinal outcome separately, and similarly show overall no credible evidence of an effect on attitudes across all outcomes. Only 3 out of 54 coefficients are marginally significant (p < 0.1). All other coefficients are generally substantively small and statistically insignificant. 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 S37). 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). Bayes factors support the null hypothesis over the alternative for each treatment (Table S31). These estimates are substantively small, and 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; Table S24 reports disaggregated results). 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 S31 for Bayes factors supporting these null results and 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 equality and rejection of violence, those who received messages via social media individually or who received the 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, there is no credible evidence that assignment to receive the messages via social media groups affected these expectations (see Table S31 for Bayes Factor supporting this null result). 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 S34 show that the women in our study demographically reflect female internet users in Egypt, Figure 6 and Table S35 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 S34 and S35). 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). Thus, 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 S36 and S37), 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 that 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 S38 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. In this case, as we measured consumption of the intervention content before outcomes at endline, one concern is that any results reflect respondents' interaction with the treatment content itself. 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 test for demand effects 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 itself.

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 similar content can be cost-effectively disseminated via social media and TV, despite the considerable differences relative to distributing such content via communal film screenings (23, 26, 27) or via the grouped in-person interventions (13–15) that we discuss below. By using social media to both encourage consumption of content in addition to hosting and deliver some content directly, our study shows that these 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 encourage the consumption of content disseminated over both social media and TV to generate deeper knowledge and cue greater outreach to supportive organizations.

This use of social media to broaden the reach of supportive organizations holds 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.

We highlight that the digitally delivered "group-level" intervention differs from communal interventions (13-15) or screenings (23-25) where individuals are are exposed to or view 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 in the social media treatment arms. 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, more 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, which may be technically difficult to generate via our recruitment mechanism of Facebook advertisements. Second, future programming would need to consider how to create and moderate meaningful, safe, and respectful interaction in these online spaces, while inducing common knowledge among participants that they are receiving the same content as the peers from their immediate community.

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 edutainments' 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 base-

line 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 in order to "receive short videos with information about women's empowerment and support 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 S39 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 to 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 a 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 S36 and S37 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 210 respondents who had responded to the endline more than once, which are balanced across treatment conditions. Appendix Table S40 shows that our main estimates 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 or communication between surveys. The absence of an "attention control" condition stemmed from practical realities. Because our partner specializes in and is known for content related to women's issues in Egypt, no pre-produced, unrelated content was available, and our partner could not have produced similarly-structured content on a different topic on a timeline that would have allowed the intervention to proceed during this period.

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 Aboul 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; SMI, SMG, and 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.

#### **Pre-registration**

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**

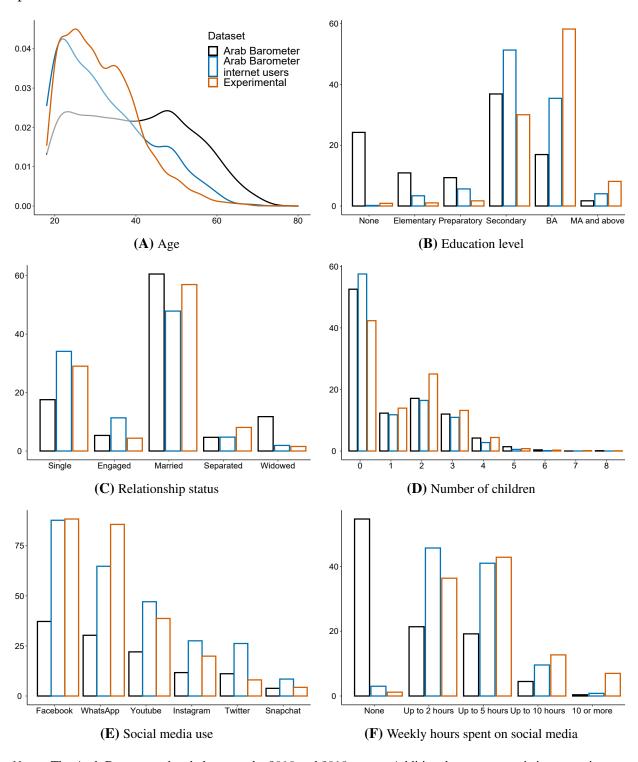
This project received approval from MIT's Committee on the Use of Humans as Experimental Subjects (COUHES) 2006000174 and from the American University of Cairo (AUC) Institutional Review Board 2020-2021-003. Participants provided informed consent at the beginning of the study, and subsequently manually 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 that would require respondents to individually identify themselves as having experienced GBV and IPV in favor of questions allowing for the experiences of "you or someone you know." This decision limited comparability relative to nationally-representative surveys like Arab Barometer that asked more direct and personal 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.

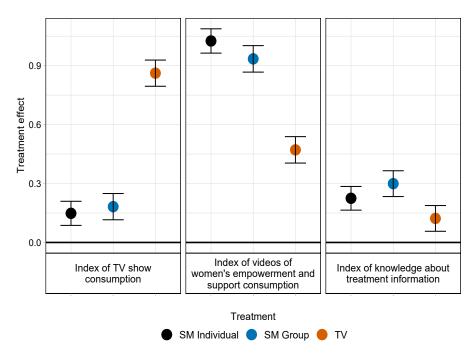
Most directly, our enumerator team also referred women to support when requested by providing them instruction on how to contact ECWR directly. All of these requests occurred during data collection, in response to the Facebook advertisement. In total, approximately five women messaged our page or our 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

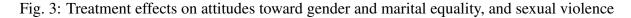


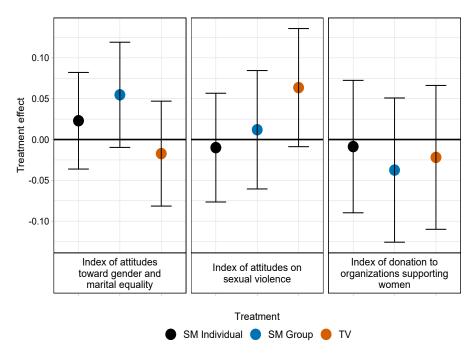
Notes: The Arab Barometer data belongs to the 2016 and 2018 waves. Additional summary statistic comparisons are in Table S34.

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



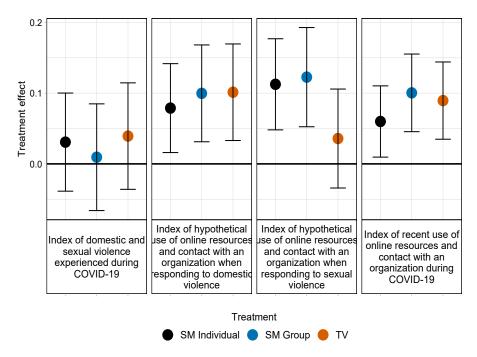
Notes: The estimates and 90% confidence intervals in each box (due to positive one-sided testing) are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent variables regressed on treatment indicators (SM Individual = 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 women's empowerment and support are in Table S17. The outcomes included in the index of knowledge about treatment information are in Table S18.



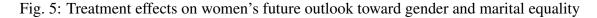


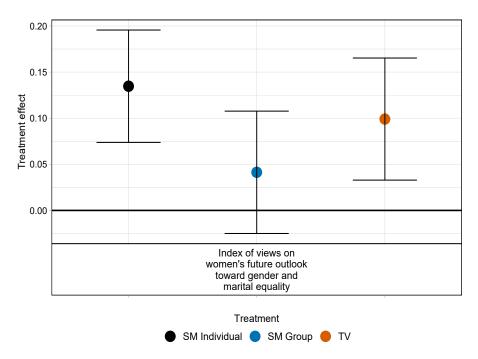
Notes: The estimates and 90% confidence intervals in the left and center panel (due to positive one-sided testing), and 95% confidence intervals in the right panel (due to two-sided testing) are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The 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



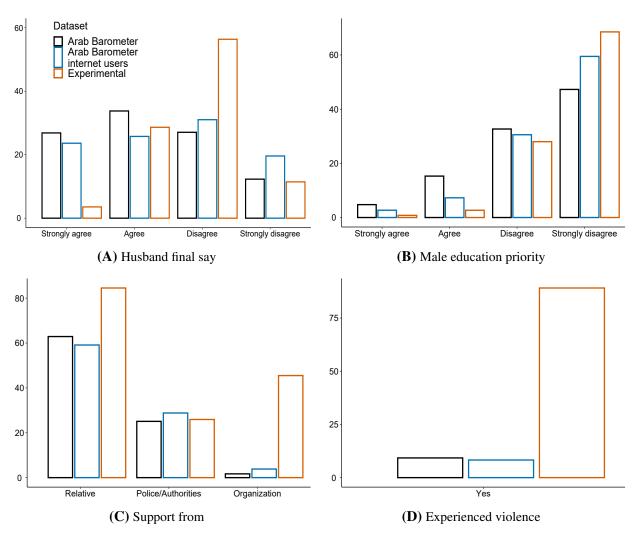
Notes: The estimates and 95% confidence intervals in the left panel (due to two-sided testing), and 90% confidence intervals in the other panels (due to positive one-sided testing) are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels 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.





Notes: The estimates and 90% confidence intervals in each box (due to positive one-sided testing) 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 S35. 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.

#### 5 References and Notes

- "Impact Report: COVID-19 and Domestic Violence Trends", techreport (National Commission onf COVID-19 and Criminal Justice), (https://covid19.counciloncj.org/2021/02/23/impact-report-covid-19-and-domestic-violence-trends/).
- 2. I. Berniell, G. Facchini, European Economic Review, 103775 (2021).
- 3. C. Rivera, Y. Hsu, F. P. Esbry, E. Dugarova, "What does coronavirus mean for women What does coronavirus mean for women", techreport (United Nations Development Programme, july 2020), (https://www.undp.org/blogs/what-does-coronavirus-mean-women).
- 4. Gender Implications of COVID-19 Outbreaks in Development and Humanitarian Settings, CARE, 2020, (https://www.care.org/wp-content/uploads/2020/07/gendered\_implications\_of\_covid-19\_-\_full\_paper.pdf).
- 5. J. Usta, H. Murr, R. El-Jarrah, Violence and Gender (2021).
- 6. E. G. Krug, J. A. Mercy, L. L. Dahlberg, A. B. Zwi, *The Lancet* **360**, 1083–1088 (2002).
- 7. K. M. Devries, J. Y. Mak, C. Garcia-Moreno, M. Petzold, J. C. Child, G. Falder, S. Lim, L. J. Bacchus, R. E. Engell, L. Rosenfeld **and others**, *Science* **340**, 1527–1528 (2013).
- 8. R. Levy, M. Mattsson, Available at SSRN 3496903 (2021).
- 9. A. Semahegn, K. Torpey, A. Manu, N. Assefa, G. Tesfaye, A. Ankomah, *Reproductive health* **16**, 93 (2019).
- 10. C. Bourey, W. Williams, E. E. Bernstein, R. Stephenson, *BMC public health* **15**, 1165 (2015).
- 11. A. M. Buller, A. Peterman, M. Ranganathan, A. Bleile, M. Hidrobo, L. Heise, *The World Bank Research Observer* **33**, 218–258 (2018).
- 12. M. E. Tankard, E. L. Paluck, D. A. Prentice, BMC women's health 19, 17 (2019).
- 13. T. Abramsky, K. M. Devries, L. Michau, J. Nakuti, T. Musuya, L. Kiss, N. Kyegombe, C. Watts, *BMC public health* **16**, 339 (2016).
- J. A. Wagman, R. H. Gray, J. C. Campbell, M. Thoma, A. Ndyanabo, J. Ssekasanvu, F. Nalugoda, J. Kagaayi, G. Nakigozi, D. Serwadda and others, *The Lancet Global Health* 3, e23–e33 (2015).
- 15. V. Sharma, J. Leight, F. Verani, S. Tewolde, N. Deyessa, *PLoS medicine* 17, e1003274 (2020).
- 16. B. Guermazi, "Digital transformation in the time of COVID-19: The case of MENA", techreport (World Bank, **july** 2020).
- 17. R. Jensen, E. Oster, The Quarterly Journal of Economics 124, 1057–1094 (2009).
- 18. E. La Ferrara, A. Chong, S. Duryea, *American Economic Journal: Applied Economics* **4**, 1–31 (2012).
- 19. A. Bandura, Applied psychology **51**, 269–290 (2002).

- 20. A. Singhal, E. Rogers, *Entertainment-education: A communication strategy for social change* (Routledge, 2012).
- 21. M. E. Tankard, E. L. Paluck, Social Issues and Policy Review 10, 181–211 (2016).
- 22. G. Blair, R. Littman, E. L. Paluck, Science Advances 5, eaau5175 (2019).
- 23. A. Banerjee, E. L. Ferrara, V. Orozco, AEA Papers and Proceedings 109, 133–37 (2019).
- 24. E. L. Paluck, D. P. Green, American Political Science Review, 622–644 (2009).
- 25. E. Arias, *Political Science Research and Methods* 7, 561–578 (2019).
- 26. J. Cooper, D. P. Green, A. M. Wilke, **110**, 615–19 (2020).
- 27. D. P. Green, A. M. Wilke, J. Cooper, *Comparative Political Studies* **53**, 2283–2320 (2020).
- 28. P. Melo, J. Messias, G. Resende, K. Garimella, J. Almeida, F. Benevenuto, 13, 676–677 (2019).
- 29. J. Bowles, H. Larreguy, S. Liu, *PloS one* **15**, e0240005 (2020).
- 30. J. Enriquez, H. Larreguy, J. Marshall, A. Simpser (2019).
- 31. "Global Gender Gap Report 2021", techreport (World Economic Forum, 2021), (http://www3.weforum.org/docs/WEF\_GGGR\_2021.pdf).
- 32. T. Elghossain, S. Bott, C. Akik, C. M. Obermeyer, *BMC international health and human rights* **19**, 29 (2019).
- 33. C. Hawcroft, R. Hughes, A. Shaheen, J. Usta, H. Elkadi, T. Dalton, K. Ginwalla, G. Feder, *BMC public health* **19**, 315 (2019).
- 34. K. M. Yount, Sex Roles 64, 43–58 (2011).
- 35. E. Ambrosetti, N. Abu Amara, S. Condon, *Violence against women* **19**, 400–421 (2013).
- 36. H. Mamdouh, H. Ismail, I. Kharboush, M. Tawfik, O. El Sharkawy, M. Abdel Baky, H. Sallam, *EMHJ-Eastern Mediterranean Health Journal*, 18 (11), 1118-1126, 2012 (2012).
- 37. "Egypt Demographic and Health Survey 2014: Key Findings", techreport (Egypt Ministry of Health, Population **and** ICF International, https://dhsprogram.com/pubs/pdf/SR223/SR223.pdf, 2014).
- 38. "Women and COVID-19 Pandemic in Egypt", techreport (UN Women, 2020), (https://link.springer.com/article/10.1186/s12905-022-01674-5).
- 39. K. M. Yount, L. Li, *Journal of Marriage and Family* **71**, 1125–1140 (2009).
- 40. R. L. Kaplan, M. Khawaja, N. Linos, *Violence against women* 17, 1465–1479 (2011).
- 41. A. Banerjee, S. Kumar, R. Pande, F. Su, *Do informed voters make better choices? Experimental evidence from urban India*, 2011.
- 42. S. Kemp, "Digital 2020: Egypt", techreport (DataReportal, https://datareportal.com/reports/digital-2020-egypt, **february** 2020).
- *43.* M. S.-Y. Chwe, *Rationality and Society* **10**, 47–75 (1998).
- 44. V. Charnysh, C. Lucas, P. Singh, Comparative political studies 48, 267–300 (2015).
- 45. T. Masoud, A. Jamal, E. Nugent, Comparative Political Studies 49, 1555–1598 (2016).
- 46. R. Inglehart, P. Norris, I. Ronald **and others**, *Rising tide: Gender equality and cultural change around the world* (Cambridge University Press, 2003).
- 47. N. Newman, R. Fletcher, A. Kalogeropoulos, R. Nielsen, *Reuters Institute digital news report 2019* (Reuters Institute for the Study of Journalism, 2019), **volume** 2019.

- 48. "Responding to rising intimate partner violence amid COVID-19 A rapid global review", techreport (The Georgetown Institute for Women, Peace and Security, DLA PIPER & New Perimeter, 2020), (https://giwps.georgetown.edu/wp-content/uploads/2021/03/Responding-to-Rising-Intimate-Partner-Violence-Amid-COVID-19.pdf).
- 49. L. Bursztyn, A. L. González, D. Yanagizawa-Drott, *American Economic Review* **110**, 2997–3029 (2020).
- 50. T. Abramsky, K. Devries, L. Kiss, J. Nakuti, N. Kyegombe, E. Starmann, B. Cundill, L. Francisco, D. Kaye, T. Musuya **and others**, *BMC medicine* **12**, 122 (2014).
- 51. R. F. Rabin, J. M. Jennings, J. C. Campbell, M. H. Bair-Merritt, *American journal of preventive medicine* **36**, 439–445 (2009).

### 6 Acknowledgements

Norhan Muhab provided invaluable assistance in design and implementation of the project. Zainab Asal, Shahd Eid, and Hadeer Hegazy provided excellent research assistance. Abeer El-Kayaty, John Marshall, Abdelrahman Nagy, Marwa Shalaby and conference, seminar, and workshop participants at the American Political Science Association 2021 Conference, the Institute For Advanced Study in Toulouse, Joint Initiative for Latin American Experimental Economics, MIT's Political Experiments Research Lab and Global Diversity Lab, and Toulouse School of Economics provided useful feedback. Larreguy gratefully acknowledges funding from the French Agence Nationale de la Recherche under the Investissement d'Avenir program ANR-17-EURE-0010.

## **Supplementary Materials**

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

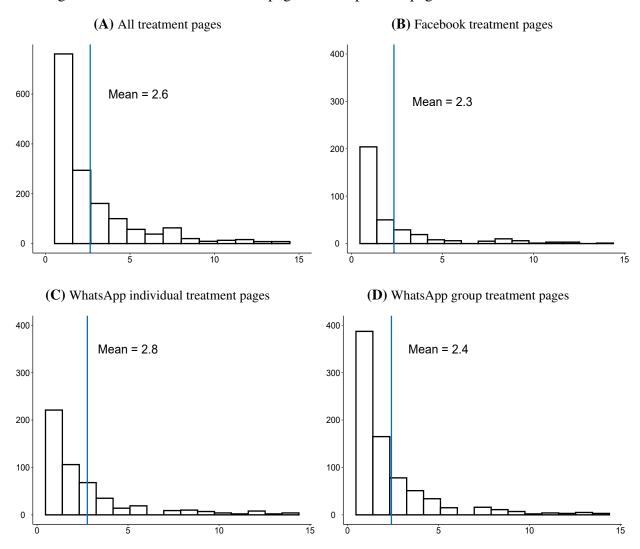


Fig. S2: Video landing web page visits for Facebook and WhatsApp Individual treatment before and after participants assigned to the Facebook treatment were shifted to the WhatsApp Individual treatment

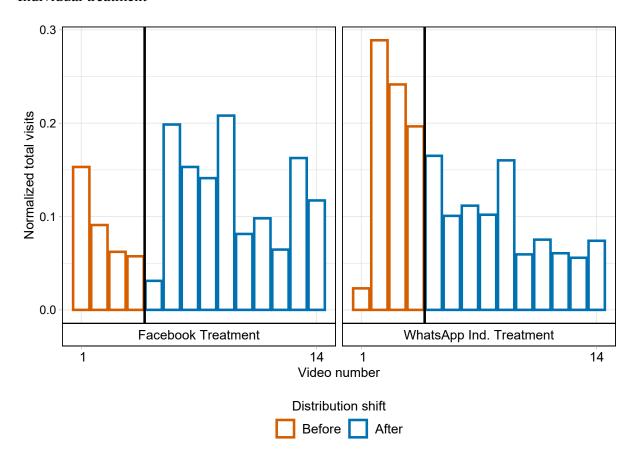
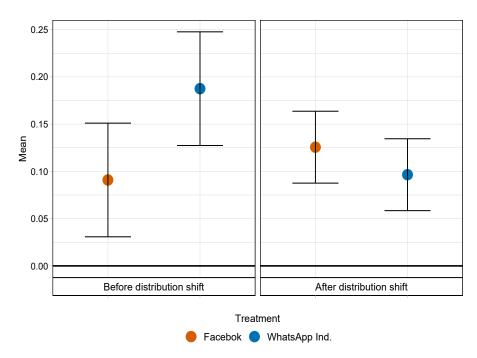
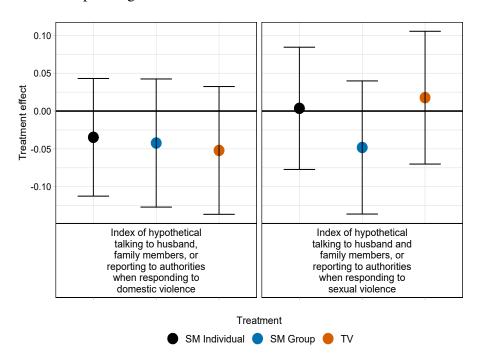


Fig. S3: Difference in difference effects of WhatsApp Individual treatment on video landing web page visits



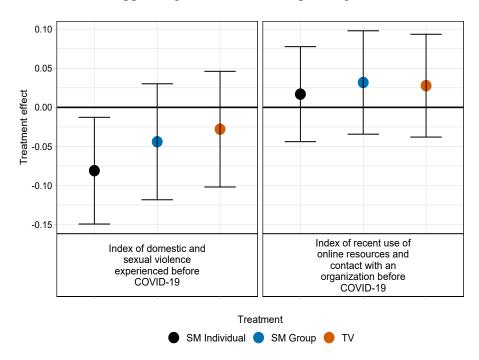
Notes: The estimates and 95% confidence intervals in each box (due to two-sided testing) are from the same difference in difference regression. We regressed number of visits per assigned participant per video on an indicator for Facebook treatment assignment, an indicator for the shift in distribution 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

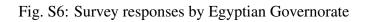


Notes: The estimates and 95% confidence intervals in each box (due to two-sided testing) are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent variables regressed on treatment indicators (SM Individual = 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 (due to two-sided testing) 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.





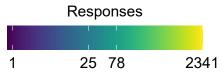


Fig. S7: Example of a treatment video whose link was disseminated to individuals assigned to the Facebook, WhatsApp Individual, and WhatsApp Group treatments

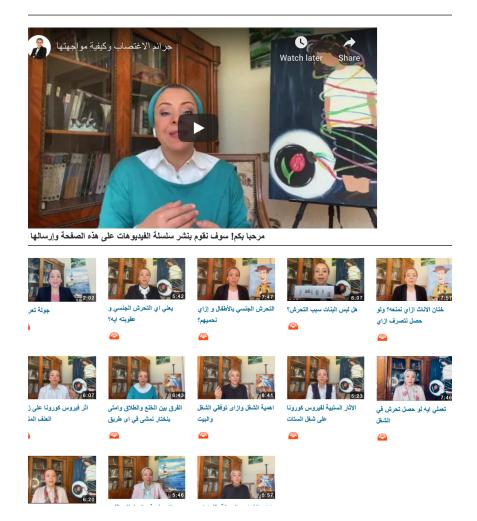
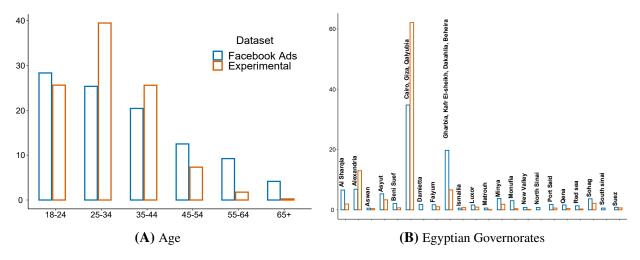
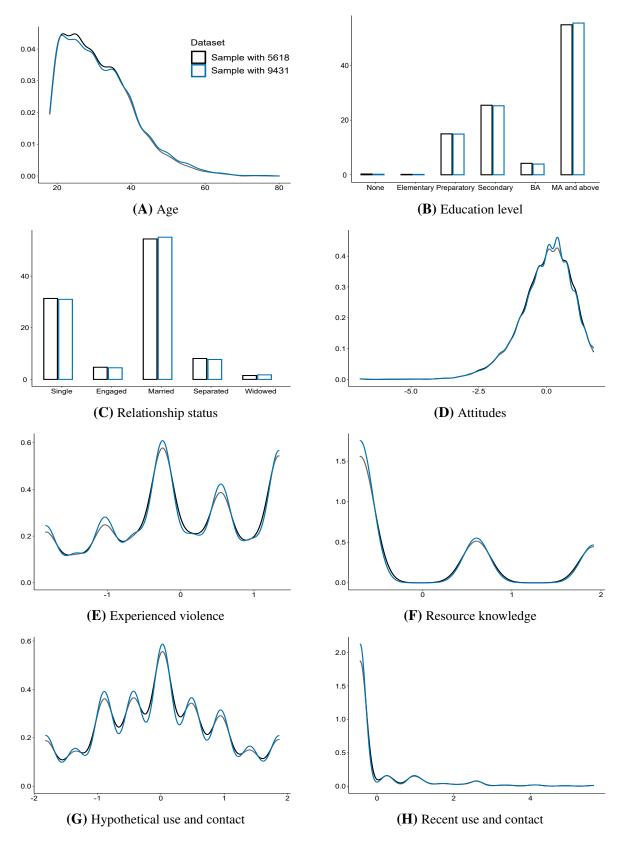


Fig. S8: Comparison of demographics between those reached by Facebook Advertisements used to recruit participants and experimental sample



*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 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 S39.

## **Mobility**

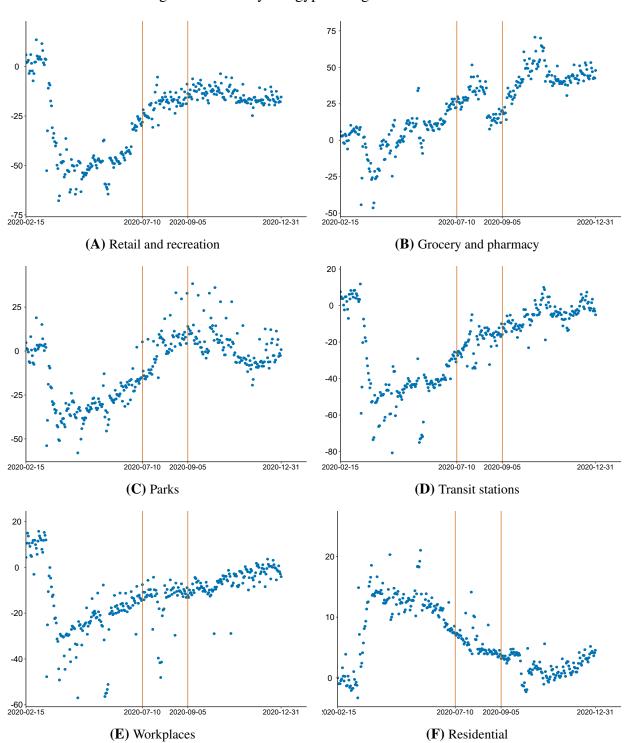


Fig. S10: Mobility in Egypt during the intervention

*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 work- place 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 em- ployees	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 stan 40 ng 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	Female Genital Cutting (FGC); one family's experience; a	Reporting FGC to the po-
	Public Prosecutor	family's criminal responsibility.	lice
2	Horrible Stories from	FGC; doctors' role in limiting FGC; FGC's lack of health	Need for patients & doc-
	Medical Clinics	benefits; Social relationships in COVID-19.	tors to contact police on
			FGC
3	Rape and Sexual Harrass-	Rape; current events; parental support for daughters	Procedures for reporting to
	ment: To Who and Why?	who are victims; minimizing victim blaming; reporting;	the police, reforms to limit
		COVID-19.	fears of reporting
4	Underage Marriage	Health implications of underage marriage; laws in Egypt;	Advertising of organiza-
		marriage officials; household life in COVID-19.	tion
5	Mary Asaad & Aziza Hus-	A women's initiative to combat FGC; women's activism;	Advertising of support or-
	sein	family planning; physical & emotional consequences of	ganization; the need for le-
		FGC; religion & FGC.	gal reform.
6	What do men want from	Male & female partnership; research on men's perceptions	NA; Advertising of sup-
	women?	of manhood; FGC; COVID-19 and domestic violence (DV);	port organization
		a UN initiative combatting DV.	
7	What should you do if you	DV against women during COVID-19; reporting DV to then	Reporting: Police, institu-
	are in the home & you	police or doctors; total number of comments, questions,	tions, organizations, phone
	don't feel safe?	& calls to organizations' pages and hotlines; organizations	number.
		supporting women facing DV in situations; COVID-19's	
	TGG 0 d I	impacts on women generally; COVID-19 & the economy.	
8	FGC & the Internet	FGC; intergenerational relationships; COVID-19 & internet	
		usage.	
9	What's the definition of a	A divorce after DV; raising responsible children and men;	Seeking support from to
	man?	forgiveness for men & men's expectations; women's views	organizations; available
		on the justifiability of DV vs. men's.; how to help women	hotlines; calling the police
		facing DV who accept DV; how to respond while violence	
10	Do woman masfer 1-1-1	is occurring & how to flee home if you need to  Negative effects of over-protectiveness; anecdote about a	Danastinas Dalias institu
10	Do women prefer kind or macho (over-protective)	marriage; spread of negative information about marriage;	Reporting: Police, institutions, organizations.
	men?	shifting gender norms and women's preferences; unjustifi-	tions, organizations.
	men:	ability of any form of DV; role of doctors; reporting DV in	
		cases of extreme violence.	
		Cases of Caucille Violence.	

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

		With Facebook account	Only with WhatsApp account		
Treatment	Baseline	Treatment probability	Treatment probability	Endline	Response rate
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
Total	5618				

*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 grou	p: Mean (s.d.)		N	Mean Differences (p-value)	<u> </u>
	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)	-0.08 (0.864)
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 Husband lives at home	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)
Before COVID-19 Full time at home	0.82 (0.39) 0.37 (0.48)	0.77 (0.42) 0.35 (0.48)	0.75 (0.43) 0.37 (0.48)	0.78 (0.41) 0.35 (0.48)	0.05 (0.006) 0.02 (0.351)	0.07 (0) 0 (1)	0.04 (0.052) 0.02 (0.416)
Before COVID-19 Partially at home	0.45 (0.5)	0.35 (0.48)	0.37 (0.48)	0.45 (0.5)	-0.01 (0.655)	0.01 (0.648)	0.02 (0.410)
Before COVID-19 Faturity at nome  Before COVID-19 Husband full time at home	0.43 (0.3)	0.46 (0.3)	0.44 (0.3)	0.43 (0.3)	0 (1)	-0.02 (0.143)	-0.01 (0.53)
Before COVID-19 Husband partially at home	0.1 (0.3)	0.1 (0.3)	0.12 (0.33)	0.11 (0.32)	-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)	0.04 (0.03)
During COVID-19 Partially at home	0.19 (0.44)	0.72 (0.43)	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 During COVID-19 heard of or experienced yelling	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) 0.07 (0.288)
During COVID-19 heard of or experienced yelling	3.48 (1.27)	3.55 (1.26) 3.27 (1.37)	3.43 (1.27) 3.1 (1.38)	3.41 (1.3)	-0.07 (0.216) -0.09 (0.145)	0.05 (0.369) 0.08 (0.188)	0.07 (0.288)
Would talk husband	3.18 (1.39)	3.79 (1.21)		3.16 (1.37)	0.03 (0.574)	, ,	0.02 (0.777)
Would talk family	3.82 (1.18) 3.74 (1.12)	3.77 (1.13)	3.82 (1.18) 3.77 (1.1)	3.79 (1.17) 3.75 (1.1)	-0.03 (0.551)	0 (1) -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)	-0.03 (0.331)	0.1 (0.084)	0.05 (0.461)
Would use online resources	2.65 (1.27)	2.69 (1.33)	2.57 (1.24)	2.59 (1.32)	-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)	0.00 (0.348)
Know online: other than ECWR	0.27 (0.45)	0.3 (0.46)	0.25 (0.44)	0.26 (0.44)	-0.04 (0.477)	0.07 (0.204)	0.02 (0.753)
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)	0.01 (0.043)	-0.01 (0.833)
During COVID-19 used online resources	2.27 (0.76)	2.35 (0.83) 4		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

Panel A: Resp	oondent's outcom	es			
	Age	Education (BA)	Number of male children	Number of female children	Other family members
	(1)	(2)	(3)	(4)	(5)
SM Individual	0.096 (-0.616, 0.808) p = 0.793	-0.021 (-0.047, 0.005) $p = 0.110$	$-0.028 \\ (-0.097, 0.040) \\ p = 0.423$	0.062* (-0.006, 0.130) p = 0.072	-0.135 (-0.379, 0.110) $p = 0.281$
SM Group	-0.008  (-0.784, 0.767)  p = 0.984	$-0.012 \\ (-0.040, 0.017) \\ p = 0.422$	$-0.014 \\ (-0.089, 0.061) \\ p = 0.717$	0.021 (-0.053, 0.094) $p = 0.583$	-0.050 (-0.317, 0.216) $p = 0.712$
TV	-0.144 (-0.918, 0.629) $p = 0.715$	-0.020 (-0.048, 0.008) $p = 0.163$	$-0.058 \\ (-0.132, 0.017) \\ p = 0.128$	$0.027 \\ (-0.046, 0.101) \\ p = 0.468$	-0.141 (-0.407, 0.124) $p = 0.298$
Control Mean Observations R <sup>2</sup>	31.507 4,165 0.161	0.753 4,165 0.518	0.685 4,165 0.136	0.559 4,165 0.120	2.652 4,165 0.101
Panel B: Whe	ther married and	husband' outcom	es		
	Married	Age	Education (BA)	Marriage duration	Husband lives at home
	(1)	(2)	(3)	(4)	(5)
SM Individual	$0.012 \\ (-0.020, 0.045) \\ p = 0.460$	7.235* (-1.294, 15.765) p = 0.097	$-0.035^{**}$ $(-0.067, -0.002)$ $p = 0.037$	-0.336 (-1.180, 0.508) $p = 0.436$	0.021 (-0.024, 0.065) $p = 0.360$
SM Group	$0.005 \\ (-0.030, 0.041) \\ p = 0.763$	2.469 (-6.575, 11.513) p = 0.593	$-0.053^{***}$ $(-0.087, -0.018)$ $p = 0.003$	-0.091 (-0.984, 0.803) $p = 0.843$	$0.032 \\ (-0.015, 0.079) \\ p = 0.180$
TV	$0.002 \\ (-0.033, 0.038) \\ p = 0.906$	-1.299 (-10.432, 7.834) $p = 0.781$	-0.042**  (-0.077, -0.007)  p = 0.019	0.427 (-0.476, 1.331) p = 0.355	$0.018 \\ (-0.029, 0.066) \\ p = 0.449$
Control Mean	0.555	31.631	10.064	0.798	0.818

*Notes:* We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. 95% confidence intervals are in parenthesis (due to two-sided testing). \* denotes p < 0.1, \*\* denotes p < 0.05, and \*\*\* denotes p < 0.01.

2,354

0.561

2,354

0.163

2,354

0.079

2,348

0.057

Observations

 $\mathbb{R}^2$ 

4,165

0.401

Table S6: Balance on before and during COVID-19 home presence of respondent and husband, and whether household income declined with COVID-19

		Before C	OVID-19			During	COVID-19		
	Full time at home	Partially at home	Husband full time at home	Husband partially at home	Full time at home	Partially at Home	Husband full time at home	Husband partially at home	COVID-19 income decline
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
SM Individual	-0.001 (-0.040, 0.037) $p = 0.944$	$0.001 \\ (-0.040, 0.041) \\ p = 0.972$	$0.002 \\ (-0.033, 0.037) \\ p = 0.913$	0.011 (-0.036, 0.057) $p = 0.654$	-0.014 (-0.050, 0.022) $p = 0.443$	$0.005 \\ (-0.027, 0.038) \\ p = 0.742$	$0.012 \\ (-0.037, 0.062) \\ p = 0.621$	0.029  (-0.025, 0.082)  p = 0.298	$0.018 \\ (-0.017, 0.052) \\ p = 0.311$
SM Group	-0.017 (-0.059, 0.025) $p = 0.429$	-0.003 (-0.047, 0.041) $p = 0.893$	$0.017 \\ (-0.020, 0.055) \\ p = 0.371$	$0.002 \\ (-0.047, 0.051) \\ p = 0.945$	-0.013 (-0.052, 0.026) $p = 0.522$	-0.001 (-0.036, 0.035) $p = 0.962$	0.054** (0.002, 0.107) p = 0.042	-0.026 (-0.083, 0.031) $p = 0.367$	$0.015 \\ (-0.023, 0.053) \\ p = 0.433$
TV	$-0.035^*$ (-0.077, 0.006) $p = 0.097$	$0.007 \\ (-0.036, 0.051) \\ p = 0.742$	$0.007 \\ (-0.031, 0.045) \\ p = 0.711$	-0.040 (-0.090, 0.009) $p = 0.113$	-0.027 (-0.067, 0.012) $p = 0.171$	$0.015 \\ (-0.021, 0.050) \\ p = 0.419$	$0.045^*$ $(-0.007, 0.098)$ $p = 0.093$	-0.062**  (-0.120, -0.005)  p = 0.034	$0.032^*$ (-0.006, 0.069) $p = 0.100$
Control Mean Observations R <sup>2</sup>	0.366 4,162 0.113	0.45 4,162 0.092	0.099 2,351 0.074	0.221 2,351 0.092	0.745 4,165 0.083	0.194 4,155 0.075	0.228 2,346 0.080	0.344 2,346 0.085	0.757 4,165 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. 95% confidence intervals are in parenthesis (due to two-sided testing). \* 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 (-0.020, 0.039) $p = 0.513$	$-0.029 \\ (-0.067, 0.009) \\ p = 0.130$	-0.011 (-0.046, 0.023) $p = 0.519$	0.009 (-0.011, 0.029) p = 0.359	0.014 (-0.016, 0.044) p = 0.367	0.039** (0.002, 0.076) p = 0.041	$0.001 \\ (-0.003, 0.005) \\ p = 0.685$
SM Group	0.010 (-0.022, 0.042) $p = 0.553$	-0.007 (-0.048, 0.034) $p = 0.737$	-0.006 (-0.044, 0.031) $p = 0.741$	$0.009 \\ (-0.013, 0.030) \\ p = 0.432$	$0.012 \\ (-0.020, 0.045) \\ p = 0.456$	$0.027 \\ (-0.013, 0.068) \\ p = 0.189$	$0.002 \\ (-0.002, 0.007) \\ p = 0.279$
TV	0.013 (-0.019, 0.045) $p = 0.438$	-0.045**  (-0.086, -0.003)  p = 0.034	$-0.004 \\ (-0.041, 0.033) \\ p = 0.837$	-0.004 (-0.026, 0.017) $p = 0.697$	$-0.001 \\ (-0.033, 0.031) \\ p = 0.951$	$0.009 \\ (-0.031, 0.049) \\ p = 0.656$	0.005** (0.001, 0.010) p = 0.019
Control Mean	0.137	0.319	0.781	0.934	0.148	0.267	0
Observations R <sup>2</sup>	4,165 0.045	4,165 0.060	4,165 0.057	4,165 0.059	4,165 0.047	4,165 0.071	4,165 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. 95% confidence intervals are in parenthesis (due to two-sided testing). \* 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	Uses WhatsApp	Uses Facebook	Uses Instagram	Uses YouTube	Uses Twitter	Uses Snapchat	Uses Telegram	Watched videos on social media	Watched videos on WhatsApp
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
SM Individual		-0.006 $(-0.035, 0.023) (-0.665)$ $p = 0.665$	-0.006 $-0.033, 0.020)$ $p = 0.648$	$0.004 \\ (-0.029, 0.037) \\ p = 0.824$	-0.024 (-0.064, 0.016) $p = 0.246$	-0.013 (-0.035, 0.009) $p = 0.250$	0.011 (-0.005, 0.028) $p = 0.179$	-0.027* $(-0.054, 0.0005)$ $p = 0.054$	0.028 (-0.068, 0.123) $p = 0.569$	-0.021 (-0.102, 0.061) $p = 0.620$
SM Group	0.082** (0.003, 0.161) p = 0.044	-0.001 (-0.033, 0.030) (- p = 0.947	$0.005 \\ -0.024, 0.034) \\ p = 0.741$	$0.024 \\ (-0.012, 0.060) \\ p = 0.187$	$0.021 \\ (-0.023, 0.064) \\ p = 0.350$	$-0.009 \\ (-0.033, 0.015) \\ p = 0.464$	0.020** (0.002, 0.038) p = 0.033	$-0.004 \\ (-0.034, 0.026) \\ p = 0.801$	0.133** (0.029, 0.237) p = 0.013	$0.069 \\ (-0.019, 0.157) \\ p = 0.127$
TV	0.116*** (0.037, 0.195) p = 0.004	0.016 (-0.015, 0.048) (-p = 0.314	-0.026* -0.055, 0.002) p = 0.073	0.003 (-0.033, 0.039) p = 0.866	-0.032 (-0.076, 0.011) $p = 0.148$	-0.024* $(-0.048, 0.00002)$ $p = 0.051$	$0.016* \\ (-0.002, 0.034) \\ p = 0.088$	-0.005 $(-0.035, 0.024)$ $p = 0.732$	0.139*** (0.035, 0.243) p = 0.009	0.096** (0.008, 0.184) p = 0.033
Control Mean Observations R <sup>2</sup>	1.839 4,165 0.091	0.858 4,165 0.058	0.892 4,165 0.064	0.195 4,165 0.063	0.4 4,165 0.067	0.093 4,165 0.094	0.033 4,165 0.070	0.139 4,165 0.070	2.863 4,165 0.125	1.707 4,165 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. 95% confidence intervals are in parenthesis (due to two-sided testing). \* 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	Husband earn income	Yelling justified	Hitting justified	Male education priority	Future equal say	Future equal rights
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
SM Individual	$0.035 \\ (-0.049, 0.118) \\ p = 0.414$	-0.035 (-0.121, 0.051) $p = 0.425$	$0.037 \\ (-0.041, 0.115) \\ p = 0.351$	0.015  (-0.022, 0.052)  p = 0.436	$0.010 \\ (-0.051, 0.072) \\ p = 0.746$	0.067* $(-0.008, 0.142)$ $p = 0.081$	$0.004 \\ (-0.061, 0.069) \\ p = 0.903$
SM Group	0.084*  (-0.007, 0.175)  p = 0.070	-0.020 (-0.114, 0.074) $p = 0.676$	$0.003 \\ (-0.082, 0.088) \\ p = 0.941$	$-0.015 \\ (-0.055, 0.025) \\ p = 0.466$	$0.005 \\ (-0.062, 0.072) \\ p = 0.885$	-0.019 (-0.101, 0.063) $p = 0.649$	-0.024 (-0.095, 0.047) $p = 0.504$
TV	0.026 (-0.065, 0.116) $p = 0.576$	-0.057 (-0.150, 0.037) $p = 0.235$	-0.047 (-0.132, 0.038) $p = 0.277$	-0.037*  (-0.077, 0.003)  p = 0.073	$0.014 \\ (-0.053, 0.081) \\ p = 0.672$	-0.016 (-0.097, 0.066) $p = 0.703$	-0.035 (-0.105, 0.036) $p = 0.339$
Control Mean Observations	2.621 4,165	2.566 4,165	2.135 4,165	1.176 4,165	1.421 4,165	4.101 4,165	4.313 4,165
$R^2$	0.078	0.090	0.108	0.066	0.057	0.053	0.063

*Notes:* We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. 95% confidence intervals are in parenthesis (due to two-sided testing). \* 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 C	OVID-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	$0.011 \\ (-0.083, 0.106) \\ p = 0.814$	0.117** (0.014, 0.219) p = 0.027	-0.012 (-0.116, 0.093) p = 0.825	$0.039 \\ (-0.074, 0.151) \\ p = 0.498$
SM Group	$0.023 \\ (-0.080, 0.126) \\ p = 0.667$	$0.045 \\ (-0.067, 0.157) \\ p = 0.428$	$-0.001 \\ (-0.115, 0.113) \\ p = 0.982$	-0.021 (-0.144, 0.101) $p = 0.736$
TV	$0.010 \\ (-0.093, 0.113) \\ p = 0.854$	$0.046 \\ (-0.066, 0.157) \\ p = 0.423$	-0.021 (-0.134, 0.093) $p = 0.720$	0.030 (-0.092, 0.152) $p = 0.634$
Control Mean	3.659	3.3	3.479	3.176
Observations R <sup>2</sup>	4,165 0.077	4,165 0.093	4,165 0.069	4,165 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. 95% confidence intervals are in parenthesis (due to two-sided testing). \* 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	$0.017 \\ (-0.080, 0.114) \\ p = 0.737$	$0.037 \\ (-0.055, 0.128) \\ p = 0.435$	-0.064 (-0.172, 0.045) $p = 0.250$	-0.036 (-0.136, 0.063) $p = 0.474$	-0.070 (-0.169, 0.029) $p = 0.165$
SM Group	-0.050 (-0.156, 0.056) $p = 0.353$	$0.030 \\ (-0.070, 0.130) \\ p = 0.554$	-0.022 (-0.140, 0.096) p = 0.712	-0.028 (-0.137, 0.081) $p = 0.614$	-0.022 (-0.129, 0.086) $p = 0.691$
TV	-0.084 (-0.189, 0.022) $p = 0.120$	0.011 (-0.089, 0.111) p = 0.829	$0.024 \\ (-0.093, 0.142) \\ p = 0.688$	0.001 (-0.107, 0.110) p = 0.982	$0.032 \\ (-0.075, 0.140) \\ p = 0.553$
Control Mean	3.819	3.738	2.64	2.647	3.334
Observations R <sup>2</sup>	4,165 0.072	4,165 0.067	4,165 0.077	4,165 0.126	4,165 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. 95% confidence intervals are in parenthesis (due to two-sided testing). \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.05.

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	$0.003 \\ (-0.023, 0.029) \\ p = 0.829$	-0.0001 (-0.010, 0.010) $p = 0.979$	-0.013 (-0.076, 0.050) $p = 0.679$	$0.037 \\ (-0.017, 0.091) \\ p = 0.179$	-0.018 (-0.044, 0.007) $p = 0.163$	$0.002 \\ (-0.006, 0.011) \\ p = 0.577$	-0.002 (-0.049, 0.045) $p = 0.936$	-0.039*  (-0.084, 0.006)  p = 0.088
SM Group	$0.001 \\ (-0.028, 0.030) \\ p = 0.950$	-0.005  (-0.015, 0.006)  p = 0.401	$0.045 \\ (-0.023, 0.114) \\ p = 0.197$	0.058*  (-0.001, 0.116)  p = 0.055	-0.020 (-0.048, 0.008) $p = 0.172$	$0.002 \\ (-0.007, 0.011) \\ p = 0.625$	$0.033 \\ (-0.018, 0.084) \\ p = 0.209$	-0.003  (-0.052, 0.047)  p = 0.919
TV	0.011 (-0.018, 0.040) p = 0.449	-0.0004 (-0.011, 0.010) $p = 0.934$	$0.055 \\ (-0.013, 0.123) \\ p = 0.115$	0.059** (0.0001, 0.117) p = 0.050	-0.030**  (-0.058, -0.002)  p = 0.036	$0.002 \\ (-0.007, 0.011) \\ p = 0.711$	0.056** (0.005, 0.107) p = 0.033	0.002  (-0.047, 0.051)  p = 0.926
Control Mean Observations R <sup>2</sup>	0.274 4,165 0.517	0.015 4,165 0.080	2.404 4,165 0.378	2.269 4,165 0.378	0.228 4,165 0.450	0.008 4,165 0.060	2.178 4,165 0.340	2.184 4,165 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. 95% confidence intervals are in parenthesis (due to two-sided testing). \* 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	Description
	groups	
No conversation	112	No one replying at all
Limited conversation	69	Only one person replying with an elaborate feedback or one or more persons replying with short feedback.
Active conversation	18	More than one person replying with an elaborate feedback or two members engaging in discussion
Problematic conversation	1	Two people getting into a heated argument or one or more persons attacking video content
Total	200	

Table 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
Total	3695	3446	1635	7090	4:01

Notes: Website data provides the number of unique IPs, unique users, and total visits by treatment assignment. A Unique User is determined via cookies and thus corresponds to a specific individual in a particular device. Note that this table reports different treatment assignment numbers than Table 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

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

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

### **Results**

0.163

0.062

0.081

0.083

Table S16: Treatment effect on TV show consumption

Panel A: Controlling by th	ne lagged deper	ıdent variable and	d covariates selec	ted by LASSO									
	Index of (1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	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*** (0.075, 0.221) p = 0.00004	0.004	0.012	0.051***	0.004	0.034**	0.029*	0.052***	0.107***	0.033*	0.093***	0.035** (0.003, 0.068) p = 0.017	0.040** (0.006, 0.074) p = 0.011
SM Group	0.182*** (0.103, 0.262) p = 0.00001	$\begin{array}{c} 0.010 \\ (-0.021, 0.041) \\ p = 0.261 \end{array}$	$0.023* \\ (-0.012, 0.058) \\ p = 0.099$	0.060*** (0.018, 0.101) p = 0.003	$\begin{array}{c} -0.0001 \\ (-0.019, 0.019) \\ p = 0.504 \end{array}$	0.060*** (0.017, 0.102) p = 0.003	0.050** (0.008, 0.092) p = 0.011	0.049*** (0.026, 0.072) p = 0.00002	0.134*** (0.103, 0.166) p = 0.000	0.056*** (0.013, 0.098) p = 0.006	0.095** (0.012, 0.179) p = 0.013	$0.035^{**}$ (-0.001, 0.070) p = 0.027	0.043** (0.006, 0.080) p = 0.012
TV	0.862*** (0.782, 0.941) p = 0.000	0.038*** (0.007, 0.068) p = 0.008	0.187*** (0.152, 0.222) p = 0.000	0.127*** (0.086, 0.168) p = 0.000	0.124*** (0.106, 0.143) p = 0.000	0.248*** (0.206, 0.290) p = 0.000	0.251*** (0.209, 0.293) p = 0.000	0.186*** (0.163, 0.209) p = 0.000	0.685*** (0.654, 0.717) p = 0.000	0.241*** (0.199, 0.284) p = 0.000	0.445*** (0.362, 0.528) p = 0.000	0.107*** (0.072, 0.142) p = 0.000	0.132*** (0.095, 0.168) p = 0.000
SM Individual = SM Group (p-value) SM Individual = TV	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
(p-value) SM Group= TV	0	0.031	0	3e-04	0	0	0	0	0	0	0	1e-04	0
(p-value) Num. Lasso covariates R <sup>2</sup>	0 6 0.277	0.0841 3 0.181	0 3 0.224	0.002 6 0.178	0 5 0.130	0 6 0.172	0 5 0.157	0 0 0.110	0 5 0.385	0 5 0.150	0 7 0.152	1e-04 6 0.132	0 6 0.148
-				0.176	0.130	0.172	0.137	0.110	0.363	0.130	0.132	0.132	0.140
Panel B: Controlling by the	0.154***			0.051***	0.006	0.044**	0.037**	0.052***	0.110***	0.040**	0.109***	0.042***	0.047***
SM Individual	$0.154^{****}$ (0.079, 0.229) p = 0.00003	$0.006 \\ (-0.022, 0.034) \\ p = 0.344$	$ \begin{array}{c} 0.016 \\ (-0.017, 0.048) \\ p = 0.173 \end{array} $	$0.051^{+++}$ (0.013, 0.089) p = 0.005	$ \begin{array}{c} 0.006 \\ (-0.012, 0.023) \\ p = 0.258 \end{array} $	$0.044^{++}$ (0.003, 0.084) p = 0.018	$(-0.037^{++})$ (-0.003, 0.077) p = 0.037		0.110*** (0.081, 0.139) p = 0.000	0.040** (0.0001, 0.081) p = 0.025	(0.030, 0.188) p = 0.004	$0.042^{+++}$ (0.009, 0.076) p = 0.007	(0.012, 0.082) $p = 0.004$
SM Group	0.182*** (0.100, 0.263) p = 0.00001	$\begin{array}{c} 0.011 \\ (-0.020, 0.042) \\ p = 0.237 \end{array}$	$0.025* \\ (-0.010, 0.061) \\ p = 0.080$	0.060*** (0.018, 0.102) p = 0.003	$\begin{array}{c} 0.001 \\ (-0.017, 0.020) \\ p = 0.442 \end{array}$	0.067*** (0.023, 0.111) p = 0.002	0.056*** (0.012, 0.099) p = 0.007	0.050*** (0.027, 0.073) p = 0.00002	0.136*** 0 (0.105, 0.168) p = 0.000	0.062*** (0.018, 0.106) p = 0.003	0.108*** (0.022, 0.194) p = 0.007	0.040** (0.004, 0.077) p = 0.016	0.049*** (0.011, 0.087) p = 0.007
TV	0.856*** (0.774, 0.937) p = 0.000	0.037*** (0.007, 0.068) p = 0.009	0.188*** (0.153, 0.223) p = 0.000	0.126*** (0.084, 0.168) p = 0.000	0.124*** (0.105, 0.143) p = 0.000	0.250*** (0.206, 0.294) p = 0.000	0.251*** (0.208, 0.295) p = 0.000	0.186*** (0.163, 0.209) p = 0.000	0.686*** 0 (0.655, 0.718) p = 0.000	0.242*** (0.198, 0.286) p = 0.000	0.448*** (0.362, 0.534) p = 0.000	0.108*** (0.072, 0.145) p = 0.000	0.134*** (0.096, 0.172) p = 0.000
SM Individual = SM Group (p-value) SM Individual = TV	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
(p-value)	0	0.0439	0	4e-04	0	0	0	0	0	0	0	4e-04	0
SM Group= TV (p-value) R <sup>2</sup>	0 0.241	0.1034 0.173	0 0.213	0.0025 0.166	0 0.113	0 0.099	0 0.095	0 0.109	0 0.374	0 0.090	0 0.091	4e-04 0.083	0 0.090
Panel C: No covariates													
SM Individual	0.171*** (0.093, 0.250) p = 0.00001	0.002 (-0.028, 0.032) p = 0.439	0.022 (-0.013, 0.057) p = 0.113	0.064*** (0.023, 0.104) p = 0.001	0.006 (-0.011, 0.024) p = 0.244	0.044** (0.003, 0.084) p = 0.018	0.037** (-0.003, 0.077) p = 0.037	0.052*** 0 (0.031, 0.073) p = 0.00000	0.110*** (0.081, 0.139) p = 0.000	0.040** (0.0001, 0.081) p = 0.025	0.109*** (0.030, 0.188) p = 0.004	0.042*** (0.009, 0.076) p = 0.007	0.047*** (0.012, 0.082) p = 0.004
SM Group	0.201*** (0.115, 0.286) p = 0.00001	$0.009 \\ (-0.023, 0.042) \\ p = 0.288$	p = 0.057	0.069*** (0.025, 0.113) p = 0.002	0.003 (-0.016, 0.022) p = 0.394	0.067*** (0.023, 0.111) p = 0.002	0.056*** (0.012, 0.099) p = 0.007	0.050*** (0.027, 0.073) p = 0.00002	0.136*** (0.105, 0.168) p = 0.000	0.062*** (0.018, 0.106) p = 0.003	0.108*** (0.022, 0.194) p = 0.007	0.040** (0.004, 0.077) p = 0.016	0.049*** (0.011, 0.087) p = 0.007
TV	0.866*** (0.781, 0.952) p = 0.000	0.036** (0.004, 0.069) p = 0.015	0.187*** (0.149, 0.225) p = 0.000	0.129*** (0.085, 0.173) p = 0.000	0.127*** (0.108, 0.146) p = 0.000	0.250*** (0.206, 0.294) p = 0.000	0.251*** (0.208, 0.295) p = 0.000	0.186*** (0.163, 0.209) p = 0.000	0.686*** 0 (0.655, 0.718) p = 0.000	0.242*** (0.198, 0.286) p = 0.000	0.448*** (0.362, 0.534) p = 0.000	0.108*** (0.072, 0.145) p = 0.000	0.134*** (0.096, 0.172) p = 0.000
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) SM Individual = TV	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
(p-value) SM Group= TV	0	0.0428	0	0.0034	0	0	0	0	0	0	0	4e-04	0
(p-value) Observations	0 4,165	0.1161 4,165	0 4,165	0.0085 4,165	0 4,165	0 4,165	0 4,165	0 4,165	0 4,165	0 4,165	0 4,165	4e-04 4,165	0 4,165

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 the 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. 90% confidence intervals are in parenthesis (due to positive one-sided testing). \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.

0.099

0.095

0.083

0.091

0.090

0.102

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

				Received	Watched			
		Watched	Watched	videos on	videos on		Accurate	Accurate
	Index of	videos on	videos on	WhatsApp or	WhatsApp or	Number of	content of	video topic
	(1,1,1,1,1,1,1)	social media	WhatsApp	Facebook	Facebook	videos watched	the videos	liked
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SM Individual	1.026***	0.287***	1.125***	0.490***	0.419***	0.830***	0.267***	0.319***
3W marviduai	(0.952, 1.099)	(0.188, 0.386)	(1.026, 1.225)	(0.458, 0.522)	(0.382, 0.457)	(0.747, 0.913)	(0.233, 0.302)	(0.282, 0.355
	p = 0.000	p = 0.000						
SM Group	0.935***	0.176***	1.076***	0.513***	0.425 ***	0.668***	0.215***	0.255***
-	(0.854, 1.015) p = 0.000	(0.068, 0.284) p = 0.001	(0.967, 1.184) p = 0.000	(0.478, 0.548) p = 0.000	(0.385, 0.466) p = 0.000	(0.578, 0.759) p = 0.000	(0.178, 0.253) p = 0.000	(0.216, 0.295 p = 0.000
P\$ 7	0.471***	0.149***	0.554***	0.276***	0.229***	0.332***	0.078***	0.103***
TV	(0.391, 0.552)	(0.041, 0.256)	(0.445, 0.662)	(0.241, 0.311)	(0.189, 0.270)	(0.242, 0.422)	(0.040, 0.115)	(0.064, 0.143
	p = 0.000	p = 0.004	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.00003	p = 0.00000
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) SM Group= TV	0	0.0122	0	0	0	0	0	0
(p-value)	0	0.6319	0	0	0	0	0	0
Num. Lasso covariates	4	4	2	2	3	4	3	4
$R^2$	0.277	0.157	0.217	0.277	0.212	0.187	0.149	0.151
Panel B: Controlling by th	ne dependent varia	able at baseline (if	available)					
SM Individual	1.027***	0.282***	1.131***	0.490***	0.419***	0.831***	0.269***	0.320***
SWI Individual	(0.954, 1.101)	(0.183, 0.382)	(1.031, 1.232)	(0.457, 0.522)	(0.382, 0.457)	(0.747, 0.915)	(0.234, 0.303)	(0.283, 0.356
	p = 0.000	p = 0.000						
SM Group	0.936***	0.178***	1.089***	0.517***	0.433***	0.685***	0.219***	0.260***
5M Gloup	(0.856, 1.017)	(0.069, 0.286)	(0.980, 1.198)	(0.482, 0.552)	(0.392, 0.474)	(0.594, 0.776)	(0.181, 0.257)	(0.220, 0.300
	p = 0.000	p = 0.001	p = 0.000	p = 0.000				
ΓV	0.470***	0.153***	0.566***	0.279***	0.237***	0.349***	0.081***	0.107***
	(0.390, 0.550)	(0.045, 0.261)	(0.457, 0.675)	(0.244, 0.315)	(0.196, 0.278)	(0.258, 0.440)	(0.043, 0.118)	(0.067, 0.147
	p = 0.000	p = 0.003	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.00002	p = 0.00000
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	U	0.0193	U	U	U	U	U	U
(p-value)	0	0.665	0	0	0	0	0	0
$R^2$	0.273	0.148	0.208	0.270	0.191	0.168	0.134	0.136
Panel C: No covariates								
SM Individual	1.028***	0.290***	1.128***	0.490***	0.419***	0.831***	0.269***	0.320***
SM Individual	(0.953, 1.103)	(0.187, 0.392)	(1.027, 1.229)	(0.457, 0.522)	(0.382, 0.457)	(0.747, 0.915)	(0.234, 0.303)	(0.283, 0.356
	p = 0.000	p = 0.00000	p = 0.000	p = 0.000				
SM Group	0.955***	0.212***	1.100***	0.517***	0.433***	0.685***	0.219***	0.260***
	(0.874, 1.037)	(0.101, 0.324)	(0.990, 1.210)	(0.482, 0.552)	(0.392, 0.474)	(0.594, 0.776)	(0.181, 0.257)	(0.220, 0.300
	p = 0.000	p = 0.0001	p = 0.000	p = 0.000				
ΓV	0.493***	0.190***	0.581***	0.279***	0.237***	0.349***	0.081***	0.107***
	(0.411, 0.574)	(0.078, 0.301)	(0.472, 0.691)	(0.244, 0.315)	(0.196, 0.278)	(0.258, 0.440)	(0.043, 0.118)	(0.067, 0.147
	p = 0.000	p = 0.0005	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.00002	p = 0.00000
Control Mean SM Individual = SM Group	-0.703	2.794	2.114	0.409	0.302	0.527	0.116	0.133
p-value)	0.0842	0.1758	0.6179	0.1309	0.5152	0.0018	0.0098	0.0033
SM Individual = TV  (p-value)  SM Group TV	0	0.0787	0	0	0	0	0	0
SM Group= TV (p-value)	0	0.6955	0	0	0	0	0	0
Dbservations	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

Table S18: Treatment effect on knowledge about treatment information

	Index of (1,1,1,1)	Know online: other than ECWR	Know online: ECWR	Know organization: other than ECWR	Know organization: ECWR
	(1)	(2)	(3)	(4)	(5)
SM Individual	0.225***	0.057***	0.045***	0.066***	0.046***
	(0.153, 0.297)	(0.022, 0.092)	(0.025, 0.065)	(0.032, 0.100)	(0.025, 0.067)
	p = 0.000	p = 0.001	p = 0.00001	p = 0.0001	p = 0.00002
SM Group	0.299***	0.084***	0.069***	0.070***	0.057***
3M Group	(0.221, 0.378)	(0.046, 0.123)	(0.047, 0.091)	(0.032, 0.107)	(0.034, 0.081)
	p = 0.000	p = 0.00001	p = 0.000	p = 0.0002	p = 0.00000
	1	1	•	r	•
ΓV	0.122***	0.037**	0.042***	-0.007	0.029***
	(0.044, 0.200)	(-0.001, 0.075)	(0.020, 0.064)	(-0.044, 0.030)	(0.006, 0.052)
	p = 0.002	p = 0.028	p = 0.0002	p = 0.650	p = 0.007
MI I''I I OMO					
SM Individual = SM Group (p-value)	0.0623	0.1588	0.0352	0.8451	0.3312
SM Individual = TV	0.0023	0.1300	0.0332	0.0431	0.3312
(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 R <sup>2</sup>	9	8	5	9	7
Κ-	0.234	0.247	0.094	0.233	0.078
Panel B: Controlling by th	ne dependent var	iable at baseline (if a	vailable)		
SM Individual	0.222***	0.054***	0.045***	0.067***	0.047***
711 Individual	(0.149, 0.295)	(0.018, 0.089)	(0.024, 0.065)	(0.032, 0.102)	(0.025, 0.068)
	p = 0.000	p = 0.002	p = 0.00001	p = 0.0001	p = 0.00001
		•	•	•	1
SM Group	0.299***	0.081***	0.069***	0.071***	0.058***
	(0.219, 0.378)	(0.043, 0.120)	(0.047, 0.091)	(0.033, 0.108)	(0.035, 0.082)
	p = 0.000	p = 0.00002	p = 0.000	p = 0.0002	p = 0.00000
ΓV	0.119***	0.031*	0.042***	-0.006	0.030***
- ,	(0.040, 0.199)	(-0.007, 0.070)	(0.020, 0.065)	(-0.044, 0.032)	(0.007, 0.053)
	p = 0.002	p = 0.057	p = 0.0001	p = 0.617	p = 0.006
SM Individual = SM Group	0.0607	0.1600	0.0255	0.0600	0.2220
p-value)	0.0607	0.1608	0.0355	0.8608	0.3228
SM Individual = TV	0.0113	0.2573	0.8255	2e-04	0.1555
(p-value) SM Group= TV	0.0113	0.2373	0.8233	26-04	0.1333
(p-value)	0	0.0132	0.023	1e-04	0.0186
$\mathbf{R}^2$	0.200	0.225	0.090	0.203	0.070
D 10 M					
Panel C: No covariates					
	0.221***	0.055***	0.045***	0.061***	0.047***
	(0.146, 0.296)	(0.018, 0.092)	(0.024, 0.065)	(0.025, 0.097)	(0.026, 0.068)
Panel C: No covariates  SM Individual					
SM Individual	(0.146, 0.296) $p = 0.000$	(0.018, 0.092) $p = 0.002$	(0.024, 0.065) $p = 0.00001$	(0.025, 0.097) $p = 0.0005$	(0.026, 0.068) $p = 0.00001$
SM Individual	(0.146, 0.296) p = 0.000 0.293***	(0.018, 0.092) $p = 0.002$ $0.082***$	(0.024, 0.065) $p = 0.00001$ $0.068***$	(0.025, 0.097) p = 0.0005 0.063***	(0.026, 0.068) $p = 0.00001$ $0.059***$
SM Individual	(0.146, 0.296) $p = 0.000$	(0.018, 0.092) $p = 0.002$	(0.024, 0.065) $p = 0.00001$	(0.025, 0.097) $p = 0.0005$	(0.026, 0.068) $p = 0.00001$
SM Individual SM Group	(0.146, 0.296) p = 0.000 0.293*** (0.211, 0.374) p = 0.000	(0.018, 0.092) p = 0.002 0.082*** (0.041, 0.122) p = 0.00004	(0.024, 0.065) p = 0.00001 0.068*** (0.046, 0.090) p = 0.000	(0.025, 0.097) p = 0.0005 0.063*** (0.024, 0.103) p = 0.001	(0.026, 0.068) p = 0.00001 0.059*** (0.036, 0.082) p = 0.00000
	(0.146, 0.296) p = 0.000 0.293*** (0.211, 0.374) p = 0.000 0.116***	(0.018, 0.092) p = 0.002 0.082*** (0.041, 0.122) p = 0.00004 0.035**	(0.024, 0.065) p = 0.00001 0.068*** (0.046, 0.090) p = 0.000 0.042***	(0.025, 0.097) p = 0.0005 0.063*** (0.024, 0.103) p = 0.001 -0.017	(0.026, 0.068) p = 0.00001 0.059*** (0.036, 0.082) p = 0.00000 0.030***
SM Individual SM Group	(0.146, 0.296) p = 0.000 0.293*** (0.211, 0.374) p = 0.000 0.116*** (0.034, 0.197)	(0.018, 0.092) p = 0.002 0.082*** (0.041, 0.122) p = 0.00004 0.035** (-0.005, 0.076)	(0.024, 0.065) p = 0.00001 0.068*** (0.046, 0.090) p = 0.000 0.042*** (0.020, 0.065)	(0.025, 0.097) p = 0.0005 0.063*** (0.024, 0.103) p = 0.001 -0.017 (-0.056, 0.023)	(0.026, 0.068) p = 0.00001 0.059*** (0.036, 0.082) p = 0.00000 0.030*** (0.007, 0.053)
SM Individual SM Group	(0.146, 0.296) p = 0.000 0.293*** (0.211, 0.374) p = 0.000 0.116***	(0.018, 0.092) p = 0.002 0.082*** (0.041, 0.122) p = 0.00004 0.035**	(0.024, 0.065) p = 0.00001 0.068*** (0.046, 0.090) p = 0.000 0.042***	(0.025, 0.097) p = 0.0005 0.063*** (0.024, 0.103) p = 0.001 -0.017	(0.026, 0.068) p = 0.00001 0.059*** (0.036, 0.082) p = 0.00000 0.030***
SM Individual SM Group TV	(0.146, 0.296) p = 0.000 0.293*** (0.211, 0.374) p = 0.000 0.116*** (0.034, 0.197) p = 0.003	(0.018, 0.092) p = 0.002 0.082*** (0.041, 0.122) p = 0.00004 0.035** (-0.005, 0.076) p = 0.042	(0.024, 0.065) p = 0.00001 0.068*** (0.046, 0.090) p = 0.000 0.042*** (0.020, 0.065) p = 0.0002	(0.025, 0.097) $p = 0.0005$ $0.063***$ $(0.024, 0.103)$ $p = 0.001$ $-0.017$ $(-0.056, 0.023)$ $p = 0.797$	(0.026, 0.068) p = 0.00001 0.059*** (0.036, 0.082) p = 0.00000 0.030*** (0.007, 0.053) p = 0.006
SM Individual SM Group FV Control Mean	(0.146, 0.296) p = 0.000 0.293*** (0.211, 0.374) p = 0.000 0.116*** (0.034, 0.197)	(0.018, 0.092) p = 0.002 0.082*** (0.041, 0.122) p = 0.00004 0.035** (-0.005, 0.076)	(0.024, 0.065) p = 0.00001 0.068*** (0.046, 0.090) p = 0.000 0.042*** (0.020, 0.065)	(0.025, 0.097) p = 0.0005 0.063*** (0.024, 0.103) p = 0.001 -0.017 (-0.056, 0.023)	(0.026, 0.068) p = 0.00001 0.059*** (0.036, 0.082) p = 0.00000 0.030*** (0.007, 0.053)
SM Individual  SM Group  FV  Control Mean  SM Individual = SM Group	(0.146, 0.296) p = 0.000 0.293*** (0.211, 0.374) p = 0.000 0.116*** (0.034, 0.197) p = 0.003	(0.018, 0.092) p = 0.002 0.082*** (0.041, 0.122) p = 0.00004 0.035** (-0.005, 0.076) p = 0.042	(0.024, 0.065) p = 0.00001 0.068*** (0.046, 0.090) p = 0.000 0.042*** (0.020, 0.065) p = 0.0002	(0.025, 0.097) $p = 0.0005$ $0.063***$ $(0.024, 0.103)$ $p = 0.001$ $-0.017$ $(-0.056, 0.023)$ $p = 0.797$	(0.026, 0.068) p = 0.00001 0.059*** (0.036, 0.082) p = 0.00000 0.030*** (0.007, 0.053) p = 0.006
SM Individual SM Group TV  Control Mean SM Individual = SM Group p-value)	(0.146, 0.296) p = 0.000 0.293*** (0.211, 0.374) p = 0.000 0.116*** (0.034, 0.197) p = 0.003	(0.018, 0.092) p = 0.002 0.082*** (0.041, 0.122) p = 0.00004 0.035** (-0.005, 0.076) p = 0.042	(0.024, 0.065) p = 0.00001 0.068*** (0.046, 0.090) p = 0.000 0.042*** (0.020, 0.065) p = 0.0002	(0.025, 0.097) p = 0.0005 0.063*** (0.024, 0.103) p = 0.001 -0.017 (-0.056, 0.023) p = 0.797	(0.026, 0.068) p = 0.00001 0.059*** (0.036, 0.082) p = 0.00000 0.030*** (0.007, 0.053) p = 0.006
SM Individual  SM Group  TV  Control Mean  SM Individual = SM Group p-value)  SM Individual = TV p-value)	(0.146, 0.296) p = 0.000 0.293*** (0.211, 0.374) p = 0.000 0.116*** (0.034, 0.197) p = 0.003	(0.018, 0.092) p = 0.002 0.082*** (0.041, 0.122) p = 0.00004 0.035** (-0.005, 0.076) p = 0.042	(0.024, 0.065) p = 0.00001 0.068*** (0.046, 0.090) p = 0.000 0.042*** (0.020, 0.065) p = 0.0002	(0.025, 0.097) p = 0.0005 0.063*** (0.024, 0.103) p = 0.001 -0.017 (-0.056, 0.023) p = 0.797	(0.026, 0.068) p = 0.00001 0.059*** (0.036, 0.082) p = 0.00000 0.030*** (0.007, 0.053) p = 0.006
SM Individual  SM Group  TV  Control Mean SM Individual = SM Group p-value) SM Individual = TV p-value) SM Group= TV	(0.146, 0.296) p = 0.000 0.293*** (0.211, 0.374) p = 0.000 0.116*** (0.034, 0.197) p = 0.003 -0.193 0.0838 0.0119	(0.018, 0.092) p = 0.002 0.082*** (0.041, 0.122) p = 0.00004 0.035** (-0.005, 0.076) p = 0.042 0.304 0.1897 0.3493	(0.024, 0.065) p = 0.00001 0.068*** (0.046, 0.090) p = 0.000 0.042*** (0.020, 0.065) p = 0.0002 0.032 0.044 0.8219	(0.025, 0.097) p = 0.0005 0.063*** (0.024, 0.103) p = 0.001 -0.017 (-0.056, 0.023) p = 0.797 0.272 0.8829 1e-04	(0.026, 0.068) p = 0.00001 0.059*** (0.036, 0.082) p = 0.00000 0.030*** (0.007, 0.053) p = 0.006 0.038 0.3235 0.1542
SM Individual  SM Group  FV  Control Mean  SM Individual = SM Group p-value)  SM Individual = TV p-value)	(0.146, 0.296) p = 0.000 0.293*** (0.211, 0.374) p = 0.000 0.116*** (0.034, 0.197) p = 0.003 -0.193 0.0838	(0.018, 0.092) p = 0.002 0.082*** (0.041, 0.122) p = 0.00004 0.035** (-0.005, 0.076) p = 0.042 0.304 0.1897	(0.024, 0.065) p = 0.00001 0.068*** (0.046, 0.090) p = 0.000 0.042*** (0.020, 0.065) p = 0.0002	(0.025, 0.097) p = 0.0005 0.063*** (0.024, 0.103) p = 0.001 -0.017 (-0.056, 0.023) p = 0.797 0.272 0.8829	(0.026, 0.068) p = 0.00001 0.059*** (0.036, 0.082) p = 0.00000 0.030*** (0.007, 0.053) p = 0.006 0.038

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

Panel A: Controlling by t	he lagged denendent	variable and covariat	es selected by LASSO						
	Index of (-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 withouth a reason (9)
SM Individual	0.023 (-0.047, 0.093) p = 0.262	0.009 (-0.060, 0.077) p = 0.400	$   \begin{array}{c}     -0.009 \\     (-0.080, 0.063) \\     p = 0.597   \end{array} $	$ \begin{array}{c} -0.018 \\ (-0.087, 0.052) \\ p = 0.690 \end{array} $	$ \begin{array}{c} 0.009 \\ (-0.061, 0.078) \\ p = 0.401 \end{array} $	$ \begin{array}{c} -0.078 \\ (-0.150, -0.005) \\ p = 0.983 \end{array} $	0.019 (-0.012, 0.050) p = 0.118	0.011 (-0.020, 0.042) p = 0.243	0.016 (-0.023, 0.056) p = 0.209
SM Group	0.055*  (-0.022, 0.131)  p = 0.082	-0.021  (-0.095, 0.054)  p = 0.708	$ \begin{array}{c} -0.027 \\ (-0.105, 0.050) \\ p = 0.755 \end{array} $	$ \begin{array}{c} -0.025 \\ (-0.101, 0.051) \\ p = 0.743 \end{array} $	$0.030 \\ (-0.046, 0.105) \\ p = 0.221$	$ \begin{array}{c} -0.015 \\ (-0.094, 0.064) \\ p = 0.646 \end{array} $	$0.010 \\ (-0.024, 0.044) \\ p = 0.279$	$ \begin{array}{c} -0.012 \\ (-0.046, 0.022) \\ p = 0.761 \end{array} $	$\begin{array}{c} 0.016 \\ (-0.027, 0.059) \\ p = 0.236 \end{array}$
TV	-0.017 (-0.094, 0.059) $p = 0.671$	-0.029  (-0.104, 0.045)  p = 0.780	0.032 (-0.045, 0.110) p = 0.208	-0.013  (-0.088, 0.063)  p = 0.629	$0.013 \\ (-0.062, 0.089) \\ p = 0.367$	-0.010 (-0.089, 0.068) $p = 0.602$	$0.012 \\ (-0.022, 0.045) \\ p = 0.248$	$\begin{array}{c} 0.001 \\ (-0.033, 0.035) \\ p = 0.473 \end{array}$	$   \begin{array}{c}     -0.030 \\     (-0.073, 0.013) \\     p = 0.913   \end{array} $
SM Individual = SM Group (p-value) SM Individual = TV	0.4185	0.4355	0.6437	0.8457	0.5914	0.1196	0.6135	0.1776	0.9792
(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 R <sup>2</sup>	3 0.308	9 0.303	5 0.343	7 0.314	5 0.148	9 0.123	7 0.102	8 0.076	6 0.095
Panel B: Controlling by t	he dependent variab	le at baseline (if availa	ible)						
SM Individual	0.030 (-0.041, 0.101) p = 0.207	0.001 (-0.068, 0.071) p = 0.486	$   \begin{array}{c}     -0.007 \\     (-0.079, 0.065) \\     p = 0.580   \end{array} $	$ \begin{array}{c} -0.015 \\ (-0.086, 0.055) \\ p = 0.664 \end{array} $	$0.020 \\ (-0.053, 0.093) \\ p = 0.294$	-0.071 (-0.146, 0.004) p = 0.969	$0.018 \\ (-0.014, 0.049) \\ p = 0.138$	$0.011 \\ (-0.020, 0.043) \\ p = 0.241$	$0.016 \\ (-0.024, 0.056) \\ p = 0.221$
SM Group	0.052* $(-0.025, 0.130)$ $p = 0.094$	$ \begin{array}{c} -0.024 \\ (-0.100, 0.052) \\ p = 0.733 \end{array} $	$-0.018 \\ (-0.096, 0.061) \\ p = 0.671$	$ \begin{array}{c} -0.017 \\ (-0.094, 0.059) \\ p = 0.672 \end{array} $	$0.027 \\ (-0.052, 0.106) \\ p = 0.253$	$ \begin{array}{c} -0.012 \\ (-0.093, 0.070) \\ p = 0.612 \end{array} $	$0.009 \\ (-0.026, 0.043) \\ p = 0.311$	-0.011  (-0.046, 0.023)  p = 0.745	$\begin{array}{c} 0.015 \\ (-0.029, 0.059) \\ p = 0.250 \end{array}$
TV	$-0.024 \\ (-0.101, 0.054) \\ p = 0.726$	$ \begin{array}{c} -0.034 \\ (-0.109, 0.041) \\ p = 0.812 \end{array} $	0.038 (-0.041, 0.116) p = 0.173	$   \begin{array}{c}     -0.008 \\     (-0.084, 0.069) \\     p = 0.578   \end{array} $	0.018  (-0.061, 0.097)  p = 0.331	$ \begin{array}{c} -0.019 \\ (-0.100, 0.063) \\ p = 0.673 \end{array} $	$0.012 \\ (-0.022, 0.047) \\ p = 0.238$	$\begin{array}{c} 0.003 \\ (-0.032, 0.037) \\ p = 0.443 \end{array}$	$ \begin{array}{c} -0.031 \\ (-0.075, 0.013) \\ p = 0.919 \end{array} $
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) R <sup>2</sup>	0.0614	0.7994	0.177	0.8075	0.8238	0.8729	0.8299	0.434	0.0432
$\frac{R^2}{}$	0.292	0.283	0.329	0.295	0.062	0.050	0.061	0.061	0.062
Panel C: No covariates									
SM Individual	$ \begin{array}{c} 0.020 \\ (-0.062, 0.102) \\ p = 0.315 \end{array} $	0.018 (-0.062, 0.097) p = 0.333	$ \begin{array}{c} -0.026 \\ (-0.110, 0.059) \\ p = 0.724 \end{array} $	0.004 (-0.077, 0.084) p = 0.466	$ \begin{array}{c} 0.020 \\ (-0.053, 0.093) \\ p = 0.294 \end{array} $	-0.071 (-0.146, 0.004) p = 0.969	0.018 (-0.014, 0.049) p = 0.138	0.011 (-0.020, 0.043) p = 0.241	0.016 (-0.024, 0.056) p = 0.221
SM Group	$\begin{array}{c} 0.036 \\ (-0.053, 0.125) \\ p = 0.216 \end{array}$	$0.016 \\ (-0.071, 0.102) \\ p = 0.363$	$ \begin{array}{c} -0.028 \\ (-0.120, 0.064) \\ p = 0.725 \end{array} $	$ \begin{array}{c} -0.016 \\ (-0.104, 0.072) \\ p = 0.638 \end{array} $	$0.027 \\ (-0.052, 0.106) \\ p = 0.253$	$ \begin{array}{c} -0.012 \\ (-0.093, 0.070) \\ p = 0.612 \end{array} $	$0.009 \\ (-0.026, 0.043) \\ p = 0.311$	-0.011 (-0.046, 0.023) p = 0.745	$\begin{array}{c} 0.015 \\ (-0.029, 0.059) \\ p = 0.250 \end{array}$
TV	-0.005  (-0.094, 0.084)  p = 0.546	$-0.022 \\ (-0.108, 0.065) \\ p = 0.690$	0.008 (-0.084, 0.100) p = 0.432	$ \begin{array}{c} -0.031 \\ (-0.119, 0.056) \\ p = 0.759 \end{array} $	$0.018 \\ (-0.061, 0.097) \\ p = 0.331$	$ \begin{array}{c} -0.019 \\ (-0.100, 0.063) \\ p = 0.673 \end{array} $	$0.012 \\ (-0.022, 0.047) \\ p = 0.238$	$\begin{array}{c} 0.003 \\ (-0.032, 0.037) \\ p = 0.443 \end{array}$	$ \begin{array}{c} -0.031 \\ (-0.075, 0.013) \\ p = 0.919 \end{array} $
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) Observations	0.3787 4,165	0.4097 4,165	0.4533 4,165	0.7339 4,165	0.8238 4,165	0.8729 4,165	0.8299 4,165	0.434 4,165	0.0432 4,165
R <sup>2</sup>	0.062	0.055	0.069	0.075	0.062	0.050	0.061	0.061	0.062

Table S20: Treatment effect on attitudes on sexual violence

		variable and covaria							Seriousness
	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	of a child telling that was sexually harassed by a relative
M Individual	(1) $-0.010$ $(-0.089, 0.069)$ $p = 0.597$	(2) $-0.024$ $(-0.110, 0.061)$ $p = 0.712$	(3) 0.010 (-0.013, 0.034) p = 0.196	(4) $-0.027$ $(-0.083, 0.029)$ $p = 0.827$	(5) 0.062 (-0.036, 0.160) p = 0.107	(6) -0.043 (-0.096, 0.010) p = 0.945	(7) 0.008 (-0.053, 0.068) p = 0.403	(8) $-0.054$ $(-0.122, 0.014)$ $p = 0.941$	(9) 0.018 (-0.040, 0.076 p = 0.273
M Group	$0.012 \\ (-0.074, 0.098) \\ p = 0.393$	$ \begin{array}{c} -0.029 \\ (-0.122, 0.064) \\ p = 0.728 \end{array} $	$0.005 \\ (-0.021, 0.030) \\ p = 0.362$	$ \begin{array}{c} -0.033 \\ (-0.093, 0.028) \\ p = 0.853 \end{array} $	$\begin{array}{c} 0.040 \\ (-0.067, 0.146) \\ p = 0.233 \end{array}$	$\begin{array}{c} 0.025 \\ (-0.032, 0.083) \\ p = 0.195 \end{array}$	$\begin{array}{c} 0.014 \\ (-0.052, 0.079) \\ p = 0.341 \end{array}$	$ \begin{array}{c} -0.012 \\ (-0.086, 0.062) \\ p = 0.628 \end{array} $	0.047* $(-0.017, 0.110)$ $p = 0.075$
v	$0.064* \\ (-0.023, 0.150) \\ p = 0.075$	$\begin{array}{c} 0.010 \\ (-0.083, 0.103) \\ p = 0.417 \end{array}$	0.011 (-0.015, 0.037) p = 0.199	$\begin{array}{c} 0.031 \\ (-0.030, 0.092) \\ p = 0.159 \end{array}$	$\begin{array}{c} 0.009 \\ (-0.097, 0.115) \\ p = 0.435 \end{array}$	$\begin{array}{c} 0.028 \\ (-0.030, 0.086) \\ p = 0.171 \end{array}$	0.049* (-0.016, 0.115) p = 0.069	$ \begin{array}{c} -0.053 \\ (-0.126, 0.021) \\ p = 0.920 \end{array} $	$ \begin{array}{c} -0.003 \\ (-0.067, 0.060 \\ p = 0.544 \end{array} $
M Individual = SM Group p-value)	0.6203	0.9266	0.6662	0.8544	0.6797	0.0203	0.8542	0.2705	0.3755
M Individual = TV p-value)	0.0957	0.4697	0.953	0.0629	0.3285	0.0159	0.2103	0.9728	0.5078
M Group= TV p-value) Jum. Lasso covariates	0.2525 8	0.4256 4	0.6313	0.0457 6	0.5815 9	0.9337 8	0.2959 9	0.2956 9	0.1296 6
2	0.134	0.070	0.062	0.080	0.138	0.081	0.080	0.111	0.092
Panel B: Controlling by the	ne dependent variabl	le at baseline (if avail	lable)						
M Individual	-0.018  (-0.101, 0.064)  p = 0.668	$ \begin{array}{c} -0.028 \\ (-0.114, 0.057) \\ p = 0.741 \end{array} $	$\begin{array}{c} 0.010 \\ (-0.013, 0.034) \\ p = 0.194 \end{array}$	-0.027 (-0.084, 0.029) $p = 0.829$	0.074*  (-0.028, 0.175)  p = 0.078	$-0.046 \\ (-0.100, 0.008) \\ p = 0.955$	$0.006 \\ (-0.054, 0.067) \\ p = 0.418$	$ \begin{array}{c} -0.047 \\ (-0.117, 0.022) \\ p = 0.908 \end{array} $	$0.016 \\ (-0.043, 0.075 \\ p = 0.296$
M Group	$0.008 \\ (-0.082, 0.098) \\ p = 0.431$	$-0.024 \\ (-0.117, 0.069) \\ p = 0.695$	$\begin{array}{c} 0.004 \\ (-0.022, 0.030) \\ p = 0.378 \end{array}$	$ \begin{array}{c} -0.033 \\ (-0.095, 0.028) \\ p = 0.856 \end{array} $	$\begin{array}{c} 0.046 \\ (-0.064, 0.157) \\ p = 0.207 \end{array}$	$\begin{array}{c} 0.022 \\ (-0.037, 0.080) \\ p = 0.234 \end{array}$	$\begin{array}{c} 0.012 \\ (-0.054, 0.078) \\ p = 0.365 \end{array}$	$ \begin{array}{c} -0.010 \\ (-0.086, 0.066) \\ p = 0.604 \end{array} $	0.046* (-0.018, 0.110 p = 0.079
'V	0.072* $(-0.017, 0.162)$ $p = 0.057$	$0.017 \\ (-0.076, 0.110) \\ p = 0.364$	$0.010 \\ (-0.015, 0.036) \\ p = 0.215$	$\begin{array}{c} 0.033 \\ (-0.029, 0.094) \\ p = 0.148 \end{array}$	-0.004  (-0.114, 0.107)  p = 0.526	$\begin{array}{c} 0.030 \\ (-0.029, 0.088) \\ p = 0.159 \end{array}$	0.051*  (-0.014, 0.117)  p = 0.064	$ \begin{array}{c} -0.060 \\ (-0.136, 0.015) \\ p = 0.941 \end{array} $	$0.0004 \\ (-0.063, 0.064) \\ p = 0.496$
M Individual = SM Group p-value)	0.5684	0.9322	0.631	0.8501	0.6291	0.0232	0.876	0.3395	0.3589
M Individual = TV p-value) M Group= TV	0.0481	0.3459	0.9956	0.0556	0.1714	0.0108	0.1815	0.7343	0.6303
p-value)	0.1702 0.061	0.4025 0.063	0.642 0.054	0.04 0.059	0.3882 0.064	0.7904 0.049	0.2494 0.058	0.2053 0.057	0.1712 0.073
Panel C: No covariates									
SM Individual	$-0.018 \\ (-0.101, 0.064) \\ p = 0.668$	$ \begin{array}{c} -0.028 \\ (-0.114, 0.057) \\ p = 0.741 \end{array} $	0.010 (-0.013, 0.034) p = 0.194	$ \begin{array}{c} -0.027 \\ (-0.084, 0.029) \\ p = 0.829 \end{array} $	0.074* (-0.028, 0.175) p = 0.078	$ \begin{array}{c} -0.046 \\ (-0.100, 0.008) \\ p = 0.955 \end{array} $	0.006 (-0.054, 0.067) p = 0.418	$ \begin{array}{c} -0.047 \\ (-0.117, 0.022) \\ p = 0.908 \end{array} $	0.016 (-0.043, 0.075 p = 0.296
M Group	$\begin{array}{c} 0.008 \\ (-0.082, 0.098) \\ p = 0.431 \end{array}$	$-0.024 \\ (-0.117, 0.069) \\ p = 0.695$	$\begin{array}{c} 0.004 \\ (-0.022, 0.030) \\ p = 0.378 \end{array}$	$ \begin{array}{c} -0.033 \\ (-0.095, 0.028) \\ p = 0.856 \end{array} $	$0.046 \\ (-0.064, 0.157) \\ p = 0.207$	$\begin{array}{c} 0.022 \\ (-0.037, 0.080) \\ p = 0.234 \end{array}$	$0.012 \\ (-0.054, 0.078) \\ p = 0.365$	$-0.010 \\ (-0.086, 0.066) \\ p = 0.604$	0.046* (-0.018, 0.110 p = 0.079
V	$0.072* \\ (-0.017, 0.162) \\ p = 0.057$	$0.017 \\ (-0.076, 0.110) \\ p = 0.364$	$0.010 \\ (-0.015, 0.036) \\ p = 0.215$	0.033  (-0.029, 0.094)  p = 0.148	-0.004  (-0.114, 0.107)  p = 0.526	$0.030 \\ (-0.029, 0.088) \\ p = 0.159$	0.051*  (-0.014, 0.117)  p = 0.064	$ \begin{array}{c} -0.060 \\ (-0.136, 0.015) \\ p = 0.941 \end{array} $	$0.0004 \\ (-0.063, 0.064 \\ p = 0.496$
ontrol Mean	-0.015	3.615	0.903	4.57	2.105	4.64	4.464	1.631	4.529
M Individual = SM Group o-value)	0.5684	0.9322	0.631	0.8501	0.6291	0.0232	0.876	0.3395	0.3589
M Individual = TV p-value) M Group= TV	0.0481	0.3459	0.9956	0.0556	0.1714	0.0108	0.1815	0.7343	0.6303
p-value) Observations	0.1702 4,165	0.4025 4,165	0.642 4,165	0.04 4,165	0.3882 4,165	0.7904 4,165	0.2494 4,165	0.2053 4,165	0.1712 4,165
$R^2$	0.061	0.063	0.054	0.059	0.064	0.049	0.058	0.057	0.073

Table S21: Treatment effect on donation to organizations supporting women

	Index of		Donating more
	(1,1)	Donation in EGP	than 0 EGP
	(1)	(2)	(3)
SM Individual	$   \begin{array}{c}     -0.009 \\     (-0.090, 0.072) \\     p = 0.835   \end{array} $	-0.124 (-0.749, 0.502) $p = 0.699$	-0.0004  (-0.035, 0.034)  p = 0.982
SM Group	-0.037 (-0.126, 0.051) $p = 0.407$	-0.461 (-1.143, 0.220) $p = 0.185$	-0.006 (-0.043, 0.032) $p = 0.771$
ΓV	-0.022 (-0.110, 0.066) $p = 0.627$	-0.293  (-0.973, 0.386)  p = 0.398	-0.002  (-0.039, 0.035)  p = 0.910
SM Individual = SM Group p-value)	0.5237	0.3323	0.7873
SM Individual = TV p-value) SM Group= TV	0.7691	0.6249	0.9273
p-value) Num. Lasso covariates	0.7357 2	0.6371 1	0.8611
$R^2$	0.090	0.097	0.080
Panel B: Controlling by th	ne dependent varial	ble at baseline (if avail	lable)
SM Individual	$ \begin{array}{c} -0.009 \\ (-0.090, 0.073) \\ p = 0.837 \end{array} $	$ \begin{array}{c} -0.121 \\ (-0.754, 0.511) \\ p = 0.707 \end{array} $	$ \begin{array}{c} -0.0004 \\ (-0.035, 0.034) \\ p = 0.980 \end{array} $
SM Group	-0.038 (-0.127, 0.051) p = 0.401	-0.468  (-1.157, 0.222)  p = 0.184	-0.006 (-0.043, 0.032) $p = 0.761$
ΓV	-0.025 (-0.114, 0.064) $p = 0.580$	$   \begin{array}{c}     -0.315 \\     (-1.003, 0.372) \\     p = 0.369   \end{array} $	-0.003 (-0.041, 0.034) $p = 0.860$
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
$R^2$	0.075	0.077	0.071
Panel C: No covariates			
SM Individual	-0.009  (-0.090, 0.073)  p = 0.837	-0.121  (-0.754, 0.511)  p = 0.707	-0.0004  (-0.035, 0.034)  p = 0.980
SM Group	$   \begin{array}{c}     -0.038 \\     (-0.127, 0.051) \\     p = 0.401   \end{array} $	$ \begin{array}{c} -0.468 \\ (-1.157, 0.222) \\ p = 0.184 \end{array} $	-0.006  (-0.043, 0.032)  p = 0.761
ΓV	-0.025 (-0.114, 0.064) $p = 0.580$	$ \begin{array}{c} -0.315 \\ (-1.003, 0.372) \\ p = 0.369 \end{array} $	-0.003  (-0.041, 0.034)  p = 0.860
Control Mean SM Individual = SM Group	0.01	4.023	0.232
p-value) SM Individual = TV	0.5158	0.326	0.7789
(p-value) SM Group= TV	0.7166	0.5812	0.8777
(p-value)	0.7782	0.6724	0.9009

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

	Index of	Would use	Would contact
	(1,1)	online resources	organization
	(1)	(2)	(3)
SM Individual	0.079**	0.107**	0.062*
	(0.004, 0.154)	(0.009, 0.204)	(-0.025, 0.150)
	p = 0.020	p = 0.017	p = 0.081
M.C	0.100***	0.115**	0.006**
SM Group	0.100***	0.115**	0.096** (0.001, 0.192)
	(0.018, 0.181) p = 0.009	(0.009, 0.221) p = 0.017	p = 0.024
	p = 0.007	p = 0.017	p = 0.02 i
TV .	0.101***	0.150***	0.069*
	(0.020, 0.183)	(0.044, 0.256)	(-0.026, 0.164)
	p = 0.008	p = 0.003	p = 0.079
347 11 1			
M Individual = SM Group	0.6166	0.075	0.4072
p-value) M Individual = TV	0.6166	0.875	0.4873
p-value)	0.5896	0.4226	0.8967
M Group= TV	0.5070	0.7220	0.0707
o-value)	0.9706	0.529	0.5801
lum. Lasso covariates	5	7	6
	0.236	0.195	0.212
Panel B: Controlling by the	ne denendent varia	hle at haseline (if avai	lable)
	•		
M Individual	0.075**	0.096**	0.057
	(-0.001, 0.150) p = 0.026	(-0.002, 0.195)	(-0.031, 0.146)
	p = 0.020	p = 0.028	p = 0.101
M Group	0.097***	0.111**	0.092**
· · · · r	(0.015, 0.179)	(0.004, 0.219)	(-0.004, 0.188)
	p = 0.010	p = 0.021	p = 0.031
<b>T</b> 7	0.101***	0.152***	0.077*
V	0.101***	0.153***	0.066*
	(0.020, 0.183) p = 0.008	(0.046, 0.260) p = 0.003	(-0.030, 0.162) p = 0.088
	p = 0.006	p = 0.003	p – 0.000
M Individual = SM Group			
o-value)	0.5886	0.7833	0.4874
M Individual = TV			
o-value)	0.5237	0.3005	0.8587
M Group= TV	0.0250	0.4502	0.6100
o-value)	0.9258	0.4582	0.6128
.=	0.229	0.179	0.198
Panel C: No covariates			
M Individual	0.054*	0.084*	0.033
***	(-0.028, 0.136)	(-0.021, 0.188)	(-0.062, 0.128)
	p = 0.099	p = 0.059	p = 0.249
	0.000***	0.100***	0.004*
M Group	0.088**	0.102**	0.084*
	(-0.002, 0.177)	(-0.012, 0.215)	(-0.019, 0.187)
	p = 0.028	p = 0.041	p = 0.056
V	0.108***	0.153***	0.078*
	(0.019, 0.197)	(0.040, 0.267)	(-0.025, 0.180)
	p = 0.009	p = 0.005	p = 0.070
ontrol Mean	-0.058	3.06	3.607
M Individual = SM Group	0.4522	0.5553	0.2227
o-value)	0.4622	0.7563	0.3337
M Individual = TV	0.2204	0.2295	0.2061
p-value) M Group= TV	0.2384	0.2285	0.3961
o-value)	0.6662	0.3832	0.9062
Observations	4,165	4,165	4,165

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

	Would use	Would contact
	online resources	organization
		(3)
		0.101***
	(0.035, 0.220)	(0.016, 0.185)
p = 0.003	p = 0.004	p = 0.010
		0.092**
		(0.0002, 0.184) p = 0.025
p = 0.003	p = 0.001	p = 0.023
0.036	0.107**	-0.027
(-0.048, 0.119)	(0.007, 0.208)	(-0.118, 0.065)
p = 0.200	p = 0.019	p = 0.718
0.8129	0.5348	0.855
0.0129	0.5540	0.055
0.0721	0.6878	0.0065
		*****
0.0468	0.3173	0.0131
3	5	5
0.197	0.182	0.176
ie dependent varial	ole at baseline (if ava	ilable)
0.092**	0.109**	0.077**
(0.009, 0.174)	(0.011, 0.208)	(-0.012, 0.167)
p = 0.015	p = 0.015	p = 0.045
0.112***	0.150***	0.082**
		(-0.015, 0.179)
p = 0.007	p = 0.004	p = 0.050
1	•	
		-0.020
		(-0.117, 0.077)
p = 0.184	p = 0.022	p = 0.659
0.6436	0.4616	0.9299
0.2676	0.9885	0.0488
0.1047	0.4707	0.0444
		0.0444
0.073	0.072	0.072
0.092**	0.109**	0.077**
(0.009, 0.174)	(0.011, 0.208)	(-0.012, 0.167)
p = 0.015	p = 0.015	p = 0.045
0.112***	0.150***	0.082**
		(-0.015, 0.179)
p = 0.007	p = 0.004	p = 0.050
	P - 0.00+	P = 0.050
p = 0.007		
0.041	0.110**	-0.020
0.041 (-0.048, 0.131)	(0.003, 0.217)	(-0.117, 0.077)
0.041		
0.041 (-0.048, 0.131) p = 0.184	(0.003, 0.217) p = 0.022	(-0.117, 0.077 p = 0.659
0.041 (-0.048, 0.131)	(0.003, 0.217)	(-0.117, 0.077)
0.041 (-0.048, 0.131) p = 0.184	(0.003, 0.217) p = 0.022	(-0.117, 0.077) p = 0.659
0.041 (-0.048, 0.131) p = 0.184	(0.003, 0.217) p = 0.022	(-0.117, 0.077 p = 0.659
0.041 (-0.048, 0.131) p = 0.184	(0.003, 0.217) p = 0.022	(-0.117, 0.077 p = 0.659
0.041 (-0.048, 0.131) p = 0.184 -0.07 0.6436 0.2676	(0.003, 0.217) p = 0.022 3.322 0.4616 0.9885	(-0.117, 0.077 p = 0.659 3.802 0.9299 0.0488
0.041 (-0.048, 0.131) p = 0.184 -0.07 0.6436	(0.003, 0.217) p = 0.022 3.322 0.4616	$(-0.117, 0.077 \\ p = 0.659$ $3.802$ $0.9299$
	Index of (1,1) (1) (1) (1) (1) (1) (1) (1) (0.113*** (0.036, 0.189) $p = 0.003$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

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

	Index of	TT 1 1'	Contacted
	(1,1)	Used online resources	organization
	(1)	(2)	(3)
SM Individual	0.060**	0.076***	0.015
3W marviada	(-0.0001, 0.120)	(0.019, 0.134)	(-0.030, 0.060)
	p = 0.026	p = 0.005	p = 0.264
	r ***=*	Γ	r
M Group	0.100***	0.060**	0.069***
	(0.035, 0.166)	(-0.002, 0.122)	(0.020, 0.118)
	p = 0.002	p = 0.030	p = 0.003
V	0.089***	0.085***	0.041*
	(0.024, 0.155)	(0.023, 0.148)	(-0.008, 0.089)
	p = 0.004	p = 0.004	p = 0.052
M Individual = SM Group	0.2241	0.6056	0.0292
p-value) M Individual = TV	U.2241	0.0030	0.0292
p-value)	0.3754	0.7761	0.2953
M Group= TV			
p-value)	0.748	0.4335	0.2676
Num. Lasso covariates	7	10	8
	0.467	0.519	0.271
Panel B: Controlling by the	he dependent variab	le at baseline (if avail	able)
M Individual	0.059**	0.069***	0.021
	(-0.001, 0.120)	(0.011, 0.126)	(-0.025, 0.066)
	p = 0.027	p = 0.010	p = 0.187
MC	0.102***	0.057**	0.07/***
M Group	0.102*** (0.037, 0.168)	0.057** (-0.006, 0.120)	0.076*** (0.027, 0.125)
	p = 0.002	p = 0.038	p = 0.002
	•	•	1
V	0.094***	0.087***	0.049**
	(0.029, 0.160)	(0.024, 0.149)	(-0.0003, 0.098)
	p = 0.003	p = 0.004	p = 0.026
M Individual = SM Group			
p-value)	0.2021	0.7237	0.0266
M Individual = TV			
o-value)	0.2961	0.5701	0.2631
M Group= TV	0.0012	0.2670	0.000
o-value)	0.8213	0.3679	0.283
.2	0.462	0.510	0.260
Panel C: No covariates			
M Individual	0.055**	0.074***	0.013
	(-0.007, 0.117)	(0.016, 0.133)	(-0.033, 0.058)
	p = 0.042	p = 0.007	p = 0.296
M Group	0.107***	0.066**	0.075***
M Group	(0.040, 0.175)	(0.003, 0.130)	$(0.075^{-0.00})$
	p = 0.001	p = 0.021	p = 0.002
	P = 0.001	P = 0.021	P = 0.002
V	0.103***	0.097***	0.049**
	(0.036, 0.170)	(0.033, 0.160)	(-0.001, 0.099)
	p = 0.002	p = 0.002	p = 0.027
- nt1 M	0.147	1.255	1 110
ontrol Mean M Individual = SM Group	-0.147	1.355	1.118
o-value)	0.1241	0.8081	0.015
M Individual = TV	0.1241	0.0001	0.015
o-value)	0.1574	0.4919	0.1528
M Group= TV		<del>-</del> -	
p-value)	0.9033	0.3636	0.3265
bservations	4,165	4,165	4,165
$\xi^2$	0.432	0.497	0.238

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

	Index of	Used online	Contacted
	(1,1)	resources	organization
	(1)	(2)	(3)
SM Individual	0.135***	0.100***	0.096***
	(0.062, 0.207)	(0.037, 0.163)	(0.037, 0.155)
	p = 0.0002	p = 0.002	p = 0.001
SM Group	0.041	0.053*	0.008
SWI Group	(-0.038, 0.120)	(-0.016, 0.122)	(-0.056, 0.073)
	p = 0.153	p = 0.065	p = 0.398
	P 0.122	P 0.000	P 0.550
ΓV	0.099***	0.095***	0.051*
	(0.020, 0.178)	(0.026, 0.163)	(-0.013, 0.115)
	p = 0.007	p = 0.004	p = 0.060
SM Individual = SM Group	0.021	0.1053	0.00=0
p-value)	0.021	0.1873	0.0078
SM Individual = TV p-value)	0.3777	0.8799	0.1715
p-value) SM Group= TV	0.5111	0.0777	0.1/13
p-value)	0.1619	0.2527	0.2045
Num. Lasso covariates	10	9	7
R <sup>2</sup>	0.283	0.262	0.230
n In a :			
Panel B: Controlling by the	ne dependent varia	ble at baseline (if avai	
SM Individual	0.131***	0.092***	0.102***
	(0.058, 0.204)	(0.027, 0.156)	(0.043, 0.162)
	p = 0.0003	p = 0.003	p = 0.0004
	0.000	0.045	0.000
SM Group	0.038	0.046	0.009
	(-0.041, 0.118)	(-0.025, 0.116)	(-0.056, 0.073)
	p = 0.173	p = 0.102	p = 0.398
ïV	0.100***	0.089***	0.054*
	(0.021, 0.179)	(0.019, 0.160)	(-0.011, 0.118)
	p = 0.007	p = 0.007	p = 0.052
	= 	<u> </u>	
M Individual = SM Group		<u> </u>	
p-value)	0.0219	0.2005	0.0045
M Individual = TV			
p-value)	0.4371	0.945	0.1386
SM Group= TV	0.1272	0.2252	0.1010
p-value)	0.1372	0.2353	0.1812
<u>-                                    </u>	0.276	0.228	0.218
Panel C: No covariates			
SM Individual	0.153***	0.119***	0.104***
111 IIIUIVIUuai	(0.070, 0.236)	(0.047, 0.190)	(0.039, 0.169)
	p = 0.0002	p = 0.001	p = 0.001
	r 0.0002	г	P 0.001
SM Group	0.024	0.038	-0.001
	(-0.066, 0.114)	(-0.039, 0.116)	(-0.072, 0.069)
	p = 0.301	p = 0.168	p = 0.515
N 7	0.000***	0.000***	0.040
V	0.083**	0.083**	0.040
	(-0.007, 0.173)	(0.006, 0.160)	(-0.031, 0.110)
	p = 0.036	p = 0.018	p = 0.136
ontrol Moon	0.076	4.064	4 244
Control Mean M. Individual – SM Group	-0.076	4.064	4.244
SM Individual = SM Group p-value)	0.0053	0.0426	0.0036
o-value) M Individual = TV	0.0055	0.0420	0.0036
o-value)	0.1289	0.3685	0.0737
p-value) SM Group= TV	0.1207	0.5005	0.0737
	0.2112	0.269	0.2685
p-value)	0.2112	0.206	
p-value) Observations	0.2112 4,165	0.268 4,165	4,165

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

Panel A: Controlling by the	ne lagged denender	t variable and covaria	ates selected by LASSO	
Taner A. Controlling by the	Index of (1,1,1)	Heard of or experienced yelling	Heard of or experienced hitting	Heard of or experienced sexual abuse
	(1)	(2)	(3)	(4)
SM Individual	$0.031 \\ (-0.039, 0.100) \\ p = 0.385$	0.049 (-0.045, 0.143) p = 0.306	$0.056 \\ (-0.042, 0.154) \\ p = 0.266$	0.004 (-0.102, 0.110) p = 0.939
SM Group	$0.009 \\ (-0.066, 0.085) \\ p = 0.807$	$0.016 \\ (-0.087, 0.118) \\ p = 0.765$	$0.015 \\ (-0.092, 0.122) \\ p = 0.782$	-0.002 (-0.117, 0.114) p = 0.979
TV	0.039 (-0.036, 0.115) p = 0.307	$0.043 \\ (-0.059, 0.145) \\ p = 0.408$	$0.071 \\ (-0.036, 0.177) \\ p = 0.196$	0.025  (-0.090, 0.140)  p = 0.674
SM Individual = SM Group (p-value) SM Individual = TV	0.5803	0.5216	0.4567	0.9223
(p-value) SM Group= TV	0.8249	0.9068	0.7889	0.7264
(p-value) Num. Lasso covariates	0.4483 7	0.6078 3	0.3216 6	0.6618 5
$\underline{\mathbb{R}^2}$	0.340	0.294	0.318	0.289
Panel B: Controlling by the	ne dependent varia	ble at baseline (if avail	able)	
SM Individual	$0.044 \\ (-0.027, 0.114) \\ p = 0.225$	$0.067 \\ (-0.029, 0.163) \\ p = 0.171$	$0.068 \\ (-0.032, 0.168) \\ p = 0.181$	$0.026 \\ (-0.090, 0.142) \\ p = 0.659$
SM Group	$0.015 \\ (-0.062, 0.091) \\ p = 0.705$	$0.019 \\ (-0.085, 0.124) \\ p = 0.715$	0.027  (-0.081, 0.136)  p = 0.621	-0.002  (-0.128, 0.125)  p = 0.981
TV	$0.047 \\ (-0.030, 0.123) \\ p = 0.230$	$0.056 \\ (-0.048, 0.160) \\ p = 0.291$	$0.072 \\ (-0.036, 0.181) \\ p = 0.192$	0.039 (-0.087, 0.166) p = 0.541
SM Individual = SM Group (p-value) SM Individual = TV	0.4624	0.3732	0.4634	0.6675
(p-value) SM Group= TV	0.9348	0.8385	0.9427	0.8383
(p-value) R <sup>2</sup>	0.4236 0.317	0.5012 0.264	0.4303 0.295	0.5353 0.142
Panel C: No covariates				
SM Individual	0.050 (-0.029, 0.130) p = 0.216	0.063 (-0.041, 0.167) p = 0.235	0.089 (-0.022, 0.200) p = 0.118	0.026 (-0.090, 0.142) p = 0.659
SM Group	$0.009 \\ (-0.078, 0.095) \\ p = 0.846$	$0.019 \\ (-0.094, 0.133) \\ p = 0.741$	$0.017 \\ (-0.104, 0.137) \\ p = 0.789$	$ \begin{array}{c} -0.002 \\ (-0.128, 0.125) \\ p = 0.981 \end{array} $
TV	0.045  (-0.042, 0.131)  p = 0.312	$0.048 \\ (-0.066, 0.161) \\ p = 0.410$	0.081  (-0.040, 0.201)  p = 0.189	0.039 (-0.087, 0.166) p = 0.541
Control Mean SM Individual = SM Group	-0.014	3.459	3.111	2.719
(p-value) SM Individual = TV	0.3474	0.4482	0.2429	0.6675
(p-value) SM Group= TV	0.8986	0.7881	0.898	0.8383
(p-value) Observations	0.4259 4,165	0.6312 4,165	0.3082 4,165	0.5353 4,165
$\mathbb{R}^2$	0.129	0.131	0.128	0.142

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

Panel A: Controlling by the	he lagged dependent	variable and covariate	es selected by LASSO	
	Index of (1,1,1)	Heard of or experienced yelling	Heard of or experienced hitting	Heard of or experienced sexual abuse
	(1)	(2)	(3)	(4)
SM Individual	$-0.081^{**}$ $(-0.149, -0.013)$ $p = 0.021$	-0.157*** (-0.245, -0.068) p = 0.001	-0.082* (-0.177, 0.013) p = 0.090	$ \begin{array}{c} -0.034 \\ (-0.139, 0.072) \\ p = 0.530 \end{array} $
SM Group	$-0.044 \\ (-0.118, 0.030) \\ p = 0.245$	$-0.074 \\ (-0.171, 0.022) \\ p = 0.131$	$-0.071 \\ (-0.174, 0.032) \\ p = 0.178$	$ \begin{array}{c} -0.002 \\ (-0.117, 0.113) \\ p = 0.973 \end{array} $
TV	-0.028  (-0.102, 0.046)  p = 0.461	$   \begin{array}{c}     -0.042 \\     (-0.138, 0.054) \\     p = 0.386   \end{array} $	-0.036 (-0.139, 0.067) $p = 0.492$	-0.015  (-0.130, 0.099)  p = 0.793
SM Individual = SM Group (p-value) SM Individual = TV	0.3298	0.0933	0.8305	0.5878
(p-value) SM Group= TV	0.1606	0.0198	0.3806	0.752
(p-value) Num. Lasso covariates	0.677 7	0.5266 3	0.5176 6	0.8243 6
$\mathbb{R}^2$	0.366	0.322	0.326	0.273
Panel B: Controlling by the	ne dependent variabl	e at baseline (if availal	ble)	
SM Individual	-0.085**  (-0.154, -0.015)  p = 0.018	$ \begin{array}{c} -0.142^{***} \\ (-0.232, -0.051) \\ p = 0.003 \end{array} $	-0.100** (-0.197, -0.004) p = 0.041	$-0.012 \\ (-0.126, 0.102) \\ p = 0.838$
SM Group	$-0.051 \\ (-0.127, 0.025) \\ p = 0.187$	$-0.073 \\ (-0.171, 0.025) \\ p = 0.146$	$-0.082 \\ (-0.187, 0.023) \\ p = 0.126$	0.001  (-0.124, 0.125)  p = 0.994
TV	-0.028  (-0.104, 0.047)  p = 0.462	$-0.039 \\ (-0.137, 0.060) \\ p = 0.441$	-0.040 (-0.144, 0.065) $p = 0.458$	$ \begin{array}{c} -0.003 \\ (-0.127, 0.121) \\ p = 0.964 \end{array} $
SM Individual = SM Group (p-value) SM Individual = TV	0.3871	0.1737	0.7278	0.8443
SM Individual = TV (p-value) SM Group= TV	0.1463	0.0404	0.2545	0.8859
(p-value) R <sup>2</sup>	0.5669 0.337	0.5029 0.290	0.4397 0.303	0.9584 0.141
Panel C: No covariates				
SM Individual	-0.057 (-0.136, 0.023) $p = 0.163$	-0.134***  (-0.234, -0.035)  p = 0.009	$-0.044 \\ (-0.151, 0.063) \\ p = 0.422$	-0.012 (-0.126, 0.102) p = 0.838
SM Group	$-0.036 \\ (-0.123, 0.050) \\ p = 0.412$	$-0.062 \\ (-0.170, 0.047) \\ p = 0.265$	-0.060 (-0.176, 0.057) $p = 0.317$	0.001  (-0.124, 0.125)  p = 0.994
ΓV	$-0.015 \\ (-0.101, 0.071) \\ p = 0.730$	-0.032 (-0.141, 0.076) $p = 0.559$	-0.018 (-0.134, 0.099) $p = 0.765$	$   \begin{array}{c}     -0.003 \\     (-0.127, 0.121) \\     p = 0.964   \end{array} $
Control Mean SM Individual = SM Group	0.049	3.619	3.242	2.758
(p-value) SM Individual = TV	0.6436	0.1922	0.7934	0.8443
(p-value) SM Group= TV	0.3476	0.0657	0.6593	0.8859
(p-value) Observations	0.6423 4,165	0.6027 4,165	0.4919 4,165	0.9584 4,165
$R^2$	0.139	0.135	0.133	0.141

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

				Would
	Index of	Would	Would	report
	(1,1,1)	talk husband	talk family	authorities
ON 6 T 1' ' 1 1	(1)	(2)	(3)	(4)
SM Individual	$ \begin{array}{c} -0.035 \\ (-0.112, 0.043) \\ p = 0.382 \end{array} $	-0.026 (-0.108, 0.057) p = 0.542	$ \begin{array}{c} -0.033 \\ (-0.113, 0.047) \\ p = 0.422 \end{array} $	$ \begin{array}{c} -0.008 \\ (-0.101, 0.086) \\ p = 0.870 \end{array} $
SM Group	$   \begin{array}{c}     -0.042 \\     (-0.127, 0.042) \\     p = 0.328   \end{array} $	-0.071  (-0.161, 0.019)  p = 0.121	-0.049  (-0.136, 0.038)  p = 0.266	$0.045 \\ (-0.057, 0.147) \\ p = 0.386$
TV	$   \begin{array}{c}     -0.052 \\     (-0.136, 0.032) \\     p = 0.228   \end{array} $	-0.086*  (-0.176, 0.003)  p = 0.059	$   \begin{array}{c}     -0.062 \\     (-0.149, 0.025) \\     p = 0.162   \end{array} $	$0.057 \\ (-0.045, 0.159) \\ p = 0.272$
SM Individual = SM Group (p-value) SM Individual = TV	0.8612	0.3214	0.7076	0.3095
(p-value) SM Group= TV	0.6881	0.1842	0.5101	0.2126
(p-value) Num. Lasso covariates	0.8251 1	0.744 4	0.7822 7	0.8234 6
R <sup>2</sup>	0.168	0.291	0.180	0.291
Panel B: Controlling by th	e dependent varial	ole at baseline (if ava	ilable)	
SM Individual	$   \begin{array}{c}     -0.032 \\     (-0.110, 0.046) \\     p = 0.418   \end{array} $	$-0.016 \\ (-0.099, 0.068) \\ p = 0.714$	$   \begin{array}{c}     -0.030 \\     (-0.110, 0.050) \\     p = 0.468   \end{array} $	-0.012  (-0.107, 0.082)  p = 0.799
SM Group	-0.042  (-0.127, 0.043)  p = 0.334	-0.065  (-0.155, 0.026)  p = 0.163	$   \begin{array}{c}     -0.050 \\     (-0.137, 0.038) \\     p = 0.266   \end{array} $	$0.051 \\ (-0.052, 0.154) \\ p = 0.337$
TV	$   \begin{array}{c}     -0.054 \\     (-0.138, 0.031) \\     p = 0.215   \end{array} $	-0.086*  (-0.176, 0.005)  p = 0.064	-0.066 (-0.153, 0.021) $p = 0.136$	$0.068 \\ (-0.035, 0.171) \\ p = 0.195$
SM Individual = SM Group (p-value) SM Individual = TV	0.824	0.2904	0.6557	0.2325
(p-value) SM Group= TV	0.6206	0.1296	0.4112	0.1265
(p-value) $R^2$	0.7905 0.166	0.6561 0.276	0.7144 0.174	0.7464 0.272
Panel C: No covariates				
SM Individual	-0.032 (-0.115, 0.050) p = 0.443	$-0.008 \\ (-0.102, 0.087) \\ p = 0.870$	$-0.018 \\ (-0.103, 0.067) \\ p = 0.678$	$   \begin{array}{c}     -0.042 \\     (-0.148, 0.065) \\     p = 0.447   \end{array} $
SM Group	$-0.048 \\ (-0.138, 0.042) \\ p = 0.295$	-0.088*  (-0.190, 0.015)  p = 0.095	$-0.040 \\ (-0.133, 0.053) \\ p = 0.399$	$0.040 \\ (-0.076, 0.157) \\ p = 0.497$
TV	-0.062 (-0.152, 0.028) $p = 0.177$	-0.124**  (-0.227, -0.022)  p = 0.018	-0.063  (-0.155, 0.030)  p = 0.185	$0.079 \\ (-0.037, 0.195) \\ p = 0.183$
Control Mean SM Individual = SM Group	0.032	3.954	3.919	2.828
	0.7321	0.1291	0.6443	0.1686
(p-value) SM Individual = TV				
(p-value)	0.5194	0.0265	0.3451	0.0422

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

SM Individual  SM Group  TV  SM Individual = SM Group (p-value) SM Individual = TV (p-value) SM Group= TV (p-value) Num. Lasso covariates R <sup>2</sup> Panel B: Controlling by the SM Individual  SM Group			Would
SM Group  TV  SM Individual = SM Group (p-value) SM Individual = TV (p-value) SM Group= TV (p-value) Num. Lasso covariates R <sup>2</sup> Panel B: Controlling by the	Index of	Would	report
SM Group  TV  SM Individual = SM Group (p-value) SM Individual = TV (p-value) SM Group= TV (p-value) Num. Lasso covariates R <sup>2</sup> Panel B: Controlling by the	(1,1)	talk family	authorities
SM Group  TV  SM Individual = SM Group (p-value) SM Individual = TV (p-value) SM Group= TV (p-value) Num. Lasso covariates R <sup>2</sup> Panel B: Controlling by the	(1)	(2)	(3)
SM Individual = SM Group (p-value) SM Individual = TV (p-value) SM Group= TV (p-value) Num. Lasso covariates R <sup>2</sup> Panel B: Controlling by the	0.004	0.054	-0.054
FV  SM Individual = SM Group p-value) SM Individual = TV p-value) SM Group= TV p-value) Num. Lasso covariates R <sup>2</sup> Panel B: Controlling by the	(-0.077, 0.084) p = 0.931	(-0.028, 0.135) p = 0.196	(-0.147, 0.039) p = 0.258
M Individual = SM Group p-value) M Individual = TV p-value) M Group= TV p-value) Jum. Lasso covariates 2 Panel B: Controlling by the	-0.048	-0.011	-0.073
SM Individual = SM Group p-value) SM Individual = TV p-value) SM Group= TV p-value) Num. Lasso covariates R Panel B: Controlling by the	(-0.136, 0.040)	(-0.100, 0.077)	(-0.174, 0.029)
M Individual = SM Group p-value) M Individual = TV p-value) M Group= TV p-value) Jum. Lasso covariates 2 Panel B: Controlling by the	p = 0.284	p = 0.803	p = 0.162
p-value) M Individual = TV p-value) M Group= TV p-value) Jum. Lasso covariates 2  Panel B: Controlling by the	0.018	0.034	-0.008
p-value) M Individual = TV p-value) M Group= TV p-value) Jum. Lasso covariates 2  Panel B: Controlling by the	(-0.070, 0.105)	(-0.054, 0.123)	(-0.109, 0.093)
p-value) M Individual = TV p-value) M Group= TV p-value) Jum. Lasso covariates 2  Panel B: Controlling by the	p = 0.693	p = 0.451	p = 0.881
M Individual = TV p-value) M Group= TV p-value) dum. Lasso covariates 2 Panel B: Controlling by the M Individual			
SM Group= TV p-value) Num. Lasso covariates R Panel B: Controlling by the	0.2499	0.1511	0.7183
p-value) Num. Lasso covariates 2 Panel B: Controlling by the	0.7536	0.6628	0.3739
2 <sup>2</sup> Panel B: Controlling by the SM Individual	0.1518	0.3273	0.2219
Panel B: Controlling by the	4 0.111	2 0.123	6 0.120
SM Individual			
	•	•	•
M Group	0.0002 $(-0.083, 0.083)$	0.061 (-0.023, 0.144)	-0.069 $(-0.166, 0.027)$
M Group	p = 0.997	p = 0.153	p = 0.158
- · · · I	-0.050	-0.010	-0.076
	(-0.140, 0.040)	(-0.101, 0.081)	(-0.181, 0.028)
	p = 0.280	p = 0.827	p = 0.153
V	0.019	0.028	0.002
	(-0.071, 0.109)	(-0.063, 0.119)	(-0.103, 0.106)
	p = 0.681	p = 0.547	p = 0.977
M Individual = SM Group	0.0504	0.4070	0.005
p-value)	0.2791	0.1263	0.895
M Individual = TV p-value)	0.684	0.4763	0.1843
M Group= TV	0.064	0.4703	0.1043
p-value)	0.1451	0.4228	0.154
2	0.065	0.075	0.059
Panel C: No covariates			
SM Individual	0.0002	0.061	-0.069
	(-0.083, 0.083)	(-0.023, 0.144)	(-0.166, 0.027)
	p = 0.997	p = 0.153	p = 0.158
M Group	-0.050	-0.010	-0.076
		(-0.101, 0.081)	(-0.181, 0.028)
	(-0.140, 0.040)		
V		p = 0.827	p = 0.153
	(-0.140, 0.040) p = 0.280 0.019	0.028	p = 0.153 $0.002$
	(-0.140, 0.040) $p = 0.280$ $0.019$ $(-0.071, 0.109)$	0.028 (-0.063, 0.119)	p = 0.153 $0.002$ $(-0.103, 0.106)$
ontrol Mean	(-0.140, 0.040) p = 0.280 0.019	0.028	p = 0.153 $0.002$
M Individual = SM Group p-value)	(-0.140, 0.040) $p = 0.280$ $0.019$ $(-0.071, 0.109)$	0.028 (-0.063, 0.119)	p = 0.153 $0.002$ $(-0.103, 0.106)$
M Individual = TV	(-0.140, 0.040) $p = 0.280$ $0.019$ $(-0.071, 0.109)$ $p = 0.681$	0.028 (-0.063, 0.119) p = 0.547	p = 0.153 0.002 (-0.103, 0.106) p = 0.977
p-value) SM Group= TV	(-0.140, 0.040) p = 0.280 0.019 (-0.071, 0.109) p = 0.681 0.004 0.2791	0.028 (-0.063, 0.119) p = 0.547 4.061 0.1263	p = 0.153 0.002 (-0.103, 0.106) p = 0.977 3.999 0.895
p-value)	(-0.140, 0.040) p = 0.280 0.019 (-0.071, 0.109) p = 0.681	0.028 (-0.063, 0.119) p = 0.547 4.061	p = 0.153 0.002 (-0.103, 0.106) p = 0.977 3.999
Observations 22	(-0.140, 0.040) p = 0.280 0.019 (-0.071, 0.109) p = 0.681 0.004 0.2791	0.028 (-0.063, 0.119) p = 0.547 4.061 0.1263	p = 0.153 0.002 (-0.103, 0.106) p = 0.977 3.999 0.895

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

	Index of	Used online	Contacted
	(1,1)	resources	organization
SM Individual	0.017	(2)	(3) $-0.006$
ivi individual	(-0.044, 0.078) $p = 0.586$	(-0.017, 0.090) p = 0.185	(-0.049, 0.038) $p = 0.802$
SM Group	0.032  (-0.034, 0.098)  p = 0.346	$0.017 \\ (-0.041, 0.076) \\ p = 0.561$	$ \begin{array}{c} 0.023 \\ (-0.024, 0.070) \\ p = 0.343 \end{array} $
TV	$0.028 \\ (-0.038, 0.094) \\ p = 0.409$	0.025  (-0.034, 0.083)  p = 0.405	$ \begin{array}{c} 0.013 \\ (-0.034, 0.060) \\ p = 0.598 \end{array} $
SM Individual = SM Group (p-value)	0.6573	0.5232	0.2372
SM Individual = TV			
(p-value) SM Group= TV	0.7471	0.6963	0.449
(p-value) Num. Lasso covariates	0.906 8	0.8077 11	0.6784 7
$R^2$	0.468	0.498	0.295
Panel B: Controlling by the	he dependent varia	ble at baseline (if ava	ilable)
SM Individual	$0.010 \\ (-0.051, 0.071) \\ p = 0.747$	0.035  (-0.019, 0.089)  p = 0.211	$   \begin{array}{c}     -0.012 \\     (-0.056, 0.031) \\     p = 0.578   \end{array} $
SM Group	0.025  (-0.041, 0.092)  p = 0.456	$0.016 \\ (-0.043, 0.075) \\ p = 0.604$	$0.020 \\ (-0.027, 0.068) \\ p = 0.399$
ΓV	$0.024 \\ (-0.042, 0.090) \\ p = 0.473$	0.027  (-0.031, 0.086)  p = 0.361	$ \begin{array}{c} 0.011 \\ (-0.036, 0.059) \\ p = 0.635 \end{array} $
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
Panel C: No covariates			
SM Individual	$0.005 \\ (-0.058, 0.068) \\ p = 0.887$	0.031  (-0.024, 0.086)  p = 0.265	$ \begin{array}{c} -0.014 \\ (-0.058, 0.030) \\ p = 0.538 \end{array} $
SM Group	$0.036 \\ (-0.033, 0.104) \\ p = 0.308$	$0.022 \\ (-0.038, 0.082) \\ p = 0.480$	$0.025 \\ (-0.023, 0.073) \\ p = 0.312$
ΓV	$0.043 \\ (-0.025, 0.111) \\ p = 0.214$	0.036  (-0.024, 0.095)  p = 0.241	0.021  (-0.027, 0.069)  p = 0.394
Control Mean	-0.09	1.342	1.138
SM Individual = SM Group (p-value) SM Individual = TV	0.3732	0.7507	0.1142
(p-value) SM Group= TV	0.2684	0.8848	0.1567
(p-value) Observations	0.8326 4,165	0.6511 4,165	0.8733 4,165
$R^2$	0.424	0.471	0.255

Table S31: Bayes Factor for statistically insignificant coefficients in our main indexes estimates

Index	SM Individual	SM Group	TV
Index on TV show consumption	-	-	-
Index of video of women's empowerment and support consumption	-	-	-
Index of knowledge about treatment information	-	-	-
Index of attitudes toward gender and marital equality	0.122	0.094	0.078
Index of attitudes on sexual violence	0.156	0.119	0.197
Index of donation to organizations supporting women	0.232	0.237	0.131
Index of domestic and sexual violence experienced during COVID-19	0.23	0.063	0.072
Index of hypothetical use of online resources and contact with an organization when	-	-	-
responding to domestic violence			
Index of hypothetical use of online resources and contact with an organization when	-	-	0.093
responding to sexual violence			
Index of recent use of online resources and contact with an organization during	-	-	-
COVID-19			
Index of views on women's future outlook toward gender and marital equality	-	0.128	-
Index of domestic and sexual violence experienced before COVID-19	-	0.118	0.113
Index of hypothetical talking to husband, family members, or reporting to authorities	0.095	0.093	0.103
when responding to domestic violence			
Index of hypothetical talking to husband, family members, or reporting to authorities	0.124	0.165	0.104
when responding to sexual violence			
Index of recent use of online resources and contact with an organization before	0.068	0.086	0.073
COVID-19			

*Notes:* We compute the Bayes Factor for each non-statistically coefficient at the 95% level in our main indexes when including all variables selected by the LASSO model.

Table S32: Power tests for statistically insignificant coefficients in our main indexes estimates

Index	SM Individual	SM Group	TV
Index on TV show consumption	-	-	-
Index of video of women's empowerment and support consumption	-	-	-
Index of knowledge about treatment information	-	-	-
Index of attitudes toward gender and marital equality	0.125	0.123	0.143
Index of attitudes on sexual violence	0.125	0.123	0.143
Index of donation to organizations supporting women	0.125	0.123	0.143
Index of domestic and sexual violence experienced during COVID-19	0.125	0.123	0.143
Index of hypothetical use of online resources and contact with an organization when	-	-	-
responding to domestic violence			
Index of hypothetical use of online resources and contact with an organization when	-	-	0.143
responding to sexual violence			
Index of recent use of online resources and contact with an organization during	-	-	-
COVID-19			
Index of views on women's future outlook toward gender and marital equality	-	0.123	-
Index of domestic and sexual violence experienced before COVID-19	-	0.123	0.143
Index of hypothetical talking to husband, family members, or reporting to authorities	0.125	0.123	0.143
when responding to domestic violence			
Index of hypothetical talking to husband, family members, or reporting to authorities	0.125	0.123	0.143
when responding to sexual violence			
Index of recent use of online resources and contact with an organization before	0.125	0.123	0.143
COVID-19			

*Notes:* We use the R package pwr to compute the minimum detectable effect given our sample size, a significance level of 0.05, and power of 0.80. We perform a two-sided test since we pre-specify a two-sided hypothesis for statistically insignificant effects.

Table S33: Endline survey questions used to create all outcome indices.

		Watched TV at show's time, TV show channels, TV show type
	TV show consumption	Watched TV show, Heard of TV show; prompted and unprompted
Treatment	1 v show consumption	Whether watched TV show episodes, and how many
Consumption		Accurate recall of content and topics of TV show
and Knowledge of	Social media campaign	Watched videos of women's empowerment on social media, WhatsApp
Resources	consumption	Received and watched videos on WhatsApp or Facebook, and how
Resources	consumption	many
		Accurate recall of content and topics of videos
	Vnoveledge shout recourses	Knowledge about online resources
	Knowledge about resources	Knowledge about organizations
		Husband should have final say in all decisions concerning the family,
		earn income
	Attitudes toward Gender and	Yelling justified
	Marital Equality	Women should not gain independence by working outside the house-
Attitudes toward	Maritar Equality	hold
Gender and		FGC is important for marriage, and carries health benefits
Marital Equality,		Marriage under age 18 should be permitted with family consent
and Sexual		Women should be able to divorce husband without a reason
Violence		Colleague comments on female look is sexual harassment
		Verbal harassment has legal consequences
	Attitudes toward Sexual	Support a woman sexually harassed at workplace, street, or hit on street
	Harassment and Violence	Inappropriate clothing or lack of Hijab justifies harassment
	Transsment and Violence	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		should be taken seriously
organization		Donation to organization supporting women
supporting women		Donation to organization supporting women
** *		TT 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Violence	Domestic and sexual violence	Heard of or experienced yelling, hitting, sexual abuse
Exposure,	exposure	
Hypothetical and	Hypothetical behavior around	Would recommend using online resources, contacting a support organi-
Recent Use of	domestic violence	zation
Resources and	Hypothetical behavior around	Would recommend using online resources, contacting a support organi-
Contact with	sexual violence	zation
Organizations	Recent behavior in response to	Recent use of online resources for affected women by domestic vio-
	domestic violence, sexual	lence, or who faced sexual harassment or assault
	harassment or assault	Recent contact with organizations supporting affected women
Future Outlook		In the future, will women have an equal say with their husbands in all
Toward Gender		decisions concerning the family?
and Marital		In the future, will men and women in Egypt have more equal legal
Equality		rights, access to education, and economic opportunities?

A	Sample	representativeness

Table S34: Summary statistics of comparable demographics both in the Arab Barometer sample, the Arab Barometer internet user sample, and the experimental sample

	Arab Barometer	Arab Barometer	Experimental	Arab Barometer
	sample	internet user sample	sample	survey years
Age	38.457	30.238	31.598	2016, 2018
	13.930	10.440	9.137	
	1826	792	4165	
Education	3.352	4.701	5.344	2016, 2018
	1.768	1.225	1.179	
	1861	801	4165	
Whether single	0.176	0.341	0.290	2016, 2018
	0.381	0.475	0.454	
	1861	801	4165	
Whether engaged	0.053	0.114	0.044	2016, 2018
	0.225	0.318	0.205	
	1861	801	4165	
Whether married	0.606	0.479	0.570	2016, 2018
	0.489	0.500	0.495	
	1861	801	4165	
Whether separated	0.047	0.047	0.081	2016, 2018
1	0.211	0.213	0.272	,
	1861	801	4165	
Whether widowed	0.118	0.019	0.016	2016, 2018
Wilder Widewed	0.322	0.137	0.124	2010, 2010
	1861	801	4165	
Relationship status	3.911	2.992	3.253	2016, 2018
xerationsinp status	3.049	1.565	1.556	2010, 2016
	1861	801	4165	
Number of children	1.090	0.916	1.274	2016, 2018
Number of children	1.376	1.235	1.327	2010, 2018
	1861	801	4165	2016 2010
Facebook	0.372	0.877	0.884	2016, 2018
	0.484	0.328	0.321	
	1861	801	4165	
WhatsApp	0.303	0.648	0.857	2018
	0.460	0.478	0.351	
	1200	598	4165	
YouTube	0.220	0.471	0.387	2018
	0.415	0.500	0.487	
	1200	598	4165	
Instagram	0.117	0.276	0.199	2016, 2018
	0.321	0.447	0.399	
	1861	801	4165	
Twitter	0.111	0.262	0.080	2016, 2018
	0.315	0.440	0.272	•
	1861	801	4165	
Snapchat	0.040	0.085	0.043	2018
· ··r	0.195	0.279	0.203	2010
	1200	598	4165	
Hours spent on social media	1.747	2.595	2.879	2018
Tours spent on social media	0.942	0.737	0.896	2010
	1200	598	4165	

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

Table S35: Summary statistics of comparable outcomes both in the Arab Barometer sample, the Arab Barometer internet user sample, and the experimental sample

	Arab Barometer	Arab Barometer	Experimental	Arab Barometer
	sample	internet user sample	sample	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 S36: 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 (0.042)	0.045 (0.043)	-0.044 (0.033)	-0.037 $(0.041)$
Experienced violence x TV	0.105*** (0.041)	0.038 (0.041)	-0.025 (0.041)	-0.053 (0.040)	-0.076 (0.044)	0.004 (0.046)	0.044 (0.039)	-0.002 (0.042)	0.062* (0.043)	0.048* (0.032)	-0.019 (0.041)
Resource knowledge x 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 R <sup>2</sup>	4,165 0.275	4,165 0.290	4,165 0.230	4,165 0.312	4,165 0.150	4,165 0.090	4,165 0.343	4,165 0.245	4,165 0.206	4,165 0.515	4,165 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 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). Although we do not display p-values and confidence intervals, all columns but (6) and (7) use positive one-sided tests of statistical significance. Columns (6) and (7) use to two-sided tests. \* denotes p<0.05, and \*\*\* denotes p<0.01.

Table S37: 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 (0.050)	-0.028 (0.051)	0.027 (0.044)	-0.036 $(0.047)$	-0.038 (0.049)	0.022 (0.038)	0.077** (0.046)
Age x 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**	-0.040 (0.040)	-0.098 (0.045)	0.018 (0.046)	0.071* (0.040)	-0.012 (0.043)	-0.027 (0.044)	-0.050 (0.034)	0.038 (0.042)
Education above BA x TV	-0.048 (0.042)	-0.042 (0.042)	0.003 (0.041)	-0.024 (0.041)	-0.090 (0.045)	0.009 (0.047)	0.100** (0.040)	-0.001 (0.043)	0.025 (0.044)	-0.014 (0.034)	0.023 (0.042)
Married x SM Individual	-0.055	0.104**	-0.001	-0.033	0.018	-0.064	0.084*	0.118***	0.161***	-0.044	-0.001
Married x SM Group	0.019	(0.048) 0.135***	(0.047) -0.048	(0.046)	(0.052)	(0.053) -0.025	(0.046)	(0.049)	(0.050) 0.023	(0.039) -0.075	(0.048)
Married x TV	0.052)	(0.052) 0.104**	(0.051)	(0.050)	0.056)	0.084	0.049)	(0.053) 0.115**	(0.054) 0.094**	(0.042) -0.018	(0.051) 0.068*
Number of children x SM Individual	(0.053) -0.007	(0.053) -0.023	(0.052) 0.074*	(0.051)	(0.057) -0.047	0.059)	(0.050) -0.031	(0.054) -0.041	(0.056) -0.037	(0.043) -0.005	(0.053) -0.012
Number of children x SM Group	(0.052) -0.067	(0.053) -0.027	(0.051) 0.067	(0.050)	(0.056) -0.081	(0.058) -0.010	(0.050) -0.044	(0.053) -0.026	(0.055) 0.003	(0.043) 0.076**	(0.052) -0.082
Number of children x TV	(0.055) -0.056	(0.056) -0.059	(0.054) 0.088*	(0.053)	(0.060) -0.074	(0.061) -0.076	(0.053) -0.008	(0.057) -0.105	(0.058) $-0.081$	(0.045) -0.048	(0.055) -0.020
Social media use x SM Individual	(0.057) 0.059*	(0.057) -0.023	(0.056) 0.045	(0.055) 0.062*	(0.061)	(0.063) 0.052	(0.054) 0.0002	(0.058) 0.066*	(0.060) 0.097**	(0.046) 0.071**	(0.056) 0.072**
Social media use x SM Group	(0.040) 0.047	(0.040) 0.021	(0.039) 0.073**	(0.039) 0.054*	(0.043)	(0.044) -0.034	(0.038) -0.067*	(0.041) 0.024	(0.042) 0.066*	(0.033) 0.087***	(0.040)
Social media use x TV	(0.043)	(0.043)	(0.042) 0.068*	(0.041) 0.089**	(0.046) -0.040	(0.047) -0.016	(0.041) -0.040	(0.044)	(0.045) 0.058	(0.035) 0.078**	(0.042)
Social media hours x SM Individual	(0.044) -0.080	(0.044) -0.082	(0.043) -0.003	(0.042)	(0.047) -0.066	(0.048) -0.073	(0.042)	(0.045) -0.050	(0.046) 0.001	(0.036) -0.038	(0.044) -0.111
	(0.042) -0.062	(0.042) -0.087	(0.041)	(0.040)	(0.045) -0.101	(0.046) -0.099**	(0.040)	(0.043) -0.082	(0.044) -0.067	(0.034)	(0.042) -0.103
Social media hours x SM Group	-0.062 $(0.045)$ $-0.034$	-0.087 $(0.045)$ $-0.072$	(0.044)	-0.099 $(0.043)$ $-0.137$	-0.101 (0.048) -0.098	-0.099 (0.049) -0.110**	(0.043) 0.022	-0.082 (0.046) -0.076	-0.067 (0.047) -0.050	(0.036) 0.021	-0.103 $(0.044)$ $-0.046$
Social media hours x TV	(0.044)	(0.045) 0.007	-0.010 (0.043)	(0.043)	(0.048)	-0.110 (0.049) -0.041	(0.042) -0.055	-0.076 (0.045) -0.040	(0.046)	(0.036)	(0.044)
Husband final say x SM Individual	-0.036 (0.039)	(0.040)	-0.075 (0.039)	-0.015 (0.038)	-0.034 (0.042)	(0.043)	(0.038)	(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 (0.042)	-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 R <sup>2</sup>	4,165 0.289	4,165 0.287	4,165 0.243	4,165 0.320	4,165 0.159	4,165 0.108	4,165 0.352	4,165 0.250	4,165 0.211	4,165 0.486	4,165 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 S16 to S26.Although we do not display p-values and confidence intervals, all columns but (6) and (7) use positive one-sided tests of statistical significance. Columns (6) and (7) use to two-sided tests. \* denotes p<0.1, \*\* denotes p<0.05, and \*\*\* denotes p<0.01.

Table S38: Treatment effect on main indexes with post-stratification weights to mimic Facebook advertisement sample distribution across Egyptian governorates and age groups

Panel A: Controlling by the lagged	dependent varia	ıble and covariat	es selected by L/	ASSO							
SM Individual	Index of TV show consumption (1) 0.153***	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) —0.018	Index of donation to organizations supporting women (6) -0.077*	Index of domestic and sexual violence experienced during COVID-19 (7) 0.025	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) 0.106***	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)
	(0.076, 0.230) p = 0.0001	(0.947, 1.101) p = 0.000	(0.135, 0.286) p = 0.00000	(-0.089, 0.058) p = 0.660	(-0.102, 0.065) p = 0.667	p = 0.092	(-0.048, 0.097) p = 0.506	(-0.042, 0.113) p = 0.187	(0.026, 0.187) p = 0.005	(-0.024, 0.099) p = 0.117	(0.096, 0.250) p = 0.00001
SM Group	0.194*** (0.110, 0.277) p = 0.00001	0.932*** (0.849, 1.016) p = 0.000	0.310*** (0.229, 0.391) p = 0.000	$0.019 \\ (-0.060, 0.098) \\ p = 0.319$	-0.018  (-0.108, 0.073)  p = 0.650	$-0.087^*$ (-0.183, 0.009) p = 0.077	$0.007 \\ (-0.071, 0.085) \\ p = 0.868$	$0.060^*$ (-0.024, 0.144) p = 0.080	0.103** (0.016, 0.189) p = 0.011	0.119*** (0.052, 0.185) p = 0.0003	$0.067* \\ (-0.016, 0.151) \\ p = 0.057$
TV	0.835*** (0.751, 0.918) p = 0.000	0.477*** (0.393, 0.561) p = 0.000	0.153*** (0.072, 0.235) p = 0.0002	$-0.040 \\ (-0.119, 0.040) \\ p = 0.837$	$0.031 \\ (-0.059, 0.122) \\ p = 0.250$	$-0.079 \\ (-0.175, 0.018) \\ p = 0.111$	0.067* (-0.011, 0.145) p = 0.093	0.055* (-0.029, 0.139) p = 0.099	0.017 (-0.070, 0.104) p = 0.355	0.093*** (0.026, 0.159) p = 0.004	$\begin{array}{c} 0.052 \\ (-0.032, 0.135) \\ p = 0.114 \end{array}$
SM Individual = SM Group (p-value) SM Individual = TV (p-value) SM Group= TV (p-value) Num. Lasso covariates	0.3333 0 0 6	0.0289 0 0 4	0.0152 0.1647 2e-04 9	0.3882 0.544 0.1535 3	0.988 0.2802 0.2983 8	0.8339 0.9706 0.8673 2	0.6481 0.2834 0.1363 7	0.5553 0.638 0.9105 5	0.9315 0.0414 0.0569 3	0.0149 0.1009 0.4508 7	0.0119 0.0041 0.7136 10
<u>R<sup>2</sup></u>	0.332	0.302	0.265	0.348	0.162	0.198	0.366	0.270	0.217	0.488	0.276
Panel B: Controlling by the depende											
SM Individual	0.175*** (0.096, 0.254) p = 0.00001	1.028*** (0.950, 1.105) p = 0.000	0.227*** (0.150, 0.304) p = 0.000	$\begin{array}{c} 0.004 \\ (-0.070, 0.079) \\ p = 0.454 \end{array}$	-0.038  (-0.124, 0.048)  p = 0.807	$-0.046 \\ (-0.138, 0.045) \\ p = 0.319$	$\begin{array}{c} 0.043 \\ (-0.031, 0.116) \\ p = 0.254 \end{array}$	0.024  (-0.054, 0.102)  p = 0.272	0.104*** (0.018, 0.191) p = 0.009	$\begin{array}{c} 0.030 \\ (-0.032, 0.092) \\ p = 0.173 \end{array}$	0.167*** (0.090, 0.245) p = 0.00002
SM Group	0.194*** (0.108, 0.280) p = 0.00001	0.934*** (0.850, 1.017) p = 0.000	0.321*** (0.238, 0.404) p = 0.000	$0.026 \\ (-0.054, 0.107) \\ p = 0.262$	$   \begin{array}{c}     -0.034 \\     (-0.128, 0.059) \\     p = 0.766   \end{array} $	-0.065  (-0.164, 0.033)  p = 0.193	$ \begin{array}{c} -0.00002 \\ (-0.079, 0.079) \\ p = 1.000 \end{array} $	$0.049 \\ (-0.035, 0.133) \\ p = 0.129$	0.090** $(-0.003, 0.184)$ $p = 0.030$	0.116*** (0.049, 0.183) p = 0.0004	0.064* $(-0.019, 0.148)$ $p = 0.066$
TV	0.835*** (0.749, 0.920) p = 0.000	0.475*** (0.391, 0.559) p = 0.000	0.151*** (0.067, 0.234) p = 0.0002	$   \begin{array}{c}     -0.037 \\     (-0.117, 0.044) \\     p = 0.814   \end{array} $	0.030 (-0.064, 0.123) p = 0.268	$ \begin{array}{c} -0.080 \\ (-0.179, 0.019) \\ p = 0.114 \end{array} $	0.070* (-0.010, 0.149) p = 0.087	$0.057* \\ (-0.027, 0.142) \\ p = 0.093$	0.035 (-0.058, 0.129) p = 0.230	0.101*** (0.034, 0.168) p = 0.002	0.047 (-0.037, 0.130) p = 0.137
SM Individual = SM Group (p-value) SM Individual = TV (p-value) SM Group= TV (p-value) R <sup>2</sup>	0.6574 0 0 0.289	0.0258 0 0 0.295	0.0248 0.0693 1e-04 0.225	0.5899 0.3138 0.1328 0.328	0.9384 0.1521 0.1867 0.101	0.7019 0.5039 0.7792 0.158	0.2844 0.5047 0.0913 0.340	0.5643 0.4423 0.8491 0.261	0.7643 0.1449 0.2585 0.089	0.0102 0.0365 0.6565 0.479	0.0142 0.0043 0.6848 0.270
Panel C: No covariates											
SM Individual	0.207*** (0.123, 0.291) p = 0.00000	1.034*** (0.955, 1.112) p = 0.000	0.229*** (0.150, 0.308) p = 0.000	-0.037 (-0.122, 0.049) $p = 0.799$	-0.038 (-0.124, 0.048) p = 0.807	-0.046 (-0.138, 0.045) p = 0.319	0.030 (-0.054, 0.113) p = 0.487	$0.027 \\ (-0.058, 0.113) \\ p = 0.267$	0.104*** (0.018, 0.191) p = 0.009	0.028 (-0.036, 0.093) p = 0.196	0.190*** (0.104, 0.276) p = 0.00001
SM Group	0.253*** (0.163, 0.344) p = 0.00000	0.951*** (0.866, 1.036) p = 0.000	0.313*** (0.228, 0.399) p = 0.000	$   \begin{array}{c}     -0.008 \\     (-0.100, 0.085) \\     p = 0.567   \end{array} $	$   \begin{array}{c}     -0.034 \\     (-0.128, 0.059) \\     p = 0.766   \end{array} $	-0.065  (-0.164, 0.033)  p = 0.193	$ \begin{array}{c} -0.015 \\ (-0.105, 0.075) \\ p = 0.739 \end{array} $	$0.041 \\ (-0.051, 0.134) \\ p = 0.192$	0.090** (-0.003, 0.184) p = 0.030	0.136*** (0.067, 0.206) p = 0.0001	$0.059 \\ (-0.034, 0.152) \\ p = 0.108$
TV	0.850*** (0.759, 0.941) p = 0.000	0.506*** (0.420, 0.591) p = 0.000	0.163*** (0.077, 0.249) p = 0.0002	-0.051 (-0.143, 0.042) $p = 0.857$	$\begin{array}{c} 0.030 \\ (-0.064, 0.123) \\ p = 0.268 \end{array}$	$   \begin{array}{c}     -0.080 \\     (-0.179, 0.019) \\     p = 0.114   \end{array} $	$0.051 \\ (-0.040, 0.141) \\ p = 0.274$	0.078**  (-0.015, 0.171)  p = 0.050	0.035  (-0.058, 0.129)  p = 0.230	0.126*** (0.057, 0.196) p = 0.0002	$0.043 \\ (-0.050, 0.136) \\ p = 0.184$
Control Mean SM Individual = SM Group (p-value) SM Individual = TV (p-value) SM Group= TV (p-value) Observations	-0.271 0.3109 0 0 3,910	-0.703 0.0535 0 0 3,910	-0.193 0.0513 0.1256 7e-04 3,910	-0.016 0.5388 0.7653 0.3755 3,910	-0.015 0.9384 0.1521 0.1867 3,910	0.01 0.7019 0.5039 0.7792 3,910	-0.014 0.322 0.6479 0.1599 3,910	-0.058 0.7658 0.2775 0.4416 3,910	-0.07 0.7643 0.1449 0.2585 3,910	-0.147 0.0019 0.0052 0.7817 3,910	-0.076 0.0051 0.0018 0.7431 3,910

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 Ads sample across Egyptian governatores. 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 the 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. All columns but (6) and (7) show 90% confidence intervals (due to two-sided testing). \*denotes p<0.0.1, \*\*\* denotes p<0.05, and \*\*\*\* denotes p<0.05!

0.101

0.107

Table S39: 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	Married	Education (BA)	Attitudes	Experienced violence	Resource knowledge	Hypothetical use and contact	Recent use and contact
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(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
$R^2$	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.

Table S40: Treatment effect on main indexes including 210 rrespondents who responded more than once to the endline

Panel A: Controlling by the lagged	dependent varia	able and covariat	es selected by L	ASSO							
	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)	during COVID-19 (10)	Index of views on women's future outlook toward gender and marital equality (11)
SM Individual	0.139*** (0.068, 0.210) p = 0.0001	1.032*** (0.961, 1.103) p = 0.000	0.222*** (0.152, 0.291) p = 0.000	$0.037 \\ (-0.032, 0.105) \\ p = 0.147$	$ \begin{array}{c} -0.010 \\ (-0.087, 0.068) \\ p = 0.596 \end{array} $	$ \begin{array}{c} -0.019 \\ (-0.097, 0.060) \\ p = 0.642 \end{array} $	$\begin{array}{c} 0.024 \\ (-0.043, 0.091) \\ p = 0.481 \end{array}$	0.076** (0.004, 0.149) p = 0.020	0.107*** (0.033, 0.182) p = 0.003	0.058** (-0.0004, 0.117) p = 0.026	0.126*** (0.055, 0.197) p = 0.0003
SM Group	0.177*** (0.100, 0.254) p = 0.00001	0.938*** (0.860, 1.016) p = 0.000	0.282*** (0.206, 0.358) p = 0.000	0.050* $(-0.025, 0.124)$ $p = 0.096$	0.011  (-0.074, 0.096)  p = 0.400	$ \begin{array}{c} -0.035 \\ (-0.121, 0.050) \\ p = 0.419 \end{array} $	$0.007 \\ (-0.066, 0.081) \\ p = 0.842$	0.084** (0.004, 0.163) p = 0.020	0.102*** (0.020, 0.183) p = 0.008	0.095*** (0.030, 0.159) p = 0.002	$0.018 \\ (-0.060, 0.096) \\ p = 0.328$
TV	0.868*** (0.790, 0.945) p = 0.000	0.473*** (0.395, 0.551) p = 0.000	0.114*** (0.038, 0.191) p = 0.002	$\begin{array}{c} 0.0003 \\ (-0.074, 0.075) \\ p = 0.498 \end{array}$	0.081** (-0.004, 0.166) p = 0.032	$   \begin{array}{c}     -0.029 \\     (-0.115, 0.056) \\     p = 0.503   \end{array} $	$0.029 \\ (-0.045, 0.102) \\ p = 0.445$	0.096*** (0.017, 0.176) p = 0.009	$\begin{array}{c} 0.021 \\ (-0.060, 0.103) \\ p = 0.306 \end{array}$	0.069** (0.005, 0.134) p = 0.018	0.075** $(-0.003, 0.152)$ $p = 0.030$
SM Individual = SM Group (p-value) SM Individual = TV (p-value) SM Group= TV (p-value) Num. Lasso covariates	0.3391 0 0 6	0.0188 0 0 3	0.1219 0.006 0 8	0.7338 0.3424 0.2085 6	0.6357 0.039 0.1201 6	0.7034 0.8074 0.8945 1	0.657 0.9059 0.5838 6	0.8576 0.6248 0.7621 4	0.898 0.0399 0.0602 2	0.2693 0.7397 0.4542 7	0.006 0.1914 0.1609 7
$\frac{R^2}{}$	0.275	0.276	0.235	0.308	0.110	0.088	0.343	0.235	0.193	0.454	0.276
Panel B: Controlling by the depend											
SM Individual	0.143*** (0.071, 0.216) p = 0.0001	1.034*** (0.963, 1.106) p = 0.000	0.224*** (0.154, 0.295) p = 0.000	$\begin{array}{c} 0.042 \\ (-0.027, 0.110) \\ p = 0.119 \end{array}$	$ \begin{array}{c} -0.017 \\ (-0.096, 0.063) \\ p = 0.658 \end{array} $	$ \begin{array}{c} -0.018 \\ (-0.098, 0.061) \\ p = 0.649 \end{array} $	$ \begin{array}{c} 0.036 \\ (-0.032, 0.104) \\ p = 0.299 \end{array} $	$0.071^{**}$ (-0.002, 0.144) p = 0.028	0.084** (0.004, 0.164) p = 0.020	0.058** $(-0.001, 0.117)$ $p = 0.028$	0.123*** (0.053, 0.194) p = 0.0004
SM Group	0.177*** (0.098, 0.256) p = 0.00001	0.940*** (0.862, 1.018) p = 0.000	0.285*** (0.208, 0.363) p = 0.000	$\begin{array}{c} 0.047 \\ (-0.028, 0.122) \\ p = 0.111 \end{array}$	$0.001 \\ (-0.086, 0.088) \\ p = 0.490$	$-0.036 \\ (-0.122, 0.050) \\ p = 0.415$	$\begin{array}{c} 0.013 \\ (-0.061, 0.088) \\ p = 0.726 \end{array}$	0.080** (0.001, 0.160) p = 0.025	0.089** (0.002, 0.176) p = 0.023	0.096*** (0.031, 0.160) p = 0.002	$\begin{array}{c} 0.016 \\ (-0.061, 0.093) \\ p = 0.340 \end{array}$
TV	0.861*** (0.781, 0.940) p = 0.000	0.474*** (0.396, 0.553) p = 0.000	0.120*** (0.043, 0.197) p = 0.002	$ \begin{array}{c} -0.007 \\ (-0.082, 0.069) \\ p = 0.569 \end{array} $	0.080** (-0.007, 0.168) p = 0.036	$ \begin{array}{c} -0.031 \\ (-0.118, 0.055) \\ p = 0.481 \end{array} $	0.035 (-0.039, 0.109) p = 0.358	0.095*** (0.015, 0.174) p = 0.010	$\begin{array}{c} 0.025 \\ (-0.063, 0.112) \\ p = 0.291 \end{array}$	0.074** (0.009, 0.138) p = 0.013	0.077** (0.0001, 0.155) p = 0.025
SM Individual = SM Group (p-value) SM Individual = TV (p-value) SM Group= TV (p-value) R <sup>2</sup>	0.4095 0 0 0.239	0.0186 0 0 0.273	0.1236 0.0084 0 0.207	0.8891 0.2125 0.1765 0.293	0.6919 0.0304 0.0843 0.059	0.6915 0.7745 0.915 0.072	0.5492 0.976 0.5796 0.320	0.8255 0.5641 0.7277 0.228	0.9116 0.1847 0.1609 0.071	0.2515 0.6319 0.518 0.449	0.0069 0.248 0.1332 0.270
Panel C: No covariates											
SM Individual	0.159*** (0.083, 0.235) p = 0.00003	1.033*** (0.961, 1.106) p = 0.000	0.216*** (0.144, 0.289) p = 0.000	$0.032 \\ (-0.047, 0.111) \\ p = 0.215$	-0.017 (-0.096, 0.063) $p = 0.658$	$-0.018 \\ (-0.098, 0.061) \\ p = 0.649$	0.030 (-0.047, 0.107) p = 0.442	0.049 (-0.030, 0.129) p = 0.112	0.084** (0.004, 0.164) p = 0.020	0.056** (-0.005, 0.116) p = 0.036	0.136*** (0.055, 0.216) p = 0.0005
SM Group	0.192*** (0.109, 0.275) p = 0.00001	0.957*** (0.878, 1.036) p = 0.000	0.275*** (0.195, 0.354) p = 0.000	0.035  (-0.052, 0.121)  p = 0.216	$\begin{array}{c} 0.001 \\ (-0.086, 0.088) \\ p = 0.490 \end{array}$	$ \begin{array}{c} -0.036 \\ (-0.122, 0.050) \\ p = 0.415 \end{array} $	$\begin{array}{c} 0.006 \\ (-0.078, 0.091) \\ p = 0.881 \end{array}$	0.068* $(-0.018, 0.155)$ $p = 0.062$	0.089** (0.002, 0.176) p = 0.023	0.102*** (0.037, 0.168) p = 0.002	$ \begin{array}{c} -0.0001 \\ (-0.088, 0.088) \\ p = 0.501 \end{array} $
TV	0.868*** (0.785, 0.952) p = 0.000	0.495*** (0.416, 0.575) p = 0.000	0.112*** (0.032, 0.191) p = 0.003	$\begin{array}{c} 0.015 \\ (-0.072, 0.101) \\ p = 0.372 \end{array}$	0.080** (-0.007, 0.168) p = 0.036	$ \begin{array}{c} -0.031 \\ (-0.118, 0.055) \\ p = 0.481 \end{array} $	$\begin{array}{c} 0.035 \\ (-0.050, 0.119) \\ p = 0.422 \end{array}$	0.100** (0.013, 0.187) p = 0.013	$0.025 \\ (-0.063, 0.112) \\ p = 0.291$	0.086*** (0.020, 0.151) p = 0.006	$0.057 \\ (-0.031, 0.145) \\ p = 0.103$
Control Mean SM Individual = SM Group (p-value) SM Individual = TV (p-value) SM Group= TV (p-value) Observations p.2	-0.263 0.4362 0 0 4,375	-0.705 0.0604 0 0 4,375	-0.185 0.1503 0.0104 1e-04 4,375	-0.021 0.9504 0.6945 0.6573 4,375	-0.011 0.6919 0.0304 0.0843 4,375	0.013 0.6915 0.7745 0.915 4,375	-0.004 0.581 0.9216 0.5264 4,375	-0.047 0.672 0.2598 0.492 4,375	-0.059 0.9116 0.1847 0.1609 4,375	-0.14 0.1642 0.3739 0.6286 4,375	-0.059 0.0025 0.0804 0.2177 4,375

0.072

0.128

0.081

0.071

0.426

0.059

0.162

0.247

0.161

0.065