Empowering Women Facing Gender-Based Violence amid COVID-19 through Media Campaigns

Fotini Christia,[1] Horacio Larreguy,[2*]
Elizabeth Parker-Magyar,[3] Manuel Quintero[4]

[1] Department of Political Science and IDSS, MIT, Cambridge, MA.
[2] Departments of Economics and Political Science, Instituto Tecnológico Autónomo de México, Mexico City, Mexico.
[3] Department of Political Science, MIT, Cambridge, MA.
[4] Department of Pure Mathematics and Mathematical Statistics, University of Cambridge, Cambridge, England.

[*]To whom correspondence should be addressed; E-mail: horacio.larreguy@itam.mx

COVID-19 heightened women's exposure to gender-based and intimate partner violence, especially in Low and Middle-Income Countries. We test whether edutainment interventions 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 organization seeking to support women amid COVID-19 social distancing. We found WhatsApp to be more effective in delivering 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 campaigns had an impact on women's attitudes toward gender or marital equality or on the justifiability of violence. However, the campaign did increase women's knowledge, hypothetical, and reported use of available resources available.

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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 Low and Middle-Income Countries [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 this 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.

This 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 experimental research on edutainment posits that shifts in expressed attitudes and behaviors can occur because exposure to role models or dramatized, entertaining content shapes 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 around them [22, 24, 25]. Studies that apply informational or edutainment interventions around GBV and IPV [23, 25–27] have produced mixed findings on whether and when these interventions lead to attitudinal or behavioral shifts. Some have found that interventions generated attitudinal shifts like increased rejection of violence [23, 25], especially when delivered via communal channels. Related studies, by contrast, 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], there is limited knowledge of whether social media platforms like Facebook and WhatsApp can be effectively used to deliver edutainment interventions, and of their relative effectiveness vis-a-vis traditional media like television.

Egypt, the context of our intervention, features high levels of gender inequality and GBV, rank-

ing 129th out of 153 countries in the World Economic Forum's 2020 Global Gender Gap Index [31]. Although structural factors have been linked to ever-married women's risk of experiencing GBV and IPV [32–34], women across socioeconomic backgrounds report high levels of violence [34]. 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 [35], while a nationally representative sample showed that Egyptian women's exposure to violence increased with COVID-19 mobility restrictions [36].

Despite this high prevalence of violence, only one-third of women surveyed nationally report seeking help to stop violence, and only 18% reported it [35]. 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 was justifiable in some cases [37, p. 1128]. Social norms that blame women who are exposed to IPV, sanction women who report violence to authorities, and stigmatize divorce also present obstacles to women who would seek support [32, 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 [32, 33, 38].

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]. Social distancing then presented existing organizations with the broader challenge of reaching isolated audiences, as it rendered 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.

Amid this setting, 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 the effectiveness of encouragement to watch videos aimed at empowering women produced by ECWR and Aboul Qomsan and hosted across two types of media in shifting attitudes, knowledge, and responses to violence. The first was a weekly television show featuring Aboul Qomsan airing on a popular satellite channel, with 25-30 minutes-long episodes. 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 fac-

tual information.

We followed Aboul Qomsan's experience crafting video messages and content appropriate for the Egyptian context. While naturally different in length and setting, the TV show and the video messages featured similar content (for more details, see Supplementary Table 1 and Table 2). Although the video content does not solely focus on IPV and GBV, most of Aboul Qomsan's content centers on discussing social norms that existing research highlights are linked to sustaining violence. 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 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.

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 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 [39], Mexico [25], and Uganda [26, 27], but differed in how we recruited participants into the study and especially in how we delivered the content. We identified 5,618 Egyptian women recruited through Facebook advertisements, placed across age brackets in every governorate across Egypt (see geographic distribution in Extended Data Fig. 1). The advertisements invited Facebook users 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 about women's issues in Egypt were randomly assigned to different treatment arms described below. 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.

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. Egypt is a site of widespread and fast-growing internet and social media adoption - 72% used the internet and 47% used social media in 2022 [40] - and Facebook and WhatsApp are the two most widely-used social platforms [41]. As Fig. 1 shows, the women in our study are demographically representative of female internet users in Egypt.

We made the decision to include only women in the study for three reasons. First, Aboul

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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 and accompanying social distancing had increased NGOs' and ECWR's insurgency in developing channels to reach women with pertinent information. 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 Supplementary Table 3 - Table 12 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 when and where the TV show would air over an eight-week period. In the remaining three treatment arms, we delivered messages about the videos, which were hosted on Youtube, via WhatsApp and Facebook. Participants assigned to the other three treatment arms— Facebook, WhatsApp Individual or WhatsApp Group —received thirteen links to a website publishing the Youtube videos throughout 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. Lastly, those respondents assigned to the Facebook treatment initially received individual messages via Facebook's Custom Messages Channel. However, this treatment arm was transitioned to individual WhatsApp receipt after the delivery of four videos due to a technical issue with the Facebook account. In the subsequent analysis, we pool individuals who received the messages via WhatsApp and Facebook individually. In all Individual and Group treatments, moderators answered basic questions about the goals of the research.

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. In using the Group functionality of WhatsApp, we aimed to measure whether communally transmitted information on social media functions as effectively as content delivered to a group offline, which has been shown to generate discussions conducive to changes in individuals' beliefs about social norms [25, 42]. In the discussion below, we note substantive differences between WhatsApp groups and other communally-delivered interventions, in particular around moderation [13, 15], which might limit the effectiveness of WhatsApp groups when compared with in-person interventions. Moreover, observing conversation in groups before endline, we noted very low levels of aggregate conversation (for more details, see Supplementary Table 13).

Because our study differs in its use of social and traditional media to deliver content, a challenge was whether individuals would consume the content. For those in the social media treatment arms, we measure their aggregate visits to the server hosting the videos and YouTube views. While this data is subject to error around the website's calculation of unique users, Supple-

mentary Figure 1 and Supplementary Table 14 and Table 15 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 server data also allows us to explore the effectiveness of Facebook vis-a-vis WhatsApp in ways that self-reported viewing at endline would not. To do so, we use 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. The analysis shows that WhatsApp was a more effective method to deliver the intervention content in terms of generating video views, beyond the technical issue necessitating the switch. For more details, see Supplementary Figure 2 and Figure 3.

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 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 respondents' factual knowledge about treatment information (Supplementary Table 16 and Table 17).

Then, to examine how Aboul Qomsan's discussion and endorsement shift 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 (Supplementary Table 18).

We measured attitudinal outcomes linked to social norms that sustain the overall prevalence of violence in Egypt via two indexes centered around content explicitly discussed and endorsed in the videos. The first index of gender and marital equality includes questions about the husband's role in the family, women's place in the workforce, and the justifiability of forms of violence like yelling and hitting (Supplementary Table 19). 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 (Supplementary Table 20). In line with other studies' use of donations to measure commitment to a cause [43, 44], we also measured whether our intervention shifted individuals' willingness to donate some or all of their endline-survey remuneration to a support organization (Supplementary Table 21).

Our main behavioral outcomes centered around hypothetical and recent use of resources in response to domestic or sexual violence (Supplementary Table 22 - Table 24). We preregistered 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 (Supplementary Table 25), including the extent to which 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 hypothesize our intervention would shift, like self-reported exposure to violence (Supplementary Table 26 and Table 27), hypothetical reporting behaviors to family members or authorities (Supplementary Table 28 and Table 29), as well as reporting behaviors before COVID-19 (Supplementary Table 30), which we use as placebo outcomes to ease concerns about demand effects. Because we sought to avoid risks or sensitivity related to personal disclosure, 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. 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. Supplementary Table 33 displays all of the questions used to generate these endline indices. We pre-registered our analysis at link.

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 Fig. 2 underscore the utility of using both social and traditional media to deliver this type of content (Panel 1 shows on TV show consumption, for Social Media individual (SMI) 0.148 SD, $t_{3947} = 3.974$, p < 0.001, 90% Confidence Interval (CI) = (0.075, 0.221); Social Media Group (SMG) 0.182 SD, $t_{3947} = 4.488$, p < 0.001, 90%CI = (0.103, 0.262); TV show reminder (TV) 0.862 SD, $t_{3947} = 21.268$, p < 0.001, 90%CI = (0.782, 0.941). Panel 2 shows consumption of videos disseminated on social media, SMI: 1.026 SD, $t_{3949} = 27.276$, p < 0.001, 90%CI = (0.952, 1.099); SMG 0.935 SD, $t_{3949} = 22.801$, p < 0.001, 90%CI = (0.854, 1.015); TV 0.471 SD, $t_{3949} = 11.527$, p < 0.001, 90%CI = (0.391, 0.552), all one-sided; see disaggregated results for the individual outcomes aggregated into the index in Supplementary Table 16 and Table 17). Relative to control, 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 numerous 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 resources for women subjected to violence (Fig. 2, Panel 3, SMI 0.225 SD, $t_{3945} = 6.134$, p < 0.001, 90%CI $= (0.153,0.297)$; SMG 0.299 SD, $t_{3945} = 7.501$, p < 0.001, 90%CI $= (0.221,0.378)$; TV 0.122 SD, $t_{3945} = 3.073$, p $= 0.002$, 90%CI $= (0.044, 0.200)$, one-sided; see disaggregated results for the individual outcomes aggregated into the index in Supplementary Table 18), 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 control. 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 show, with the exception that there was less knowledge acquisition of organizations other than ECWR among those who received reminders of the TV show (Supplementary Table 18).

Figures 3 through 5 display our results regarding attitudes, resource use, and future outlook. The results in Fig. 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, rejection of sexual violence, or 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 (Fig. 3, Panel 1, 0.055 SD, $t_{3950} = 1.399$, p $= 0.082$, 90%CI $= (-0.022, 0.131)$, one-sided), while those who received reminders of the TV show showed a marginal increase in their index of rejection of sexual violence (Fig. 3, Panel 2, 0.064 SD, $t_{3945} = 1.446$, p $= 0.075$, 90%CI $= (-0.023, 0.150)$, one-sided). For the rest of the estimated coefficients, we found that the data supported the null model over the alternative when using Bayes factors (Supplementary Table 31). The minimum detectable effects of our power analysis (Supplementary Table 32, 0.123-0.143) support that our analysis is sufficiently powered to detect meaningful effects. Supplementary Table 19 - Table 21 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 Supplementary Table 37). 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 [44, 45].

In contrast, as we anticipated in the preregistration, 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 Fig. 4 show that, in hypothetical scenarios of response to domestic and sexual violence, treated participants were more likely to report that they would seek to use online resources or contact a support organization (On domestic violence: SMI 0.079 SD, $t_{3948} = 2.064$, p = 0.020, 90%CI = (0.004, 0.154); SMG 0.100 SD, $t_{3948} = 2.397$, p = 0.009, 90%CI = (0.018, 0.181); TV 0.101 SD, $t_{3948} = 2.441$, p = 0.008, 90%CI = (0.020, 0.183). On sexual violence: SMI 0.113 SD, $t_{3950} = 2.874$, p = 0.003, 90%CI = (0.039, 0.206); SMG 0.123 SD, $t_{3950} = 2.877$, p = 0.003, 90%CI = (0.039, 0.206); all one-sided; see Supplementary Table 22 and Table 23 for disaggregated results).

In turn, 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 Supplementary Figure 4 and Supplementary Table 28 and Table 29). Bayes factors support the null hypothesis over the alternative for each treatment (Supplementary Table 31). These estimates are substantively small, and are sufficiently powered to detect meaningful effects. The preregistration did not hypothesize a shift in these outcomes, as the intervention content not only did not emphasize or encourage these reporting forms, but it also mentioned necessary reforms in the ongoing struggle for women to access justice when subjected to violence.

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 Fig. 4, SMI 0.060 SD, $t_{3944} = 1.957$, p = 0.026, 90%CI = (−0.0001, 0.120); SMG 0.100 SD, $t_{3944} = 3.010$, p = 0.002, 90%CI = (0.035, 0.166); TV 0.089 SD, $t_{3944} = 2.695$, p = 0.004, 90%CI = (0.024, 0.155), all one-sided; see Supplementary Table 24 for disaggregated results). Relative to control, 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 or demand effects, given the active phrasing of these questions around "looked for or accessed" and "contacted," which differs from outcomes related to consumption of intervention content, and asked about the use of organizations and online resources generally, rather than ECWR specifically. The left panel of Fig. 4 shows that these changes in behavior are not due to increased exposure to violence; we found no credible evidence of an effect on reported experience of domestic and sexual violence during COVID-19 (see Supplementary Table 31 for Bayes factors supporting these null results and Supplementary Table 26 for disaggregated results).

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 reminders about the TV show expressed increased beliefs that women would achieve *future* greater gender and marital equality (Fig. 5, SMI 0.135 SD, $t_{3944} = 3.636$, p = 0.0002, 90%CI = (0.062, 0.207); SMG 0.041 SD, $t_{3944} = 1.025$, p = 0.153, 90%CI = (−0.038, 0.120); TV 0.099 SD, $t_{3944} = 2.462$, p = 0.007, 90%CI = (0.020, 0.178), all one-sided; see Supplemen-

tary Table 25 for disaggregated results). However, there is no credible evidence that assignment to receive the messages via social media groups affected these expectations (see Supplementary Table 31 for Bayes Factor supporting this null result). This result does not extend to those who received the messages via social media groups, which we discuss in greater detail below.

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. Figure 1 and Supplementary Table 34 show that the women in our study are largely demographically representative of female internet users in Egypt, albeit slightly younger, as captured by the two most recent rounds of the nationally-representative Arab Barometer survey. Beyond demographic characteristics, Fig. 6 and Supplementary Table 35 display how women in our sample's attitudes differ from those of surveyed women. The data show that the women in our study expressed attitudes slightly more in favor of gender and marital equality at baseline than Arab Barometer respondents. 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 ensure the generalizability of our experimental findings to the broader population of Egyptian female internet users and that slightly more favorable attitudes toward gender or marriage equality at baseline are not producing 'ceiling effects' that drive our null findings, we examine heterogeneous effects according to these and other baseline demographics and attitudes. This analysis finds no credible evidence of heterogeneous effects on our findings by these baseline attitudes or demographic variables (Supplementary Table 36 and Table 37), 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 Figs. 1 and 2, together with this absence of heterogeneous effects, suggest any compositional differences in our sample are unlikely to impact the generalizability of interest.

We further assess generalizability by recomputing our main estimates by weighting the experimental sample to match the governorate-age distribution of Facebook users that saw the recruitment Facebook advertisements. Supplementary Figure 8b 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 Supplementary Table 38 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.

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 de-

mand 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, and we find consistent results across direct and indirect (including hypothetical) questions, as well as questions testing accurate recall. That individuals increased their knowledge of ECWR *alongside* other organizations directly featured in the content (Supplementary Table 19) strongly suggests the 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. However, 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 Supplementary Figure 5, Supplementary Table 26, Table 27, and Table 30) – 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, instead delivering 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.

As it does so, 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 [46] 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 en-

courage the consumption of content disseminated over both social media and TV to generate deeper knowledge and cue greater outreach to support organizations.

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 (Supplementary Figure 6), while 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 and useful outside of COVID-19 contexts given the relatively low cost of this intervention.

The digitally delivered "group-level" intervention differs from communal interventions [13–15] or screenings [23–25] where individuals consume content next to those they consider their neighbors and personal contacts in ways that might lead to more rapid changes in beliefs about social norms. This difference might account for the lack of differential effects we find between the individual and group dissemination in the social media treatment arms and is a limitation of the study. 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 challenges in mimicking or generating groups akin to those who come into contact with 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 their community members.

Finally, 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. The absence of men in the intervention constitutes an additional limitation of the study. 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 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 [47] and exposure to violence [14], or shown that edutainments' impacts

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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

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 receive further videos on "women's empowerment and support" by sending a text to a project WhatsApp account, adding the number to their contacts, and following and sending a message to 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 project completion. 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 risks and perceptions of personal disclosure 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 [48]. 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 (Supplementary Table 1), 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. 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.

Sample recruitment and Surveys

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

In the informed consent of the baseline survey, respondents were told the survey was part of an "evaluation in collaboration with the Egyptian Center for Women's Rights," focused "on the views and behaviors of Egyptian women such as yourself." Near completion of the baseline survey, respondents were invited to text a project WhatsApp account, add the number to their contacts, and follow and send a message to a project Facebook account 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. Supplementary Figure 9 and Supplementary Table 39 explore 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, Supplementary Table 36 and Table 37 show no credible evidence that there are heterogeneous effects on our findings by such baseline characteristics, underscoring 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.

In collaboration with our partner, the baseline survey outcomes were 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 [32, 37]. We also added outcomes from recent modules from the Arab Barometer survey in Egypt and broader research around access community-level interventions [14, 49] 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 of 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 responded to the endline more than once, which are balanced across treatment conditions. Supplementary Table 40 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.

Supplementary Figure 8b 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, Supplementary Figure 7 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, Fig. 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. Supplementary Table 3 displays details on the block randomization procedure, assignment to

treatment, and endline response rates across treatment arms. Supplementary Table 4 - Table 12 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 show's 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. Supplementary Table 1 and Table 2 summarize the content of each TV episode and video disseminated over social media.

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 Fig. 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. 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. 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. Supplementary Figure 2 displays visits per assigned user across videos distinguishing Facebook and WhatsApp Individual treatments. Supplementary Figure 3 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 = 0.022, 95%CI = (0.025, 0.226), two-sided) 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, γ_b are block-randomization fixed effects. The regression weights correspond to the inverse probability of treatment assignment, as detailed in Supplementary Table 3. Our primary estimates (α_{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 Figs. 2 - 5. In Panel B, we control by the lagged dependent variable (if available). In Panel C, we do not control for any covariates.

Preregistration

This study was preregistered at the Evidence in Governance and Politics repository, https://osf.io/tekyr on April 14, 2021.

Data Availability

All the data used in this research, including de-identified baseline and endline survey data, server data on server visits, YouTube channel views, and supplemental Google Mobility data (`https://www.google.com/covid19/mobility/`), 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.

Code Availability

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

5 Acknowledgements

6 Author Contributions Statement

F.C., H.L, and E.P-M developed and designed the experiment, and oversaw and conducted data collection. F.C., H.L., E.P-M, and M.Q. devised statistical analyses. E.P-M. and M.Q. wrote analysis code. M.Q. performed statistical analyses. All authors wrote the manuscript, provided revisions and finalized the text.

7 Competing Interests Statement

The authors declare no competing interests.

8 Tables and Figures

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

(a) Age

(b) Education level

(c) Relationship status

(d) Number of children

(e) Social media use

(f) Weekly hours spent on social media
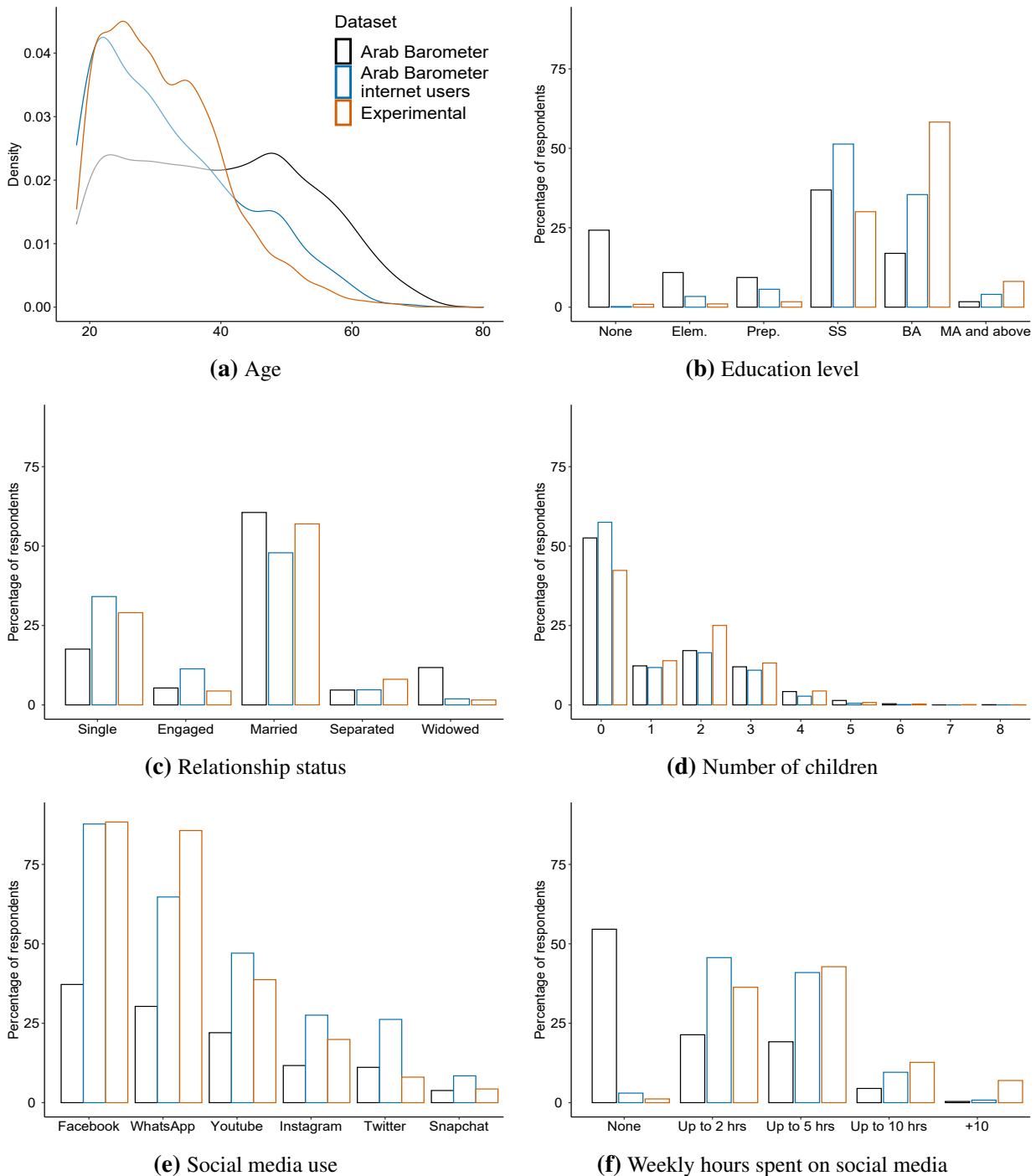
Notes: Panel (a) compares the distribution of respondent ages for our experimental sample, the Arab Barometer, and the Arab Barometer restricted to internet users. Panel (b) is for education level, panel (c) for relationship status, panel (d) for number of children, panel (e) for social media platforms used, and panel (f) for weekly hours spent on social media. The Arab Barometer data belongs to the 2016 and 2018 waves. Additional summary statistic comparisons are in Supplementary Table 34.

Fig. 2: Treatment effects on TV show consumption, Facebook and WhatsApp treatment consumption, and knowledge of resources delivered in treatment
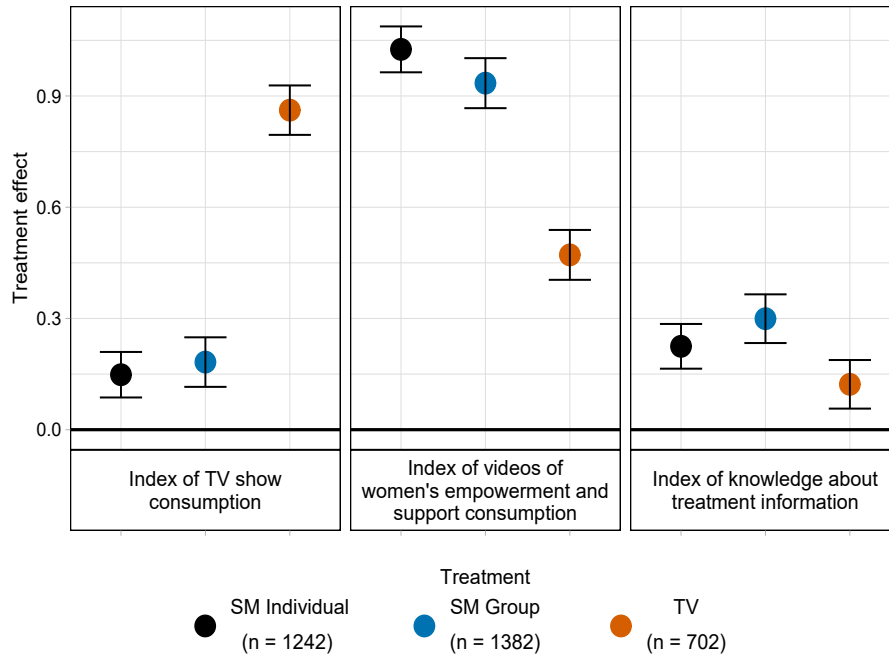
Notes: Data are presented as treatment effects relative to the control group $\pm 90\%$ confidence intervals (due to positive one-sided t-tests). Estimates are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent 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 Supplementary Table 16. The outcomes included in the index of videos of women's empowerment and support are in Supplementary Table 17. The outcomes included in the index of knowledge about treatment information are in Supplementary Table 18.

Fig. 3: Treatment effects on attitudes toward gender and marital equality, and sexual violence
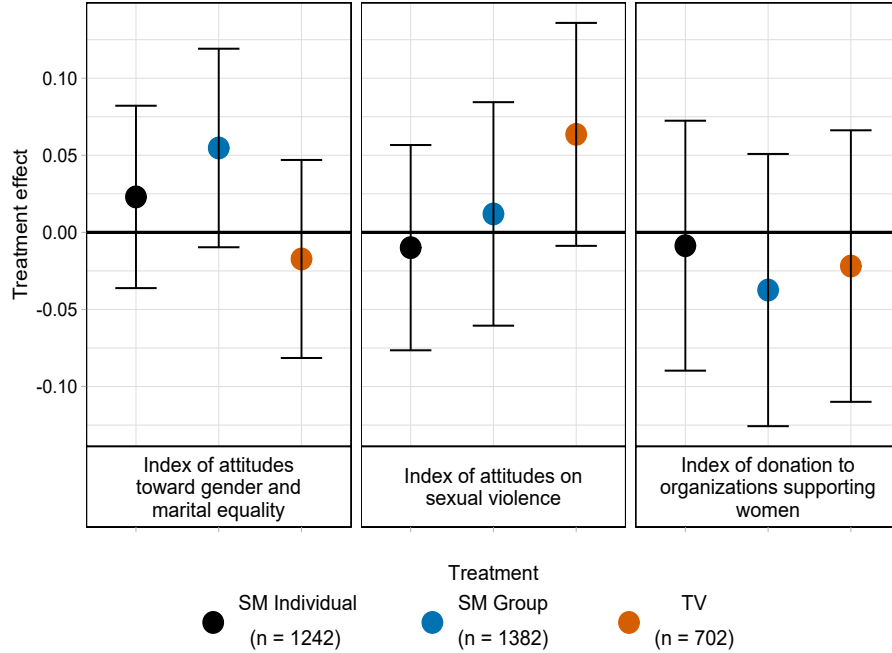
Notes: Data are presented as treatment effects relative to the control group ±90% confidence intervals in the left and center panel (due to positive one-sided t-tests), and ±95% confidence intervals in the right panel (due to two-sided t-tests). Estimates are from separate WGLS regressions where the 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 Supplementary Table 19. The outcomes included in the index of attitudes on sexual violence are in Supplementary Table 20. The outcomes included in the index of donation to organizations supporting women are in Supplementary Table 21.

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
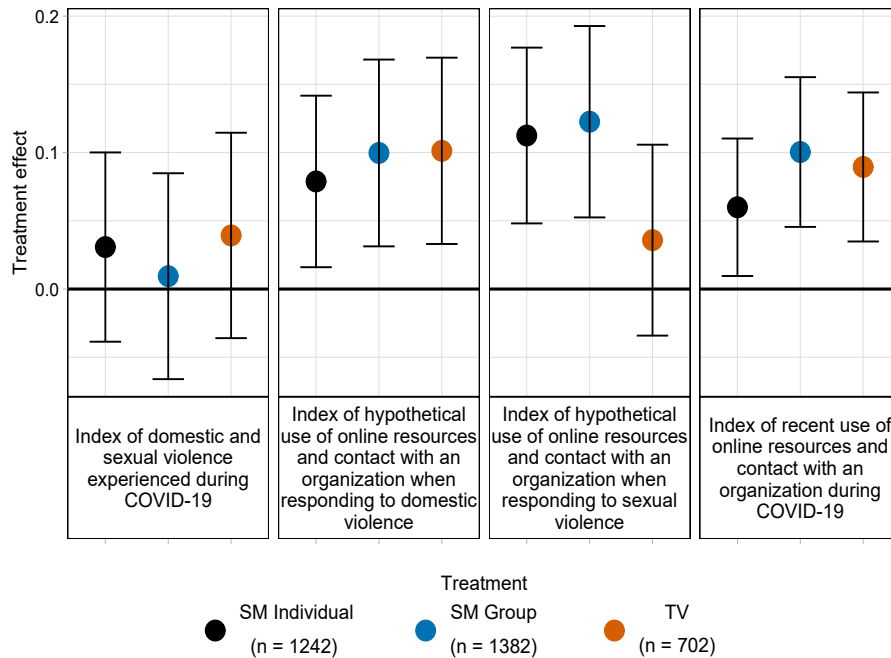
Notes: Data are presented as treatment effects relative to the control group $\pm 95\%$ confidence intervals in the left panel (due to two-sided t-tests), and $\pm 90\%$ confidence intervals in the other panels (due to positive one-sided t-tests). Estimates are from separate WGLS regressions where the 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 Supplementary Table 26. 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 Supplementary Table 22 . 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 Supplementary Table 23. The outcomes included in the index of recent use of online resources and contact with a support organization during COVID-19 are those in Supplementary Table 24.

Fig. 5: Treatment effects on women's future outlook toward gender and marital equality
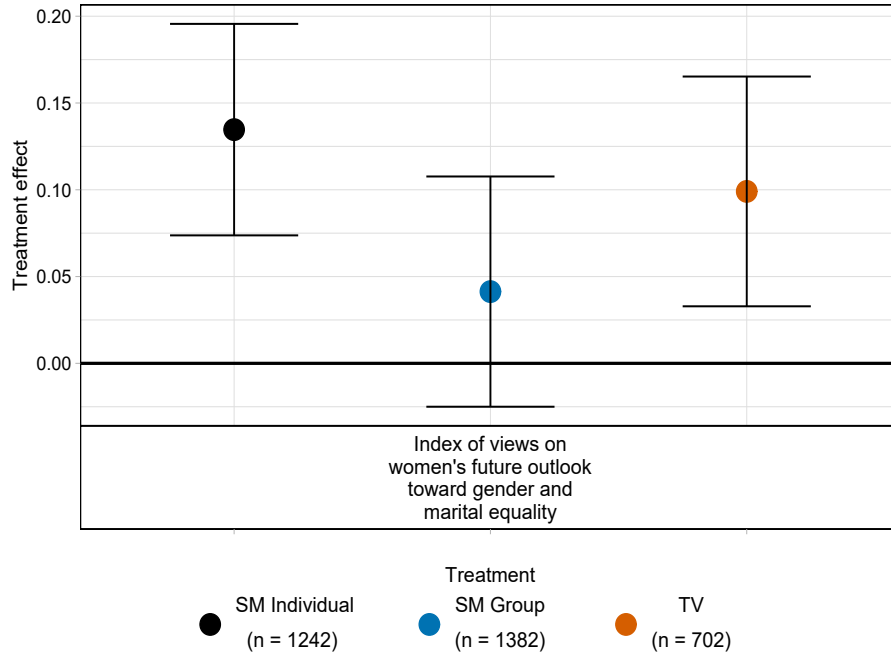
Notes: Data are presented as treatment effects relative to the control group $\pm 90\%$ confidence intervals (due to positive one-sided t-tests). Estimates are from separate WGLS regressions where the weights are in the inverse probability of treatment assignment. The labels are the corresponding dependent 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 Supplementary Table 25.

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

(a) Husband final say

(b) Male education priority

(c) Support from

(d) Experienced violence
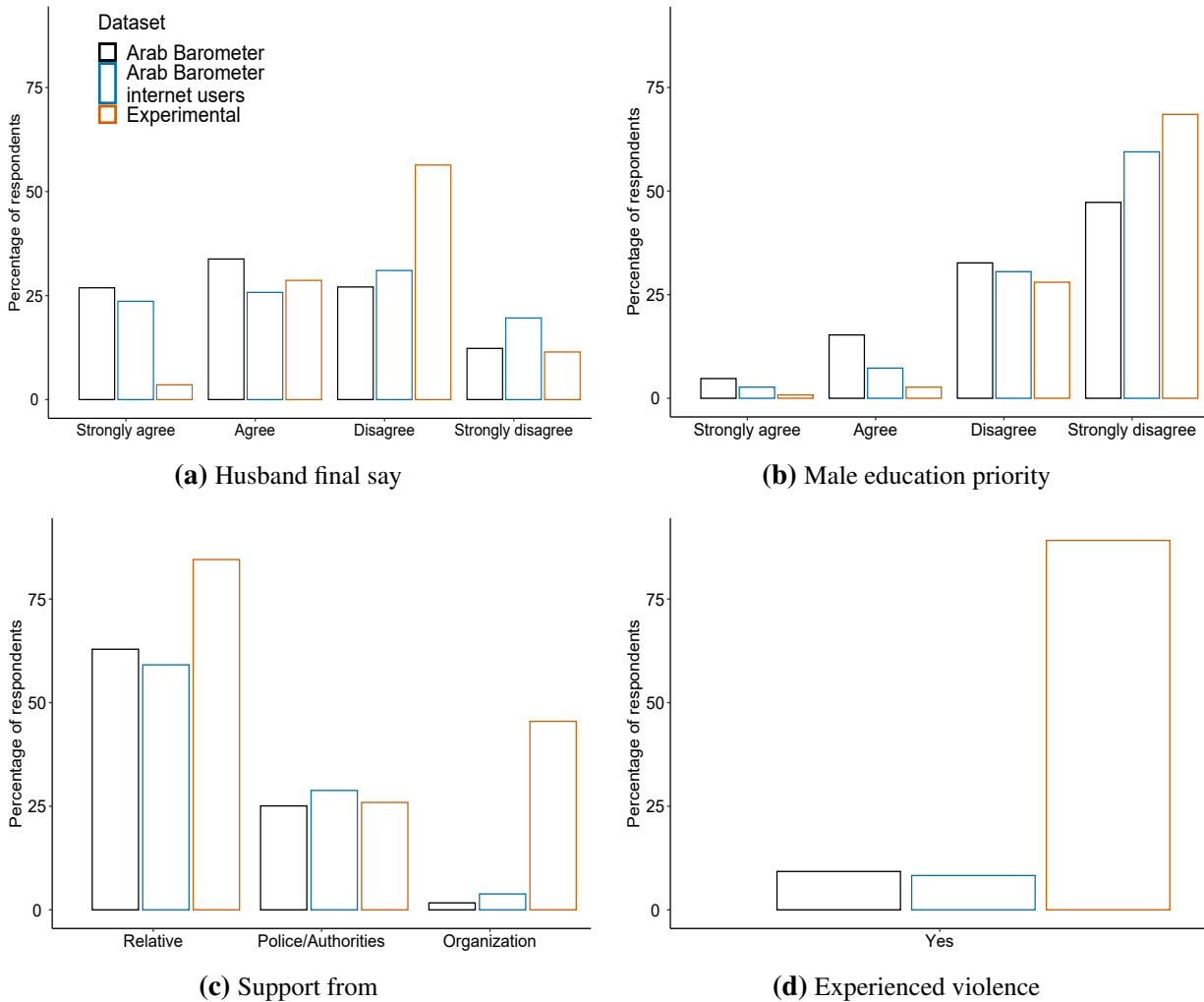
Notes: Panel (a) compares the distribution of the responses to whether the husband has the final say on attitudes toward gender and marital equality. Panel (b) compares responses to whether male education should be prioritized over female education. For panel (c), the variables differ in both surveys: 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. In Panel (d), the variable also differs in both surveys. The Arab Barometer survey asked if in the last twelve months any individual in the household experienced physical abuse by another member. Our survey asked if in the month before the COVID-19 pandemic respondents heard of someone or themselves experienced being hit by a man. The Arab Barometer data belongs to the 2016 and 2018 waves. Additional summary statistic comparisons are in Supplementary Table 35.

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Supplementary Materials

Supplementary Figure 1: Number of treatment web pages visited per web page user across treatments

(a) All treatment pages

(b) Facebook treatment pages

(c) WhatsApp individual treatment pages

(d) WhatsApp group treatment pages
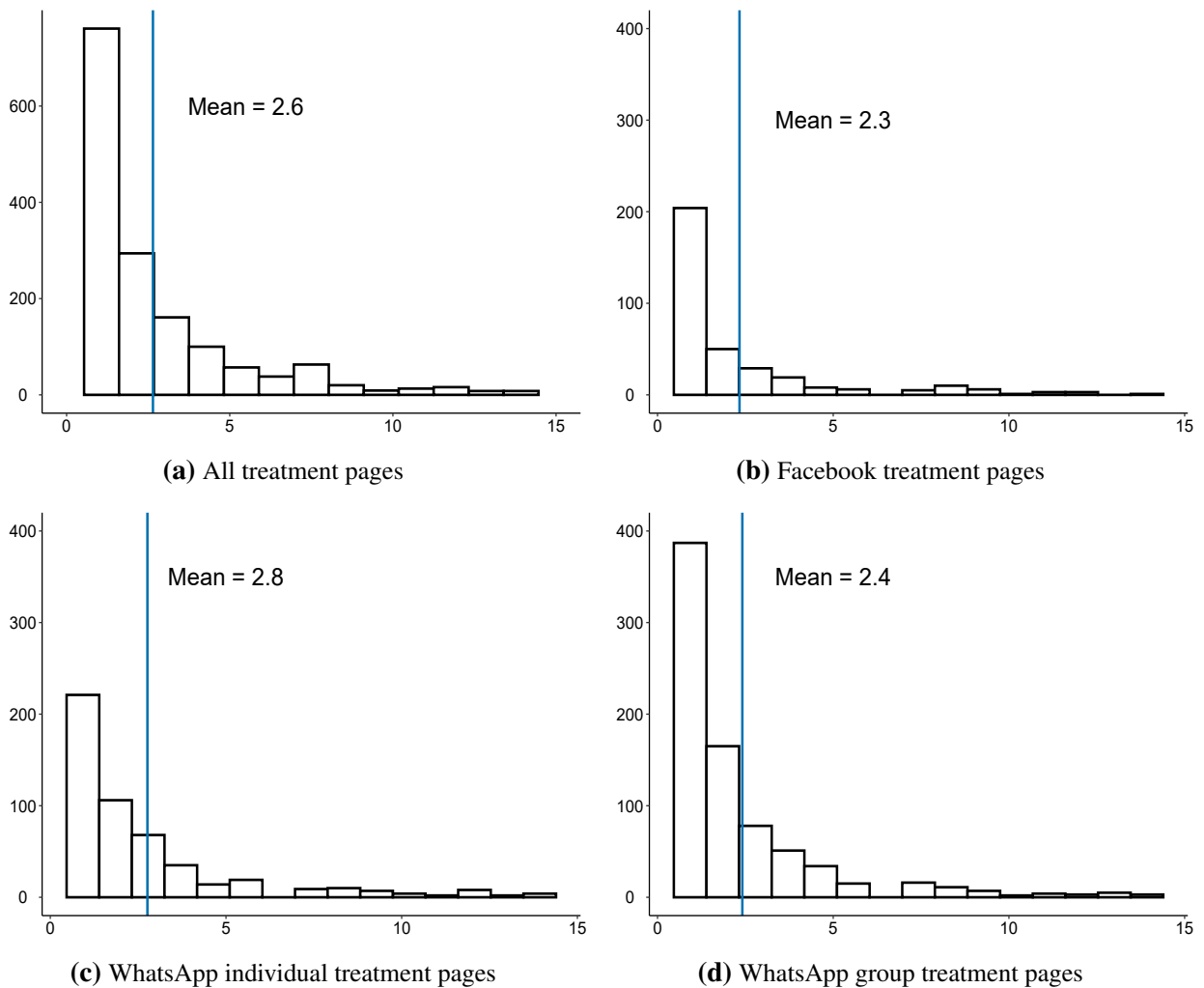
Notes: Panel (a) shows the total number of visits to the server hosting videos and YouTube videos for the 14 pages/videos delivered. Panel (b) shows the number of visits for the Facebook treatment group, panel (c) for the WhatsApp individual treatment group, and panel (d) for the WhatsApp group pages. For more detailed results, refer to Supplementary Table 14 and Table 15.

Supplementary Figure 2: 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
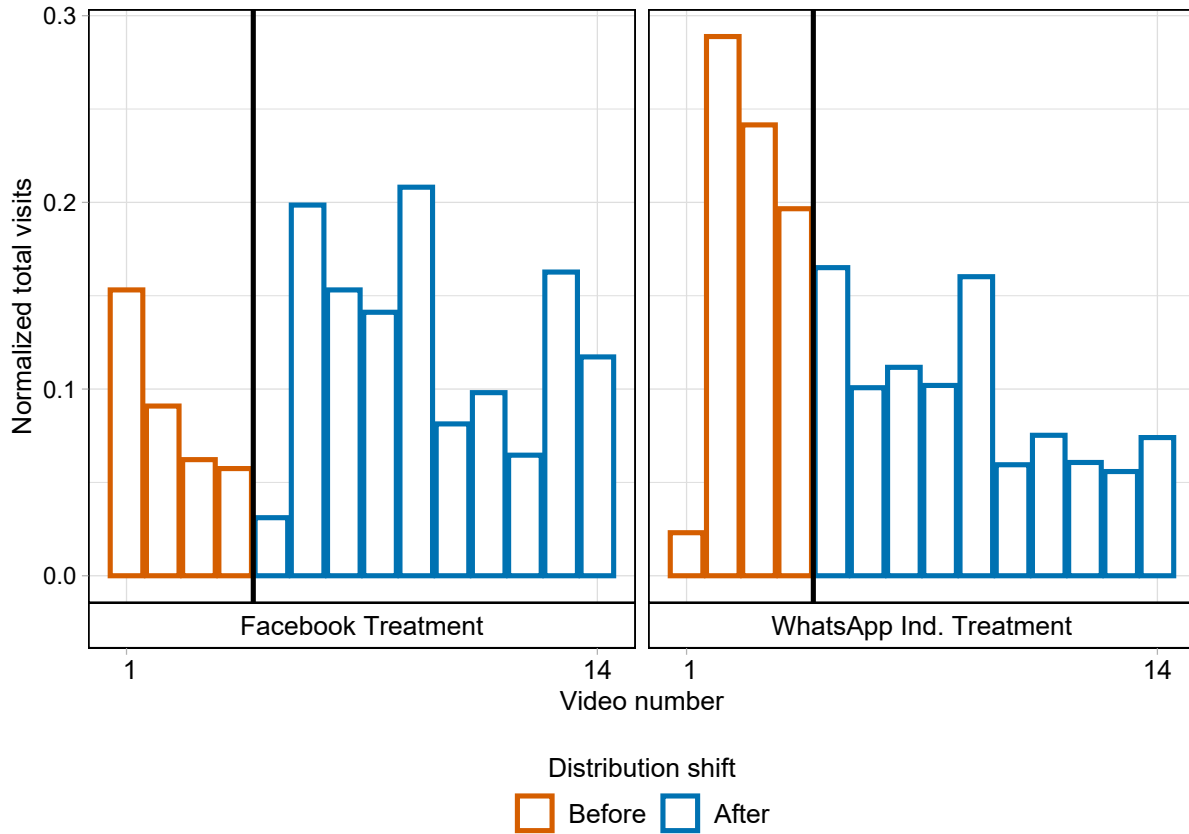
Notes: Difference-in-differences analysis of the impact of transitioning the Facebook treatment group from receiving videos on Facebook to receiving videos via WhatsApp. The left panel shows the distribution shift in the total number of video views before and after the transition for the Facebook treatment group. The right panel compares the same distribution shift for the WhatsApp individual treatment group. Analyzing the distribution shift helps us understand the relative effectiveness of Facebook vis-a-vis WhatsApp.

Supplementary Figure 3: Difference in difference effects of WhatsApp Individual treatment on video landing web page visits
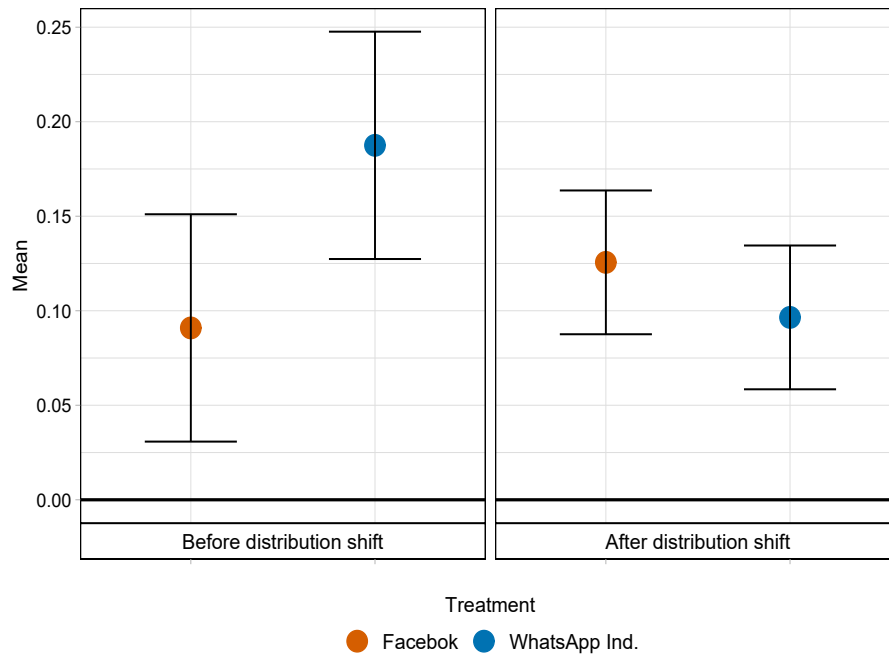
Notes: Data are presented as mean $\pm 95\%$ confidence intervals (due to two-sided t-tests). Estimates are from the same difference in difference regression. We regressed number of visits per assigned participant per video on an indicator for Facebook treatment assignment, an indicator for the shift in distribution from Facebook to WhatsApp Individual, and the interaction between the two indicators. The coefficient on the interaction term is 0.126, ($t_{24} = 2.449$, $p = 0.022$, 95%CI $= (0.025, 0.226)$, two-sided).

Supplementary Figure 4: Treatment effects on hypothetical talking to husband and family members, or reporting to authorities when responding to domestic and sexual violence

Notes: Data are presented as treatment effects relative to the control group ±95% confidence intervals (due to two-sided t-tests). Estimates 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 Supplementary Table 28. 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 Supplementary Table 29.

Supplementary Figure 5: 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: Data are presented as treatment effects relative to the control group $\pm 95\%$ confidence intervals (due to two-sided t-tests). Estimates 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 Supplementary Table 27. The outcomes included in the index of recent use of online resources and contact with a support organization before COVID-19 are in Supplementary Table 30.

Mobility

Supplementary Figure 6: Mobility in Egypt during the intervention

(a) Retail and recreation

(b) Grocery and pharmacy

(c) Parks

(d) Transit stations

(e) Workplaces

(f) Residential
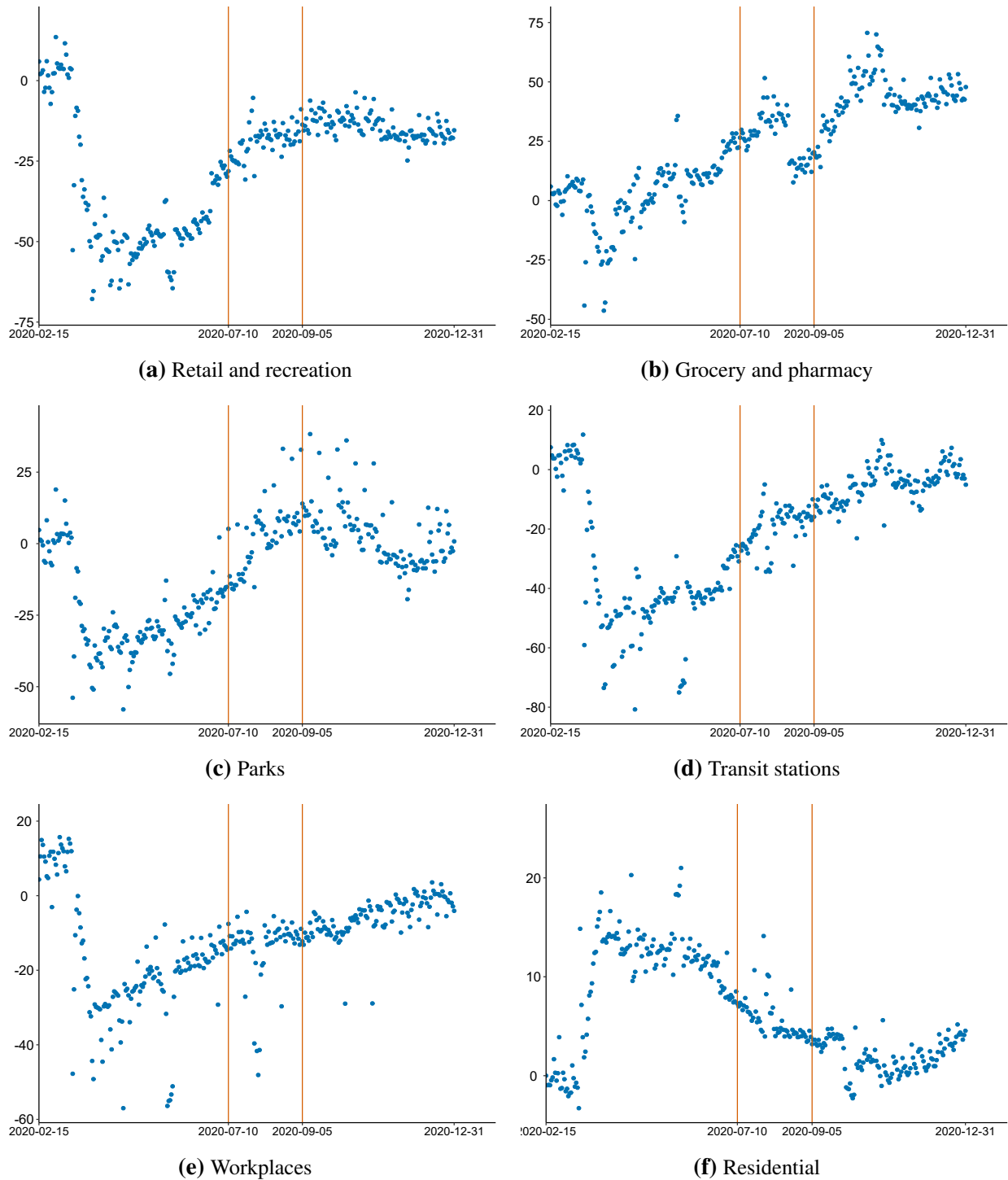
Notes: We plot the daily percent change in mobility relative to the prior to the COVID-19 pandemic across different industries (panel (a) is Retail and recreation, panel (b) grocery and pharmacy, panel (c) parks, panel (d) transit stations, panel (e) workplaces, and panel (f) residential) in Egypt during the first year of 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.

Supplementary Figure 7: Survey responses by Egyptian Governorate
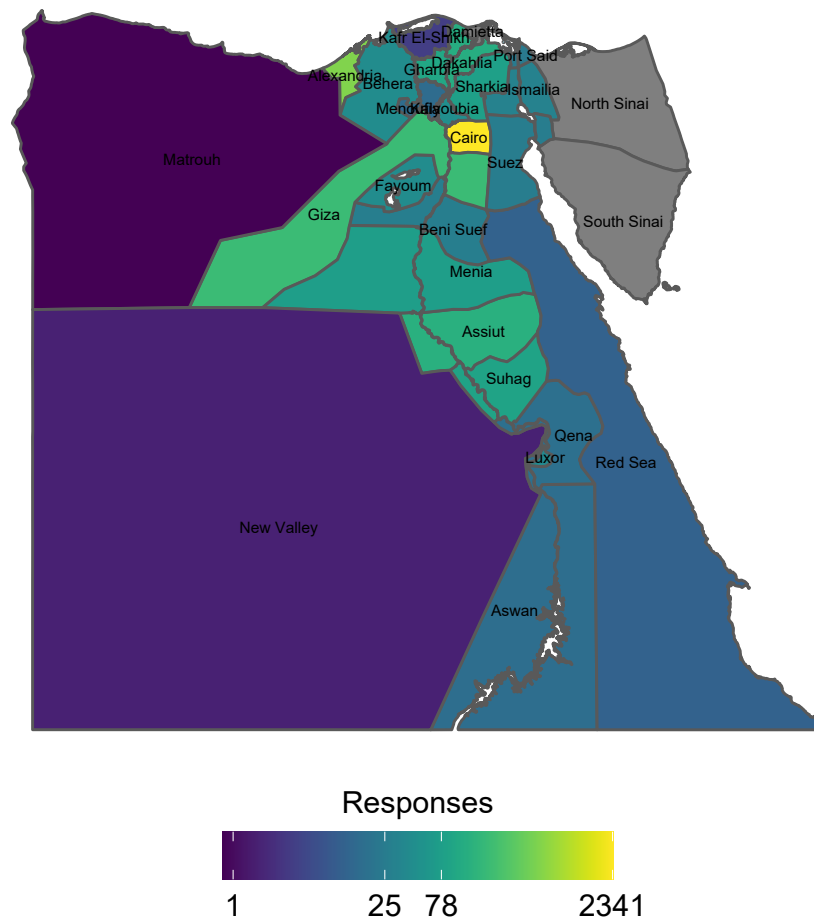
Notes: The graph shows the distribution of survey responses by governorate, with Cairo having the highest frequency of responses at 2341. The median governorates are Luxor and Bahera, with 37 and 42 responses, respectively. Matrouh had the lowest number of responses, with only one respondent. The survey data was collected and analyzed by our team.

Supplementary Figure 8: Comparison of demographics between those reached by Facebook Advertisements used to recruit participants and experimental sample

(a) Age

(b) Egyptian Governorates
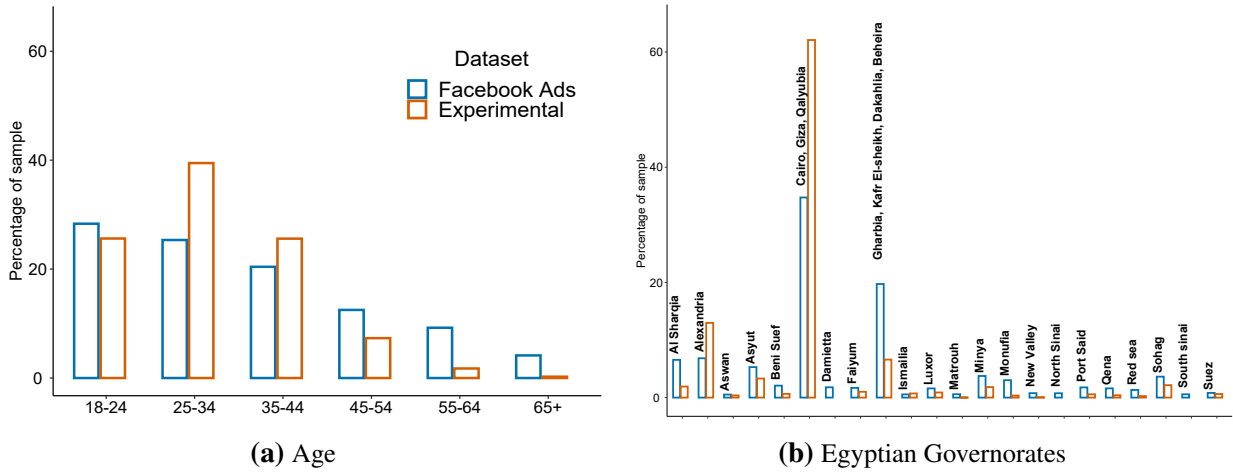
Notes: Panel (a) compares the distribution of our experimental sample with that of Facebook Ads by age group. Panel (b) shows a comparison of distributions by Egyptian Governorates. The demographics of those reached by Facebook Advertisements use to recruit participants comes from the analytics that Facebook gives to advertisers.

Supplementary Figure 9: 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

(a) Age

(b) Education level

(c) Relationship status

(d) Attitudes

(e) Experienced violence

(f) Resource knowledge

(g) Hypothetical use and contact

(h) Recent use and contact
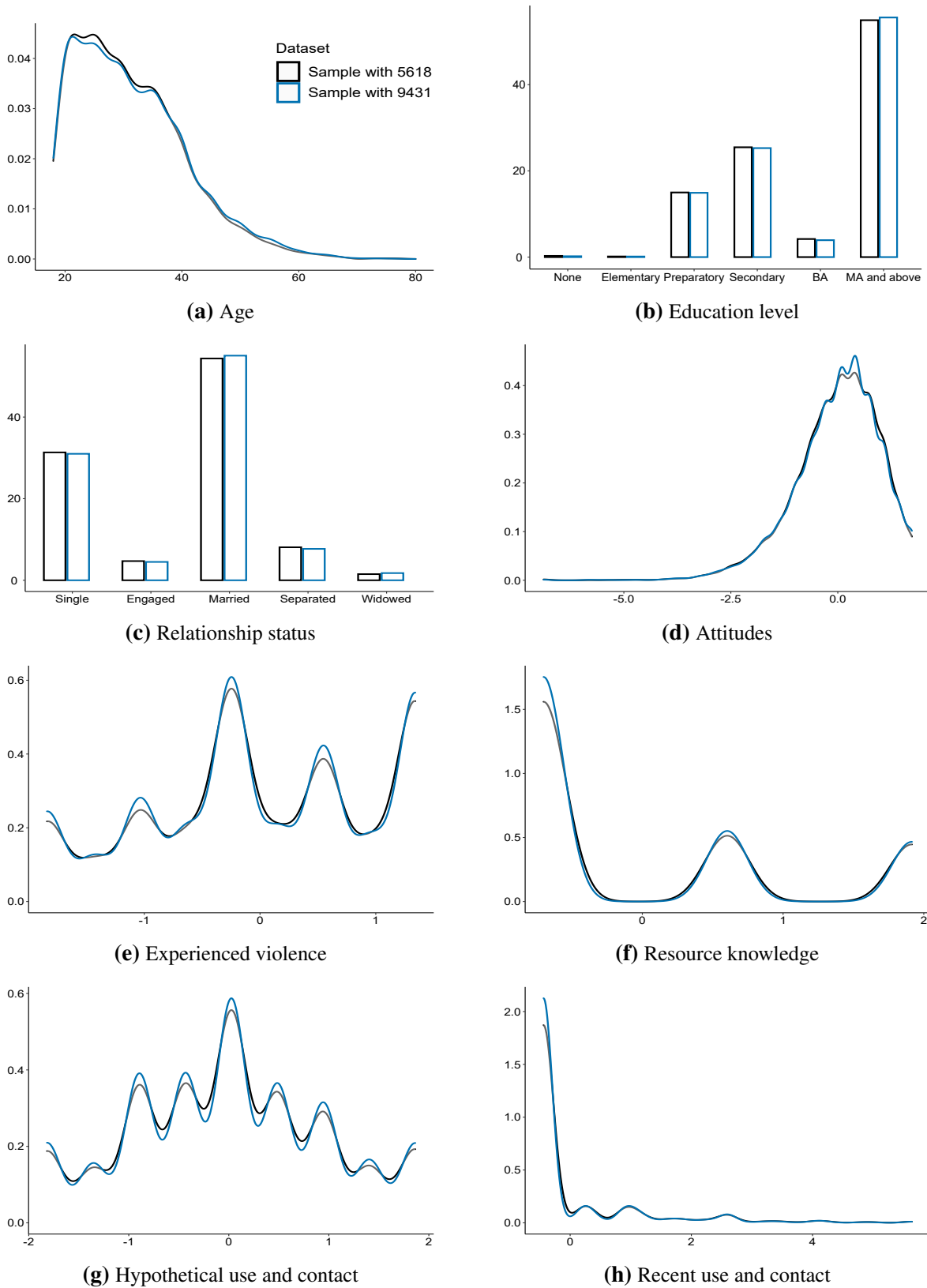
Notes: Panels (a), (b), and (c) correspond to the main demographic variables. Panels (d) to (h) correspond to the main baseline indexes on attitudes towards gender and marital equality (Attitudes), domestic violence experienced during COVID-19 (Experienced violence), knowledge on treatment information (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 Supplementary Table 39.

Content Tables and Randomization

Supplementary Table 1: Content of videos hosted on the website and delivered via message

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

Notes: Videos titles, content descriptions, and teachings on seeking support or reaching out to different organizations for all videos hosted on the website.

Supplementary Table 2: Content of TV shows hosted on satellite channel

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

Notes: Episode titles, content descriptions, and teachings on seeking support or reaching out to different organizations for all 10 episodes of the TV show hosted on a satellite TV channel.

Supplementary Table 3: Block sizes, treatment probabilities and responses rates by treatment assignment

| Treatment | Baseline | With Facebook account | Only with WhatsApp account | Endline | Response |
		Treatment probability	Treatment probability		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

Supplementary Table 4: Balance tests

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

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Notes: two-sided t-test of statistical significance were used for mean comparisons.

Supplementary Table 5: Balance on demographics variables

Panel A: Respondent's outcomes

	Age	Education (BA)	Number of male children	Number of female children	Other family members
	(1)	(2)	(3)	(4)	(5)
SM Individual	0.096	−0.021	−0.028	0.062*	−0.135
	(−0.616, 0.808)	(−0.047, 0.005)	(−0.097, 0.040)	(−0.006, 0.130)	(−0.379, 0.110)
	p = 0.793	p = 0.110	p = 0.423	p = 0.072	p = 0.281
SM Group	−0.008	−0.012	−0.014	0.021	−0.050
	(−0.784, 0.767)	(−0.040, 0.017)	(−0.089, 0.061)	(−0.053, 0.094)	(−0.317, 0.216)
	p = 0.984	p = 0.422	p = 0.717	p = 0.583	p = 0.712
TV	−0.144	−0.020	−0.058	0.027	−0.141
	(−0.918, 0.629)	(−0.048, 0.008)	(−0.132, 0.017)	(−0.046, 0.101)	(−0.407, 0.124)
	p = 0.715	p = 0.163	p = 0.128	p = 0.468	p = 0.298
Control Mean	31.507	0.753	0.685	0.559	2.652
Observations	4,165	4,165	4,165	4,165	4,165
R^2	0.161	0.518	0.136	0.120	0.101

Panel B: Whether married and husband' outcomes

	Married	Age	Education (BA)	Marriage duration	Husband lives at home
	(1)	(2)	(3)	(4)	(5)
SM Individual	0.012	7.235*	−0.035**	−0.336	0.021
	(−0.020, 0.045)	(−1.294, 15.765)	(−0.067, −0.002)	(−1.180, 0.508)	(−0.024, 0.065)
	p = 0.460	p = 0.097	p = 0.037	p = 0.436	p = 0.360
SM Group	0.005	2.469	−0.053***	−0.091	0.032
	(−0.030, 0.041)	(−6.575, 11.513)	(−0.087, −0.018)	(−0.984, 0.803)	(−0.015, 0.079)
	p = 0.763	p = 0.593	p = 0.003	p = 0.843	p = 0.180
TV	0.002	−1.299	−0.042**	0.427	0.018
	(−0.033, 0.038)	(−10.432, 7.834)	(−0.077, −0.007)	(−0.476, 1.331)	(−0.029, 0.066)
	p = 0.906	p = 0.781	p = 0.019	p = 0.355	p = 0.449
Control Mean	0.555	31.631	10.064	0.798	0.818
Observations	4,165	2,348	2,354	2,354	2,354
R^2	0.401	0.057	0.561	0.163	0.079

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

Supplementary Table 6: Balance on before and during COVID-19 home presence of respondent and husband, and whether household income declined with COVID-19

| | Before COVID-19 | | | | During COVID-19 | | | | |
| | Full time at home | Partially at home | Husband full time at home | Husband partially at home | Full time at home | Partially at Home | Husband full time at home | Husband partially at home | COVID-19 income decline |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
SM Individual	−0.001	0.001	0.002	0.011	−0.014	0.005	0.012	0.029	0.018
	(−0.040, 0.037)	(−0.040, 0.041)	(−0.033, 0.037)	(−0.036, 0.057)	(−0.050, 0.022)	(−0.027, 0.038)	(−0.037, 0.062)	(−0.025, 0.082)	(−0.017, 0.052)
	p = 0.944	p = 0.972	p = 0.913	p = 0.654	p = 0.443	p = 0.742	p = 0.621	p = 0.298	p = 0.311
SM Group	−0.017	−0.003	0.017	0.002	−0.013	−0.001	0.054**	−0.026	0.015
	(−0.059, 0.025)	(−0.047, 0.041)	(−0.020, 0.055)	(−0.047, 0.051)	(−0.052, 0.026)	(−0.036, 0.035)	(0.002, 0.107)	(−0.083, 0.031)	(−0.023, 0.053)
	p = 0.429	p = 0.893	p = 0.371	p = 0.945	p = 0.522	p = 0.962	p = 0.042	p = 0.367	p = 0.433
TV	−0.035*	0.007	0.007	−0.040	−0.027	0.015	0.045*	−0.062**	0.032*
	(−0.077, 0.006)	(−0.036, 0.051)	(−0.031, 0.045)	(−0.090, 0.009)	(−0.067, 0.012)	(−0.021, 0.050)	(−0.007, 0.098)	(−0.120, −0.005)	(−0.006, 0.069)
	p = 0.097	p = 0.742	p = 0.711	p = 0.113	p = 0.171	p = 0.419	p = 0.093	p = 0.034	p = 0.100
Control Mean	0.366	0.45	0.099	0.221	0.745	0.194	0.228	0.344	0.757
Observations	4,162	4,162	2,351	2,351	4,165	4,155	2,346	2,346	4,165
R^2	0.113	0.092	0.074	0.092	0.083	0.075	0.080	0.085	0.067

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

Supplementary Table 7: 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	−0.029	−0.011	0.009	0.014	0.039**	0.001
	(−0.020, 0.039)	(−0.067, 0.009)	(−0.046, 0.023)	(−0.011, 0.029)	(−0.016, 0.044)	(0.002, 0.076)	(−0.003, 0.005)
	p = 0.513	p = 0.130	p = 0.519	p = 0.359	p = 0.367	p = 0.041	p = 0.685
SM Group	0.010	−0.007	−0.006	0.009	0.012	0.027	0.002
	(−0.022, 0.042)	(−0.048, 0.034)	(−0.044, 0.031)	(−0.013, 0.030)	(−0.020, 0.045)	(−0.013, 0.068)	(−0.002, 0.007)
	p = 0.553	p = 0.737	p = 0.741	p = 0.432	p = 0.456	p = 0.189	p = 0.279
TV	0.013	−0.045**	−0.004	−0.004	−0.001	0.009	0.005**
	(−0.019, 0.045)	(−0.086, −0.003)	(−0.041, 0.033)	(−0.026, 0.017)	(−0.033, 0.031)	(−0.031, 0.049)	(0.001, 0.010)
	p = 0.438	p = 0.034	p = 0.837	p = 0.697	p = 0.951	p = 0.656	p = 0.019
Control Mean	0.137	0.319	0.781	0.934	0.148	0.267	0
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.045	0.060	0.057	0.059	0.047	0.071	0.043

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

Supplementary Table 8: 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	0.011	−0.006	−0.006	0.004	−0.024	−0.013	0.011	−0.027*	0.028	−0.021
	(−0.062, 0.084)	(−0.035, 0.023)	(−0.033, 0.020)	(−0.029, 0.037)	(−0.064, 0.016)	(−0.035, 0.009)	(−0.005, 0.028)	(−0.054, 0.0005)	(−0.068, 0.123)	(−0.102, 0.061)
	p = 0.768	p = 0.665	p = 0.648	p = 0.824	p = 0.246	p = 0.250	p = 0.179	p = 0.054	p = 0.569	p = 0.620
SM Group	0.082**	−0.001	0.005	0.024	0.021	−0.009	0.020**	−0.004	0.133**	0.069
	(0.003, 0.161)	(−0.033, 0.030)	(−0.024, 0.034)	(−0.012, 0.060)	(−0.023, 0.064)	(−0.033, 0.015)	(0.002, 0.038)	(−0.034, 0.026)	(0.029, 0.237)	(−0.019, 0.157)
	p = 0.044	p = 0.947	p = 0.741	p = 0.187	p = 0.350	p = 0.464	p = 0.033	p = 0.801	p = 0.013	p = 0.127
TV	0.116***	0.016	−0.026*	0.003	−0.032	−0.024*	0.016*	−0.005	0.139***	0.096**
	(0.037, 0.195)	(−0.015, 0.048)	(−0.055, 0.002)	(−0.033, 0.039)	(−0.076, 0.011)	(−0.048, 0.00002)	(−0.002, 0.034)	(−0.035, 0.024)	(0.035, 0.243)	(0.008, 0.184)
	p = 0.004	p = 0.314	p = 0.073	p = 0.866	p = 0.148	p = 0.051	p = 0.088	p = 0.732	p = 0.009	p = 0.033
Control Mean	1.839	0.858	0.892	0.195	0.4	0.093	0.033	0.139	2.863	1.707
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.091	0.058	0.064	0.063	0.067	0.094	0.070	0.070	0.125	0.113

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

Supplementary Table 9: 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	−0.035	0.037	0.015	0.010	0.067*	0.004
	(−0.049, 0.118)	(−0.121, 0.051)	(−0.041, 0.115)	(−0.022, 0.052)	(−0.051, 0.072)	(−0.008, 0.142)	(−0.061, 0.069)
	p = 0.414	p = 0.425	p = 0.351	p = 0.436	p = 0.746	p = 0.081	p = 0.903
SM Group	0.084*	−0.020	0.003	−0.015	0.005	−0.019	−0.024
	(−0.007, 0.175)	(−0.114, 0.074)	(−0.082, 0.088)	(−0.055, 0.025)	(−0.062, 0.072)	(−0.101, 0.063)	(−0.095, 0.047)
	p = 0.070	p = 0.676	p = 0.941	p = 0.466	p = 0.885	p = 0.649	p = 0.504
TV	0.026	−0.057	−0.047	−0.037*	0.014	−0.016	−0.035
	(−0.065, 0.116)	(−0.150, 0.037)	(−0.132, 0.038)	(−0.077, 0.003)	(−0.053, 0.081)	(−0.097, 0.066)	(−0.105, 0.036)
	p = 0.576	p = 0.235	p = 0.277	p = 0.073	p = 0.672	p = 0.703	p = 0.339
Control Mean	2.621	2.566	2.135	1.176	1.421	4.101	4.313
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.078	0.090	0.108	0.066	0.057	0.053	0.063

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

Supplementary Table 10: Balance on domestic violence experienced before and during COVID-19

	Before COVID-19		During COVID-19	
	Heard of or experienced yelling	Heard of or experienced hitting	Heard of or experienced yelling	Heard of or experienced hitting
	(1)	(2)	(3)	(4)
SM Individual	0.011	0.117**	−0.012	0.039
	(−0.083, 0.106)	(0.014, 0.219)	(−0.116, 0.093)	(−0.074, 0.151)
	p = 0.814	p = 0.027	p = 0.825	p = 0.498
SM Group	0.023	0.045	−0.001	−0.021
	(−0.080, 0.126)	(−0.067, 0.157)	(−0.115, 0.113)	(−0.144, 0.101)
	p = 0.667	p = 0.428	p = 0.982	p = 0.736
TV	0.010	0.046	−0.021	0.030
	(−0.093, 0.113)	(−0.066, 0.157)	(−0.134, 0.093)	(−0.092, 0.152)
	p = 0.854	p = 0.423	p = 0.720	p = 0.634
Control Mean	3.659	3.3	3.479	3.176
Observations	4,165	4,165	4,165	4,165
R^2	0.077	0.093	0.069	0.075

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

Supplementary Table 11: 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	0.037	−0.064	−0.036	−0.070
	(−0.080, 0.114)	(−0.055, 0.128)	(−0.172, 0.045)	(−0.136, 0.063)	(−0.169, 0.029)
	p = 0.737	p = 0.435	p = 0.250	p = 0.474	p = 0.165
SM Group	−0.050	0.030	−0.022	−0.028	−0.022
	(−0.156, 0.056)	(−0.070, 0.130)	(−0.140, 0.096)	(−0.137, 0.081)	(−0.129, 0.086)
	p = 0.353	p = 0.554	p = 0.712	p = 0.614	p = 0.691
TV	−0.084	0.011	0.024	0.001	0.032
	(−0.189, 0.022)	(−0.089, 0.111)	(−0.093, 0.142)	(−0.107, 0.110)	(−0.075, 0.140)
	p = 0.120	p = 0.829	p = 0.688	p = 0.982	p = 0.553
Control Mean	3.819	3.738	2.64	2.647	3.334
Observations	4,165	4,165	4,165	4,165	4,165
R^2	0.072	0.067	0.077	0.126	0.124

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

Supplementary Table 12: 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	−0.0001	−0.013	0.037	−0.018	0.002	−0.002	−0.039*
	(−0.023, 0.029)	(−0.010, 0.010)	(−0.076, 0.050)	(−0.017, 0.091)	(−0.044, 0.007)	(−0.006, 0.011)	(−0.049, 0.045)	(−0.084, 0.006)
	p = 0.829	p = 0.979	p = 0.679	p = 0.179	p = 0.163	p = 0.577	p = 0.936	p = 0.088
SM Group	0.001	−0.005	0.045	0.058*	−0.020	0.002	0.033	−0.003
	(−0.028, 0.030)	(−0.015, 0.006)	(−0.023, 0.114)	(−0.001, 0.116)	(−0.048, 0.008)	(−0.007, 0.011)	(−0.018, 0.084)	(−0.052, 0.047)
	p = 0.950	p = 0.401	p = 0.197	p = 0.055	p = 0.172	p = 0.625	p = 0.209	p = 0.919
TV	0.011	−0.0004	0.055	0.059**	−0.030**	0.002	0.056**	0.002
	(−0.018, 0.040)	(−0.011, 0.010)	(−0.013, 0.123)	(0.0001, 0.117)	(−0.058, −0.002)	(−0.007, 0.011)	(0.005, 0.107)	(−0.047, 0.051)
	p = 0.449	p = 0.934	p = 0.115	p = 0.050	p = 0.036	p = 0.711	p = 0.033	p = 0.926
Control Mean	0.274	0.015	2.404	2.269	0.228	0.008	2.178	2.184
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.517	0.080	0.378	0.378	0.450	0.060	0.340	0.319

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

Website, YouTube and WhatsApp Conversation Tables

Supplementary Table 13: Coding of conversations in WhatsApp groups

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

Supplementary Table 14: 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 Supplementary Table 3 as it includes assignments to individuals who responded twice to the endline survey, and thus were excluded from the study.

Supplementary Table 15: Website and YouTube analytics

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

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

Results

Supplementary Table 16: Treatment effect on TV show consumption

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO

	Index of (1,1,1,1,1,1,1,1,1,1,1,1)	Watched TV evening	Watched channels of TV show	Watched TV show type	Mentioned watched TV show Saturday evening	Watched TV show	Heard of TV show	Heard of TV show via WhatsApp	Received TV show WhatsApp reminder	Whether watched TV show episodes	Number of TV show episodes watched	Accurate content of the TV show	Accurate TV show topic liked
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
SM Individual	0.148*** (0.075, 0.221) p = 0.00004	0.004 (−0.024, 0.032) p = 0.391	0.012 (−0.020, 0.044) p = 0.231	0.051*** (0.012, 0.089) p = 0.005	0.004 (−0.014, 0.021) p = 0.341	0.034** (−0.004, 0.073) p = 0.042	0.029* (−0.010, 0.068) p = 0.071	0.052*** (0.030, 0.073) p = 0.00000	0.107*** (0.078, 0.136) p = 0.000	0.033* (−0.006, 0.072) p = 0.051	0.093*** (0.016, 0.169) p = 0.009	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	0.010 (−0.021, 0.041) p = 0.261	0.023* (−0.012, 0.058) p = 0.099	0.060*** (0.018, 0.101) p = 0.003	−0.0001 (−0.019, 0.019) p = 0.504	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)	0.4027	0.6986	0.5397	0.6656	0.7001	0.242	0.3368	0.8514	0.0896	0.2861	0.9496	0.9811	0.8872
SM Individual = TV (p-value)	0	0.031	0	3e-04	0	0	0	0	0	0	0	1e-04	0
SM Group= TV (p-value)	0	0.0841	0	0.002	0	0	0	0	0	0	0	1e-04	0
Num. Lasso covariates	6	3	3	6	5	6	5	0	5	5	7	6	6
R²	0.277	0.181	0.224	0.178	0.130	0.172	0.157	0.110	0.385	0.150	0.152	0.132	0.148

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

SM Individual	0.154*** (0.079, 0.229) p = 0.00003	0.006 (−0.022, 0.034) p = 0.344	0.016 (−0.017, 0.048) p = 0.173	0.051*** (0.013, 0.089) p = 0.005	0.006 (−0.012, 0.023) p = 0.258	0.044** (0.003, 0.084) p = 0.018	0.037** (−0.003, 0.077) p = 0.037	0.052*** (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	0.182*** (0.100, 0.263) p = 0.00001	0.011 (−0.020, 0.042) p = 0.237	0.025* (−0.010, 0.061) p = 0.080	0.060*** (0.018, 0.102) p = 0.003	0.001 (−0.017, 0.020) p = 0.442	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	0.856*** (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*** (0.655, 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)	0.4998	0.7287	0.5887	0.6773	0.6514	0.2978	0.3906	0.8375	0.0972	0.3412	0.9831	0.9169	0.942
SM Individual = TV (p-value)	0	0.0439	0	4e-04	0	0	0	0	0	0	0	4e-04	0
SM Group= TV (p-value)	0	0.1034	0	0.0025	0	0	0	0	0	0	0	4e-04	0
R²	0.241	0.173	0.213	0.166	0.113	0.099	0.095	0.109	0.374	0.090	0.091	0.083	0.090

Panel C: No covariates

SM Individual	0.171*** (0.093, 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*** (0.031, 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	0.031* (−0.007, 0.069) 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*** (0.655, 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)	0.501	0.6776	0.6389	0.8194	0.7132	0.2978	0.3906	0.8375	0.0972	0.3412	0.9831	0.9169	0.942
SM Individual = TV (p-value)	0	0.0428	0	0.0034	0	0	0	0	0	0	0	4e-04	0
SM Group= TV (p-value)	0	0.1161	0	0.0085	0	0	0	0	0	0	0	4e-04	0
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R²	0.163	0.062	0.081	0.083	0.102	0.099	0.095	0.109	0.374	0.090	0.091	0.083	0.090

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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 t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 17: Treatment effect on videos of women's empowerment and support consumption

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO

	Index of (1,1,1,1,1,1,1) (1)	Watched videos on social media (2)	Watched videos on WhatsApp (3)	Received videos on WhatsApp or Facebook (4)	Watched videos on WhatsApp or Facebook (5)	Number of videos watched (6)	Accurate content of the videos (7)	Accurate video topic liked (8)
SM Individual	1.026***	0.287***	1.125***	0.490***	0.419***	0.830***	0.267***	0.319***
	(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	p = 0.000	p = 0.000	p = 0.000	p = 0.000	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)	(0.068, 0.284)	(0.967, 1.184)	(0.478, 0.548)	(0.385, 0.466)	(0.578, 0.759)	(0.178, 0.253)	(0.216, 0.295)
	p = 0.000	p = 0.001	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000
TV	0.471***	0.149***	0.554***	0.276***	0.229***	0.332***	0.078***	0.103***
	(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)	0	0.0122	0	0	0	0	0	0
SM Group= TV (p-value)	0	0.6319	0	0	0	0	0	0
Num. Lasso covariates	4	4	2	2	3	4	3	4
R^2	0.277	0.157	0.217	0.277	0.212	0.187	0.149	0.151

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

SM Individual	1.027***	0.282***	1.131***	0.490***	0.419***	0.831***	0.269***	0.320***
	(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	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000
SM Group	0.936***	0.178***	1.089***	0.517***	0.433***	0.685***	0.219***	0.260***
	(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	p = 0.000	p = 0.000	p = 0.000	p = 0.000
TV	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 (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***
	(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	p = 0.000	p = 0.000	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	p = 0.000	p = 0.000	p = 0.000	p = 0.000
TV	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	-0.703	2.794	2.114	0.409	0.302	0.527	0.116	0.133
SM Individual = SM Group (p-value)	0.0842	0.1758	0.6179	0.1309	0.5152	0.0018	0.0098	0.0033
SM Individual = TV (p-value)	0	0.0787	0	0	0	0	0	0
SM Group= TV (p-value)	0	0.6955	0	0	0	0	0	0
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.247	0.095	0.194	0.270	0.191	0.168	0.134	0.136

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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 t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 18: Treatment effect on knowledge about treatment information

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO

	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***
	(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
TV	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
SM Individual = SM Group (p-value)	0.0623	0.1588	0.0352	0.8451	0.3312
SM Individual = TV (p-value)	0.0102	0.3169	0.7923	1e-04	0.1493
SM Group= TV (p-value)	0	0.0184	0.0204	1e-04	0.0183
Num. Lasso covariates	9	8	5	9	7
R²	0.234	0.247	0.094	0.233	0.078

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

SM Individual	0.222***	0.054***	0.045***	0.067***	0.047***
	(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
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
TV	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 (p-value)	0.0607	0.1608	0.0355	0.8608	0.3228
SM Individual = TV (p-value)	0.0113	0.2573	0.8255	2e-04	0.1555
SM Group= TV (p-value)	0	0.0132	0.023	1e-04	0.0186
R²	0.200	0.225	0.090	0.203	0.070

Panel C: No covariates

SM Individual	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)
	p = 0.000	p = 0.002	p = 0.00001	p = 0.0005	p = 0.00001
SM Group	0.293***	0.082***	0.068***	0.063***	0.059***
	(0.211, 0.374)	(0.041, 0.122)	(0.046, 0.090)	(0.024, 0.103)	(0.036, 0.082)
	p = 0.000	p = 0.00004	p = 0.000	p = 0.001	p = 0.00000
TV	0.116***	0.035**	0.042***	−0.017	0.030***
	(0.034, 0.197)	(−0.005, 0.076)	(0.020, 0.065)	(−0.056, 0.023)	(0.007, 0.053)
	p = 0.003	p = 0.042	p = 0.0002	p = 0.797	p = 0.006
Control Mean	-0.193	0.304	0.032	0.272	0.038
SM Individual = SM Group (p-value)	0.0838	0.1897	0.044	0.8829	0.3235
SM Individual = TV (p-value)	0.0119	0.3493	0.8219	1e-04	0.1542
SM Group= TV (p-value)	0	0.028	0.0284	1e-04	0.0184
Observations	4,165	4,165	4,165	4,165	4,165
R²	0.160	0.161	0.081	0.146	0.069

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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 t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 19: Treatment effects on attitudes towards gender and marital equality

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO

	Index of (-1,-1,-1,1, -1,-1,1,1) (1)	Husband final say (2)	Husband earn income (3)	Yelling justified (4)	Gain independence by working outside the household (5)	Circumcision important for women marriage (6)	Female circumcision health benefits (7)	Marriage permitted under age 18 with family consent (8)	Khul: Women can divorce husband withouth a reason (9)
SM Individual	0.023 (−0.047, 0.093) p = 0.262	0.009 (−0.060, 0.077) p = 0.400	−0.009 (−0.080, 0.063) p = 0.597	−0.018 (−0.087, 0.052) p = 0.690	0.009 (−0.061, 0.078) p = 0.401	−0.078 (−0.150, −0.005) p = 0.983	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	−0.027 (−0.105, 0.050) p = 0.755	−0.025 (−0.101, 0.051) p = 0.743	0.030 (−0.046, 0.105) p = 0.221	−0.015 (−0.094, 0.064) p = 0.646	0.010 (−0.024, 0.044) p = 0.279	−0.012 (−0.046, 0.022) p = 0.761	0.016 (−0.027, 0.059) p = 0.236
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	0.001 (−0.033, 0.035) p = 0.473	−0.030 (−0.073, 0.013) p = 0.913
SM Individual = SM Group (p-value)	0.4185	0.4355	0.6437	0.8457	0.5914	0.1196	0.6135	0.1776	0.9792
SM Individual = TV (p-value)	0.304	0.316	0.3002	0.8988	0.9145	0.0939	0.6807	0.567	0.0359
SM Group= TV (p-value)	0.0724	0.8285	0.1428	0.7529	0.6738	0.9092	0.9265	0.4468	0.0429
Num. Lasso covariates	3	9	5	7	5	9	7	8	6
R²	0.308	0.303	0.343	0.314	0.148	0.123	0.102	0.076	0.095

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

SM Individual	0.030 (−0.041, 0.101) p = 0.207	0.001 (−0.068, 0.071) p = 0.486	−0.007 (−0.079, 0.065) p = 0.580	−0.015 (−0.086, 0.055) p = 0.664	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	−0.024 (−0.100, 0.052) p = 0.733	−0.018 (−0.096, 0.061) p = 0.671	−0.017 (−0.094, 0.059) p = 0.672	0.027 (−0.052, 0.106) p = 0.253	−0.012 (−0.093, 0.070) p = 0.612	0.009 (−0.026, 0.043) p = 0.311	−0.011 (−0.046, 0.023) p = 0.745	0.015 (−0.029, 0.059) p = 0.250
TV	−0.024 (−0.101, 0.054) p = 0.726	−0.034 (−0.109, 0.041) p = 0.812	0.038 (−0.041, 0.116) p = 0.173	−0.008 (−0.084, 0.069) p = 0.578	0.018 (−0.061, 0.097) p = 0.331	−0.019 (−0.100, 0.063) p = 0.673	0.012 (−0.022, 0.047) p = 0.238	0.003 (−0.032, 0.037) p = 0.443	−0.031 (−0.075, 0.013) p = 0.919
SM Individual = SM Group (p-value)	0.573	0.5139	0.7982	0.955	0.8676	0.1563	0.6135	0.1938	0.9763
SM Individual = TV (p-value)	0.1766	0.3603	0.26	0.847	0.9515	0.2086	0.7745	0.6157	0.0357
SM Group= TV (p-value)	0.0614	0.7994	0.177	0.8075	0.8238	0.8729	0.8299	0.434	0.0432
R²	0.292	0.283	0.329	0.295	0.062	0.050	0.061	0.061	0.062

Panel C: No covariates

SM Individual	0.020 (−0.062, 0.102) p = 0.315	0.018 (−0.062, 0.097) p = 0.333	−0.026 (−0.110, 0.059) p = 0.724	0.004 (−0.077, 0.084) p = 0.466	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	0.036 (−0.053, 0.125) p = 0.216	0.016 (−0.071, 0.102) p = 0.363	−0.028 (−0.120, 0.064) p = 0.725	−0.016 (−0.104, 0.072) p = 0.638	0.027 (−0.052, 0.106) p = 0.253	−0.012 (−0.093, 0.070) p = 0.612	0.009 (−0.026, 0.043) p = 0.311	−0.011 (−0.046, 0.023) p = 0.745	0.015 (−0.029, 0.059) p = 0.250
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	−0.031 (−0.119, 0.056) p = 0.759	0.018 (−0.061, 0.097) p = 0.331	−0.019 (−0.100, 0.063) p = 0.673	0.012 (−0.022, 0.047) p = 0.238	0.003 (−0.032, 0.037) p = 0.443	−0.031 (−0.075, 0.013) p = 0.919
Control Mean	-0.016	2.511	2.596	2.26	3.913	1.609	0.814	0.821	0.384
SM Individual = SM Group (p-value)	0.7317	0.9621	0.9592	0.6668	0.8676	0.1563	0.6135	0.1938	0.9763
SM Individual = TV (p-value)	0.577	0.3724	0.4736	0.4355	0.9515	0.2086	0.7745	0.6157	0.0357
SM Group= TV (p-value)	0.3787	0.4097	0.4533	0.7339	0.8238	0.8729	0.8299	0.434	0.0432
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R²	0.062	0.055	0.069	0.075	0.062	0.050	0.062	0.061	0.062

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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 t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 20: Treatment effect on attitudes on sexual violence

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO

	Index of (1,1,-1,1, 1,-1,1,-1)	Colleague comments on female look sexual harassment	Verbal harassment legal consequences	Interfere to support a woman sexually harassed at workplace	Inappropriate clothing or lack of Hijab justifies harassment	Interfere if a man hits a woman on the street	Interfere if a man sexually harasses on the street	Avoid the authorities if your daughter sexually assaulted	Seriousness of a child telling that was sexually harassed by a relative
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
SM Individual	−0.010 (−0.089, 0.069) p = 0.597	−0.024 (−0.110, 0.061) p = 0.712	0.010 (−0.013, 0.034) p = 0.196	−0.027 (−0.083, 0.029) p = 0.827	0.062 (−0.036, 0.160) p = 0.107	−0.043 (−0.096, 0.010) p = 0.945	0.008 (−0.053, 0.068) p = 0.403	−0.054 (−0.122, 0.014) p = 0.941	0.018 (−0.040, 0.076) p = 0.273
SM Group	0.012 (−0.074, 0.098) p = 0.393	−0.029 (−0.122, 0.064) p = 0.728	0.005 (−0.021, 0.030) p = 0.362	−0.033 (−0.093, 0.028) p = 0.853	0.040 (−0.067, 0.146) p = 0.233	0.025 (−0.032, 0.083) p = 0.195	0.014 (−0.052, 0.079) p = 0.341	−0.012 (−0.086, 0.062) p = 0.628	0.047* (−0.017, 0.110) p = 0.075
TV	0.064* (−0.023, 0.150) p = 0.075	0.010 (−0.083, 0.103) p = 0.417	0.011 (−0.015, 0.037) p = 0.199	0.031 (−0.030, 0.092) p = 0.159	0.009 (−0.097, 0.115) p = 0.435	0.028 (−0.030, 0.086) p = 0.171	0.049* (−0.016, 0.115) p = 0.069	−0.053 (−0.126, 0.021) p = 0.920	−0.003 (−0.067, 0.060) p = 0.544
SM Individual = SM Group (p-value)	0.6203	0.9266	0.6662	0.8544	0.6797	0.0203	0.8542	0.2705	0.3755
SM Individual = TV (p-value)	0.0957	0.4697	0.953	0.0629	0.3285	0.0159	0.2103	0.9728	0.5078
SM Group= TV (p-value)	0.2525	0.4256	0.6313	0.0457	0.5815	0.9337	0.2959	0.2956	0.1296
Num. Lasso covariates	8	4	2	6	9	8	9	9	6
R^2	0.134	0.070	0.062	0.080	0.138	0.081	0.080	0.111	0.092

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

SM Individual	−0.018 (−0.101, 0.064) p = 0.668	−0.028 (−0.114, 0.057) p = 0.741	0.010 (−0.013, 0.034) p = 0.194	−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	−0.047 (−0.117, 0.022) p = 0.908	0.016 (−0.043, 0.075) p = 0.296
SM Group	0.008 (−0.082, 0.098) p = 0.431	−0.024 (−0.117, 0.069) p = 0.695	0.004 (−0.022, 0.030) p = 0.378	−0.033 (−0.095, 0.028) p = 0.856	0.046 (−0.064, 0.157) p = 0.207	0.022 (−0.037, 0.080) p = 0.234	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
TV	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	−0.060 (−0.136, 0.015) p = 0.941	0.0004 (−0.063, 0.064) p = 0.496
SM Individual = SM Group (p-value)	0.5684	0.9322	0.631	0.8501	0.6291	0.0232	0.876	0.3395	0.3589
SM Individual = TV (p-value)	0.0481	0.3459	0.9956	0.0556	0.1714	0.0108	0.1815	0.7343	0.6303
SM Group= TV (p-value)	0.1702	0.4025	0.642	0.04	0.3882	0.7904	0.2494	0.2053	0.1712
R^2	0.061	0.063	0.054	0.059	0.064	0.049	0.058	0.057	0.073

Panel C: No covariates

SM Individual	−0.018 (−0.101, 0.064) p = 0.668	−0.028 (−0.114, 0.057) p = 0.741	0.010 (−0.013, 0.034) p = 0.194	−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	−0.047 (−0.117, 0.022) p = 0.908	0.016 (−0.043, 0.075) p = 0.296
SM Group	0.008 (−0.082, 0.098) p = 0.431	−0.024 (−0.117, 0.069) p = 0.695	0.004 (−0.022, 0.030) p = 0.378	−0.033 (−0.095, 0.028) p = 0.856	0.046 (−0.064, 0.157) p = 0.207	0.022 (−0.037, 0.080) p = 0.234	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
TV	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	−0.060 (−0.136, 0.015) p = 0.941	0.0004 (−0.063, 0.064) p = 0.496
Control Mean	-0.015	3.615	0.903	4.57	2.105	4.64	4.464	1.631	4.529
SM Individual = SM Group (p-value)	0.5684	0.9322	0.631	0.8501	0.6291	0.0232	0.876	0.3395	0.3589
SM Individual = TV (p-value)	0.0481	0.3459	0.9956	0.0556	0.1714	0.0108	0.1815	0.7343	0.6303
SM Group= TV (p-value)	0.1702	0.4025	0.642	0.04	0.3882	0.7904	0.2494	0.2053	0.1712
Observations	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.061	0.063	0.054	0.059	0.064	0.049	0.058	0.057	0.073

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

Supplementary Table 21: Treatment effect on donation to organizations supporting women

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO

	Index of (1,1)	Donation in EGP	Donating more than 0 EGP
	(1)	(2)	(3)
SM Individual	−0.009	−0.124	−0.0004
	(−0.090, 0.072)	(−0.749, 0.502)	(−0.035, 0.034)
	p = 0.835	p = 0.699	p = 0.982
SM Group	−0.037	−0.461	−0.006
	(−0.126, 0.051)	(−1.143, 0.220)	(−0.043, 0.032)
	p = 0.407	p = 0.185	p = 0.771
TV	−0.022	−0.293	−0.002
	(−0.110, 0.066)	(−0.973, 0.386)	(−0.039, 0.035)
	p = 0.627	p = 0.398	p = 0.910
SM Individual = SM Group (p-value)	0.5237	0.3323	0.7873
SM Individual = TV (p-value)	0.7691	0.6249	0.9273
SM Group= TV (p-value)	0.7357	0.6371	0.8611
Num. Lasso covariates	2	1	2
R^2	0.090	0.097	0.080

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

SM Individual	−0.009	−0.121	−0.0004
	(−0.090, 0.073)	(−0.754, 0.511)	(−0.035, 0.034)
	p = 0.837	p = 0.707	p = 0.980
SM Group	−0.038	−0.468	−0.006
	(−0.127, 0.051)	(−1.157, 0.222)	(−0.043, 0.032)
	p = 0.401	p = 0.184	p = 0.761
TV	−0.025	−0.315	−0.003
	(−0.114, 0.064)	(−1.003, 0.372)	(−0.041, 0.034)
	p = 0.580	p = 0.369	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	−0.121	−0.0004
	(−0.090, 0.073)	(−0.754, 0.511)	(−0.035, 0.034)
	p = 0.837	p = 0.707	p = 0.980
SM Group	−0.038	−0.468	−0.006
	(−0.127, 0.051)	(−1.157, 0.222)	(−0.043, 0.032)
	p = 0.401	p = 0.184	p = 0.761
TV	−0.025	−0.315	−0.003
	(−0.114, 0.064)	(−1.003, 0.372)	(−0.041, 0.034)
	p = 0.580	p = 0.369	p = 0.860
Control Mean	0.01	4.023	0.232
SM Individual = SM Group (p-value)	0.5158	0.326	0.7789
SM Individual = TV (p-value)	0.7166	0.5812	0.8777
SM Group= TV (p-value)	0.7782	0.6724	0.9009
Observations	4,165	4,165	4,165
R^2	0.075	0.077	0.071

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

Supplementary Table 22: Treatment effect on hypothetical use of online resources and contact with an organization when responding to domestic violence

	Index of (1,1)	Would use online resources	Would contact organization
	(1)	(2)	(3)
Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO			
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
SM Group	0.100***	0.115**	0.096**
	(0.018, 0.181)	(0.009, 0.221)	(0.001, 0.192)
	p = 0.009	p = 0.017	p = 0.024
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
SM Individual = SM Group (p-value)	0.6166	0.875	0.4873
SM Individual = TV (p-value)	0.5896	0.4226	0.8967
SM Group= TV (p-value)	0.9706	0.529	0.5801
Num. Lasso covariates	5	7	6
R²	0.236	0.195	0.212
Panel B: Controlling by the dependent variable at baseline (if available)			
SM Individual	0.075**	0.096**	0.057
	(−0.001, 0.150)	(−0.002, 0.195)	(−0.031, 0.146)
	p = 0.026	p = 0.028	p = 0.101
SM Group	0.097***	0.111**	0.092**
	(0.015, 0.179)	(0.004, 0.219)	(−0.004, 0.188)
	p = 0.010	p = 0.021	p = 0.031
TV	0.101***	0.153***	0.066*
	(0.020, 0.183)	(0.046, 0.260)	(−0.030, 0.162)
	p = 0.008	p = 0.003	p = 0.088
SM Individual = SM Group (p-value)	0.5886	0.7833	0.4874
SM Individual = TV (p-value)	0.5237	0.3005	0.8587
SM Group= TV (p-value)	0.9258	0.4582	0.6128
R²	0.229	0.179	0.198
Panel C: No covariates			
SM 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
SM 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
TV	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
Control Mean	-0.058	3.06	3.607
SM Individual = SM Group (p-value)	0.4622	0.7563	0.3337
SM Individual = TV (p-value)	0.2384	0.2285	0.3961
SM Group= TV (p-value)	0.6662	0.3832	0.9062
Observations	4,165	4,165	4,165
R²	0.080	0.075	0.074

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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 t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 23: Treatment effect on hypothetical use of online resources and contact with an organization when responding to sexual violence

	Index of (1,1)	Would use online resources	Would contact organization
	(1)	(2)	(3)
Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO			
SM Individual	0.113***	0.128***	0.101***
	(0.036, 0.189)	(0.035, 0.220)	(0.016, 0.185)
	p = 0.003	p = 0.004	p = 0.010
SM Group	0.123***	0.160***	0.092**
	(0.039, 0.206)	(0.059, 0.261)	(0.0002, 0.184)
	p = 0.003	p = 0.001	p = 0.025
TV	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
SM Individual = SM Group (p-value)	0.8129	0.5348	0.855
SM Individual = TV (p-value)	0.0721	0.6878	0.0065
SM Group= TV (p-value)	0.0468	0.3173	0.0131
Num. Lasso covariates	3	5	5
R^2	0.197	0.182	0.176
Panel B: Controlling by the dependent variable at baseline (if available)			
SM Individual	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
SM Group	0.113***	0.150***	0.082**
	(0.023, 0.203)	(0.043, 0.257)	(−0.015, 0.179)
	p = 0.007	p = 0.004	p = 0.050
TV	0.041	0.110**	−0.020
	(−0.048, 0.131)	(0.003, 0.217)	(−0.117, 0.077)
	p = 0.184	p = 0.022	p = 0.659
SM Individual = SM Group (p-value)	0.6436	0.4616	0.9299
SM Individual = TV (p-value)	0.2676	0.9885	0.0488
SM Group= TV (p-value)	0.1247	0.4797	0.0444
R^2	0.073	0.072	0.072
Panel C: No covariates			
SM Individual	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
SM Group	0.113***	0.150***	0.082**
	(0.023, 0.203)	(0.043, 0.257)	(−0.015, 0.179)
	p = 0.007	p = 0.004	p = 0.050
TV	0.041	0.110**	−0.020
	(−0.048, 0.131)	(0.003, 0.217)	(−0.117, 0.077)
	p = 0.184	p = 0.022	p = 0.659
Control Mean	-0.07	3.322	3.802
SM Individual = SM Group (p-value)	0.6436	0.4616	0.9299
SM Individual = TV (p-value)	0.2676	0.9885	0.0488
SM Group= TV (p-value)	0.1247	0.4797	0.0444
Observations	4,165	4,165	4,165
R^2	0.073	0.072	0.072

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

Supplementary Table 24: Treatment effect on recent use of online resources and contact with an organization during COVID-19

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO

	Index of (1,1)	Used online resources	Contacted organization
	(1)	(2)	(3)
SM Individual	0.060**	0.076***	0.015
	(−0.0001, 0.120)	(0.019, 0.134)	(−0.030, 0.060)
	p = 0.026	p = 0.005	p = 0.264
SM 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
TV	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
SM Individual = SM Group (p-value)	0.2241	0.6056	0.0292
SM Individual = TV (p-value)	0.3754	0.7761	0.2953
SM Group= TV (p-value)	0.748	0.4335	0.2676
Num. Lasso covariates	7	10	8
R²	0.467	0.519	0.271

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

SM 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
SM Group	0.102***	0.057**	0.076***
	(0.037, 0.168)	(−0.006, 0.120)	(0.027, 0.125)
	p = 0.002	p = 0.038	p = 0.002
TV	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
SM Individual = SM Group (p-value)	0.2021	0.7237	0.0266
SM Individual = TV (p-value)	0.2961	0.5701	0.2631
SM Group= TV (p-value)	0.8213	0.3679	0.283
R²	0.462	0.510	0.260

Panel C: No covariates

SM 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
SM Group	0.107***	0.066**	0.075***
	(0.040, 0.175)	(0.003, 0.130)	(0.025, 0.124)
	p = 0.001	p = 0.021	p = 0.002
TV	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
Control Mean	-0.147	1.355	1.118
SM Individual = SM Group (p-value)	0.1241	0.8081	0.015
SM Individual = TV (p-value)	0.1574	0.4919	0.1528
SM Group= TV (p-value)	0.9033	0.3636	0.3265
Observations	4,165	4,165	4,165
R²	0.432	0.497	0.238

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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 t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 25: Treatment effect on views on women's future outlook toward gender and marital equality

	Index of (1,1)	Used online resources	Contacted organization
Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO			
	(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
	(−0.038, 0.120)	(−0.016, 0.122)	(−0.056, 0.073)
	p = 0.153	p = 0.065	p = 0.398
TV	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 (p-value)	0.021	0.1873	0.0078
SM Individual = TV (p-value)	0.3777	0.8799	0.1715
SM Group= TV (p-value)	0.1619	0.2527	0.2045
Num. Lasso covariates	10	9	7
R^2	0.283	0.262	0.230
Panel B: Controlling by the dependent variable at baseline (if available)			
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
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
TV	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
SM Individual = SM Group (p-value)	0.0219	0.2005	0.0045
SM Individual = TV (p-value)	0.4371	0.945	0.1386
SM Group= TV (p-value)	0.1372	0.2353	0.1812
R^2	0.276	0.228	0.218
Panel C: No covariates			
SM Individual	0.153***	0.119***	0.104***
	(0.070, 0.236)	(0.047, 0.190)	(0.039, 0.169)
	p = 0.0002	p = 0.001	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
TV	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
Control Mean	-0.076	4.064	4.244
SM Individual = SM Group (p-value)	0.0053	0.0426	0.0036
SM Individual = TV (p-value)	0.1289	0.3685	0.0737
SM Group= TV (p-value)	0.2112	0.268	0.2685
Observations	4,165	4,165	4,165
R^2	0.061	0.061	0.061

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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 t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 26: Treatment effect on domestic and sexual violence experienced during COVID-19

Panel A: Controlling by the lagged dependent variable and covariates 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	0.031	0.049	0.056	0.004
	(−0.039, 0.100)	(−0.045, 0.143)	(−0.042, 0.154)	(−0.102, 0.110)
	p = 0.385	p = 0.306	p = 0.266	p = 0.939
SM Group	0.009	0.016	0.015	−0.002
	(−0.066, 0.085)	(−0.087, 0.118)	(−0.092, 0.122)	(−0.117, 0.114)
	p = 0.807	p = 0.765	p = 0.782	p = 0.979
TV	0.039	0.043	0.071	0.025
	(−0.036, 0.115)	(−0.059, 0.145)	(−0.036, 0.177)	(−0.090, 0.140)
	p = 0.307	p = 0.408	p = 0.196	p = 0.674
SM Individual = SM Group (p-value)	0.5803	0.5216	0.4567	0.9223
SM Individual = TV (p-value)	0.8249	0.9068	0.7889	0.7264
SM Group= TV (p-value)	0.4483	0.6078	0.3216	0.6618
Num. Lasso covariates	7	3	6	5
R^2	0.340	0.294	0.318	0.289

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

SM Individual	0.044	0.067	0.068	0.026
	(−0.027, 0.114)	(−0.029, 0.163)	(−0.032, 0.168)	(−0.090, 0.142)
	p = 0.225	p = 0.171	p = 0.181	p = 0.659
SM Group	0.015	0.019	0.027	−0.002
	(−0.062, 0.091)	(−0.085, 0.124)	(−0.081, 0.136)	(−0.128, 0.125)
	p = 0.705	p = 0.715	p = 0.621	p = 0.981
TV	0.047	0.056	0.072	0.039
	(−0.030, 0.123)	(−0.048, 0.160)	(−0.036, 0.181)	(−0.087, 0.166)
	p = 0.230	p = 0.291	p = 0.192	p = 0.541
SM Individual = SM Group (p-value)	0.4624	0.3732	0.4634	0.6675
SM Individual = TV (p-value)	0.9348	0.8385	0.9427	0.8383
SM Group= TV (p-value)	0.4236	0.5012	0.4303	0.5353
R^2	0.317	0.264	0.295	0.142

Panel C: No covariates

SM Individual	0.050	0.063	0.089	0.026
	(−0.029, 0.130)	(−0.041, 0.167)	(−0.022, 0.200)	(−0.090, 0.142)
	p = 0.216	p = 0.235	p = 0.118	p = 0.659
SM Group	0.009	0.019	0.017	−0.002
	(−0.078, 0.095)	(−0.094, 0.133)	(−0.104, 0.137)	(−0.128, 0.125)
	p = 0.846	p = 0.741	p = 0.789	p = 0.981
TV	0.045	0.048	0.081	0.039
	(−0.042, 0.131)	(−0.066, 0.161)	(−0.040, 0.201)	(−0.087, 0.166)
	p = 0.312	p = 0.410	p = 0.189	p = 0.541
Control Mean	-0.014	3.459	3.111	2.719
SM Individual = SM Group (p-value)	0.3474	0.4482	0.2429	0.6675
SM Individual = TV (p-value)	0.8986	0.7881	0.898	0.8383
SM Group= TV (p-value)	0.4259	0.6312	0.3082	0.5353
Observations	4,165	4,165	4,165	4,165
R^2	0.129	0.131	0.128	0.142

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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. 95% confidence intervals are in parenthesis (due to two-sided t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 27: Treatment effects on domestic and sexual violence experienced before COVID-19

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO

	Index of (1,1,1) (1)	Heard of or experienced yelling (2)	Heard of or experienced hitting (3)	Heard of or experienced sexual abuse (4)
SM Individual	−0.081** (−0.149, −0.013) p = 0.021	−0.157*** (−0.245, −0.068) p = 0.001	−0.082* (−0.177, 0.013) p = 0.090	−0.034 (−0.139, 0.072) p = 0.530
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	−0.002 (−0.117, 0.113) p = 0.973
TV	−0.028 (−0.102, 0.046) p = 0.461	−0.042 (−0.138, 0.054) p = 0.386	−0.036 (−0.139, 0.067) p = 0.492	−0.015 (−0.130, 0.099) p = 0.793
SM Individual = SM Group (p-value)	0.3298	0.0933	0.8305	0.5878
SM Individual = TV (p-value)	0.1606	0.0198	0.3806	0.752
SM Group= TV (p-value)	0.677	0.5266	0.5176	0.8243
Num. Lasso covariates	7	3	6	6
R^2	0.366	0.322	0.326	0.273

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

SM Individual	−0.085** (−0.154, −0.015) p = 0.018	−0.142*** (−0.232, −0.051) p = 0.003	−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	−0.003 (−0.127, 0.121) p = 0.964
SM Individual = SM Group (p-value)	0.3871	0.1737	0.7278	0.8443
SM Individual = TV (p-value)	0.1463	0.0404	0.2545	0.8859
SM Group= TV (p-value)	0.5669	0.5029	0.4397	0.9584
R^2	0.337	0.290	0.303	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
TV	−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	−0.003 (−0.127, 0.121) p = 0.964
Control Mean	0.049	3.619	3.242	2.758
SM Individual = SM Group (p-value)	0.6436	0.1922	0.7934	0.8443
SM Individual = TV (p-value)	0.3476	0.0657	0.6593	0.8859
SM Group= TV (p-value)	0.6423	0.6027	0.4919	0.9584
Observations	4,165	4,165	4,165	4,165
R^2	0.139	0.135	0.133	0.141

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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. 95% confidence intervals are in parenthesis (due to two-sided t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 28: Treatment effect of hypothetical talking to husband and family members, or reporting to authorities when responding to domestic violence

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO

	Index of (1,1,1)	Would talk husband	Would talk family	Would report authorities
	(1)	(2)	(3)	(4)
SM Individual	−0.035	−0.026	−0.033	−0.008
	(−0.112, 0.043)	(−0.108, 0.057)	(−0.113, 0.047)	(−0.101, 0.086)
	p = 0.382	p = 0.542	p = 0.422	p = 0.870
SM Group	−0.042	−0.071	−0.049	0.045
	(−0.127, 0.042)	(−0.161, 0.019)	(−0.136, 0.038)	(−0.057, 0.147)
	p = 0.328	p = 0.121	p = 0.266	p = 0.386
TV	−0.052	−0.086*	−0.062	0.057
	(−0.136, 0.032)	(−0.176, 0.003)	(−0.149, 0.025)	(−0.045, 0.159)
	p = 0.228	p = 0.059	p = 0.162	p = 0.272
SM Individual = SM Group (p-value)	0.8612	0.3214	0.7076	0.3095
SM Individual = TV (p-value)	0.6881	0.1842	0.5101	0.2126
SM Group= TV (p-value)	0.8251	0.744	0.7822	0.8234
Num. Lasso covariates	1	4	7	6
R^2	0.168	0.291	0.180	0.291

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

SM Individual	−0.032	−0.016	−0.030	−0.012
	(−0.110, 0.046)	(−0.099, 0.068)	(−0.110, 0.050)	(−0.107, 0.082)
	p = 0.418	p = 0.714	p = 0.468	p = 0.799
SM Group	−0.042	−0.065	−0.050	0.051
	(−0.127, 0.043)	(−0.155, 0.026)	(−0.137, 0.038)	(−0.052, 0.154)
	p = 0.334	p = 0.163	p = 0.266	p = 0.337
TV	−0.054	−0.086*	−0.066	0.068
	(−0.138, 0.031)	(−0.176, 0.005)	(−0.153, 0.021)	(−0.035, 0.171)
	p = 0.215	p = 0.064	p = 0.136	p = 0.195
SM Individual = SM Group (p-value)	0.824	0.2904	0.6557	0.2325
SM Individual = TV (p-value)	0.6206	0.1296	0.4112	0.1265
SM Group= TV (p-value)	0.7905	0.6561	0.7144	0.7464
R^2	0.166	0.276	0.174	0.272

Panel C: No covariates

SM Individual	−0.032	−0.008	−0.018	−0.042
	(−0.115, 0.050)	(−0.102, 0.087)	(−0.103, 0.067)	(−0.148, 0.065)
	p = 0.443	p = 0.870	p = 0.678	p = 0.447
SM Group	−0.048	−0.088*	−0.040	0.040
	(−0.138, 0.042)	(−0.190, 0.015)	(−0.133, 0.053)	(−0.076, 0.157)
	p = 0.295	p = 0.095	p = 0.399	p = 0.497
TV	−0.062	−0.124**	−0.063	0.079
	(−0.152, 0.028)	(−0.227, −0.022)	(−0.155, 0.030)	(−0.037, 0.195)
	p = 0.177	p = 0.018	p = 0.185	p = 0.183
Control Mean	0.032	3.954	3.919	2.828
SM Individual = SM Group (p-value)	0.7321	0.1291	0.6443	0.1686
SM Individual = TV (p-value)	0.5194	0.0265	0.3451	0.0422
SM Group= TV (p-value)	0.7688	0.4958	0.6383	0.5247
Observations	4,165	4,165	4,165	4,165
R^2	0.053	0.065	0.064	0.072

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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. 95% confidence intervals are in parenthesis (due to two-sided t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 29: Treatment effect of hypothetical talking to husband and family members, or reporting to authorities when responding to sexual violence

	Index of (1,1)	Would talk family	Would report authorities
	(1)	(2)	(3)
Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO			
SM Individual	0.004	0.054	−0.054
	(−0.077, 0.084)	(−0.028, 0.135)	(−0.147, 0.039)
	p = 0.931	p = 0.196	p = 0.258
SM Group	−0.048	−0.011	−0.073
	(−0.136, 0.040)	(−0.100, 0.077)	(−0.174, 0.029)
	p = 0.284	p = 0.803	p = 0.162
TV	0.018	0.034	−0.008
	(−0.070, 0.105)	(−0.054, 0.123)	(−0.109, 0.093)
	p = 0.693	p = 0.451	p = 0.881
SM Individual = SM Group (p-value)	0.2499	0.1511	0.7183
SM Individual = TV (p-value)	0.7536	0.6628	0.3739
SM Group= TV (p-value)	0.1518	0.3273	0.2219
Num. Lasso covariates	4	2	6
R²	0.111	0.123	0.120
Panel B: Controlling by the dependent variable at baseline (if available)			
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
SM Group	−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
TV	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
SM Individual = SM Group (p-value)	0.2791	0.1263	0.895
SM Individual = TV (p-value)	0.684	0.4763	0.1843
SM Group= TV (p-value)	0.1451	0.4228	0.154
R²	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
SM Group	−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
TV	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
Control Mean	0.004	4.061	3.999
SM Individual = SM Group (p-value)	0.2791	0.1263	0.895
SM Individual = TV (p-value)	0.684	0.4763	0.1843
SM Group= TV (p-value)	0.1451	0.4228	0.154
Observations	4,165	4,165	4,165
R²	0.065	0.075	0.059

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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. 95% confidence intervals are in parenthesis (due to two-sided t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 30: Treatment effects on recent use of online resources and contact with an organization when responding to domestic and sexual violence before COVID-19

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO

	Index of (1,1)	Used online resources	Contacted organization
	(1)	(2)	(3)
SM Individual	0.017	0.036	−0.006
	(−0.044, 0.078)	(−0.017, 0.090)	(−0.049, 0.038)
	p = 0.586	p = 0.185	p = 0.802
SM Group	0.032	0.017	0.023
	(−0.034, 0.098)	(−0.041, 0.076)	(−0.024, 0.070)
	p = 0.346	p = 0.561	p = 0.343
TV	0.028	0.025	0.013
	(−0.038, 0.094)	(−0.034, 0.083)	(−0.034, 0.060)
	p = 0.409	p = 0.405	p = 0.598
SM Individual = SM Group (p-value)	0.6573	0.5232	0.2372
SM Individual = TV (p-value)	0.7471	0.6963	0.449
SM Group= TV (p-value)	0.906	0.8077	0.6784
Num. Lasso covariates	8	11	7
R^2	0.468	0.498	0.295

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

SM Individual	0.010	0.035	−0.012
	(−0.051, 0.071)	(−0.019, 0.089)	(−0.056, 0.031)
	p = 0.747	p = 0.211	p = 0.578
SM Group	0.025	0.016	0.020
	(−0.041, 0.092)	(−0.043, 0.075)	(−0.027, 0.068)
	p = 0.456	p = 0.604	p = 0.399
TV	0.024	0.027	0.011
	(−0.042, 0.090)	(−0.031, 0.086)	(−0.036, 0.059)
	p = 0.473	p = 0.361	p = 0.635
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^2	0.459	0.489	0.280

Panel C: No covariates

SM Individual	0.005	0.031	−0.014
	(−0.058, 0.068)	(−0.024, 0.086)	(−0.058, 0.030)
	p = 0.887	p = 0.265	p = 0.538
SM Group	0.036	0.022	0.025
	(−0.033, 0.104)	(−0.038, 0.082)	(−0.023, 0.073)
	p = 0.308	p = 0.480	p = 0.312
TV	0.043	0.036	0.021
	(−0.025, 0.111)	(−0.024, 0.095)	(−0.027, 0.069)
	p = 0.214	p = 0.241	p = 0.394
Control Mean	-0.09	1.342	1.138
SM Individual = SM Group (p-value)	0.3732	0.7507	0.1142
SM Individual = TV (p-value)	0.2684	0.8848	0.1567
SM Group= TV (p-value)	0.8326	0.6511	0.8733
Observations	4,165	4,165	4,165
R^2	0.424	0.471	0.255

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into 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. 95% confidence intervals are in parenthesis (due to two-sided t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 31: 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 responding to sexual violence	-	-	0.093
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 when responding to domestic violence	0.095	0.093	0.103
Index of hypothetical talking to husband, family members, or reporting to authorities when responding to sexual violence	0.124	0.165	0.104
Index of recent use of online resources and contact with an organization before COVID-19	0.068	0.086	0.073

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.

Supplementary Table 32: 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 responding to sexual violence	-	-	0.143
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 when responding to domestic violence	0.125	0.123	0.143
Index of hypothetical talking to husband, family members, or reporting to authorities when responding to sexual violence	0.125	0.123	0.143
Index of recent use of online resources and contact with an organization before COVID-19	0.125	0.123	0.143

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.

Supplementary Table 33: Endline survey questions used to create all outcome indices.

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

A Sample representativeness

Supplementary Table 34: Summary statistics of comparable demographics both in the Arab Barometer sample, the Arab Barometer internet user sample, and the experimental sample

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

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

Supplementary Table 35: Summary statistics of comparable outcomes both in the Arab Barometer sample, the Arab Barometer internet user sample, and the experimental sample

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

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

Supplementary Table 36: 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	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.275	0.290	0.230	0.312	0.150	0.090	0.343	0.245	0.206	0.515	0.287

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. All regressions include controls for all baseline covariates in the outcome family as stated in their corresponding Supplementary Table 16 to Table 26. 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 t-tests of statistical significance. Columns (6) and (7) use to two-sided t-tests. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 37: 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** (0.041)	−0.040 (0.040)	−0.098 (0.045)	0.018 (0.046)	0.071* (0.040)	−0.012 (0.043)	−0.027 (0.044)	−0.050 (0.034)	0.038 (0.042)
Education above BA x TV	−0.048 (0.042)	−0.042 (0.042)	0.003 (0.041)	−0.024 (0.041)	−0.090 (0.045)	0.009 (0.047)	0.100** (0.040)	−0.001 (0.043)	0.025 (0.044)	−0.014 (0.034)	0.023 (0.042)
Married x SM Individual	−0.055 (0.048)	0.104** (0.048)	−0.001 (0.047)	−0.033 (0.046)	0.018 (0.052)	−0.064 (0.053)	0.084* (0.046)	0.118*** (0.049)	0.161*** (0.050)	−0.044 (0.039)	−0.001 (0.048)
Married x SM Group	0.019 (0.052)	0.135*** (0.052)	−0.048 (0.051)	0.021 (0.050)	0.088* (0.056)	−0.025 (0.057)	0.077 (0.049)	0.058 (0.053)	0.023 (0.054)	−0.075 (0.042)	0.025 (0.051)
Married x TV	0.050 (0.053)	0.104** (0.053)	−0.033 (0.052)	0.002 (0.051)	0.016 (0.057)	0.084 (0.059)	0.066 (0.050)	0.115** (0.054)	0.094** (0.056)	−0.018 (0.043)	0.068* (0.053)
Number of children x SM Individual	−0.007 (0.052)	−0.023 (0.053)	0.074* (0.051)	0.051 (0.050)	−0.047 (0.056)	0.015 (0.058)	−0.031 (0.050)	−0.041 (0.053)	−0.037 (0.055)	−0.005 (0.043)	−0.012 (0.052)
Number of children x SM Group	−0.067 (0.055)	−0.027 (0.056)	0.067 (0.054)	0.046 (0.053)	−0.081 (0.060)	−0.010 (0.061)	−0.044 (0.053)	−0.026 (0.057)	0.003 (0.058)	0.076** (0.045)	−0.082 (0.055)
Number of children x TV	−0.056 (0.057)	−0.059 (0.057)	0.088* (0.056)	0.042 (0.055)	−0.074 (0.061)	−0.076 (0.063)	−0.008 (0.054)	−0.105 (0.058)	−0.081 (0.060)	−0.048 (0.046)	−0.020 (0.056)
Social media use x SM Individual	0.059* (0.040)	−0.023 (0.040)	0.045 (0.039)	0.062* (0.039)	0.032 (0.043)	0.052 (0.044)	0.0002 (0.038)	0.066* (0.041)	0.097** (0.042)	0.071** (0.033)	0.072** (0.040)
Social media use x SM Group	0.047 (0.043)	0.021 (0.043)	0.073** (0.042)	0.054* (0.041)	0.003 (0.046)	−0.034 (0.047)	−0.067* (0.041)	0.024 (0.044)	0.066* (0.045)	0.087*** (0.035)	0.030 (0.042)
Social media use x TV	0.047 (0.044)	0.011 (0.044)	0.068* (0.043)	0.089** (0.042)	−0.040 (0.047)	−0.016 (0.048)	−0.040 (0.042)	0.016 (0.045)	0.058 (0.046)	0.078** (0.036)	0.043 (0.044)
Social media hours x SM Individual	−0.080 (0.042)	−0.082 (0.042)	−0.003 (0.041)	−0.106 (0.040)	−0.066 (0.045)	−0.073 (0.046)	0.0003 (0.040)	−0.050 (0.043)	0.001 (0.044)	−0.038 (0.034)	−0.111 (0.042)
Social media hours x SM Group	−0.062 (0.045)	−0.087 (0.045)	0.039 (0.044)	−0.099 (0.043)	−0.101 (0.048)	−0.099** (0.049)	0.010 (0.043)	−0.082 (0.046)	−0.067 (0.047)	0.006 (0.036)	−0.103 (0.044)
Social media hours x TV	−0.034 (0.044)	−0.072 (0.045)	−0.010 (0.043)	−0.137 (0.043)	−0.098 (0.048)	−0.110** (0.049)	0.022 (0.042)	−0.076 (0.045)	−0.050 (0.046)	0.021 (0.036)	−0.046 (0.044)
Husband final say x SM Individual	−0.036 (0.039)	0.007 (0.040)	−0.075 (0.039)	−0.015 (0.038)	−0.034 (0.042)	−0.041 (0.043)	−0.055 (0.038)	−0.040 (0.040)	0.009 (0.041)	0.022 (0.032)	−0.006 (0.039)
Husband final say x SM Group	−0.061 (0.042)	0.001 (0.043)	−0.005 (0.042)	−0.019 (0.041)	−0.086 (0.046)	−0.081* (0.047)	0.012 (0.040)	−0.040 (0.043)	−0.050 (0.044)	−0.014 (0.034)	−0.027 (0.042)
Husband final say x TV	−0.036 (0.043)	−0.082 (0.043)	−0.099 (0.042)	−0.00005 (0.041)	−0.038 (0.046)	−0.112** (0.047)	−0.072* (0.041)	0.057* (0.044)	0.038 (0.045)	0.039 (0.034)	−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	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165	4,165
R^2	0.289	0.287	0.243	0.320	0.159	0.108	0.352	0.250	0.211	0.486	0.294

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. All regressions include controls for all baseline covariates in the outcome family as stated in their corresponding Supplementary Table 16 to Table 26. Although we do not display p-values and confidence intervals, all columns but (6) and (7) use positive one-sided t-tests of statistical significance. Columns (6) and (7) use to two-sided t-tests. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 38: 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 variable and covariates selected by LASSO

	Index of TV show consumption (1)	Index of videos of women's empowerment and support consumption (2)	Index of knowledge about treatment information (3)	Index of attitudes toward gender and marital equality (4)	Index of attitudes on sexual violence (5)	Index of donation to organizations supporting women (6)	Index of domestic and sexual violence experienced during COVID-19 (7)	Index of hypothetical use of online resources and contact with an organization when responding to domestic violence (8)	Index of hypothetical use of online resources and contact with an organization when responding to sexual violence (9)	Index of recent use of online resources and contact with an organization during COVID-19 (10)	Index of views on women's future outlook toward gender and marital equality (11)
SM Individual	0.153*** (0.076, 0.230) p = 0.0001	1.024*** (0.947, 1.101) p = 0.000	0.211*** (0.135, 0.286) p = 0.00000	−0.015 (−0.089, 0.058) p = 0.660	−0.018 (−0.102, 0.065) p = 0.667	−0.077* (−0.166, 0.012) p = 0.092	0.025 (−0.048, 0.097) p = 0.506	0.035 (−0.042, 0.113) p = 0.187	0.106*** (0.026, 0.187) p = 0.005	0.037 (−0.024, 0.099) p = 0.117	0.173*** (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	0.052 (−0.032, 0.135) p = 0.114
SM Individual = SM Group (p-value)	0.3333	0.0289	0.0152	0.3882	0.988	0.8339	0.6481	0.5553	0.9315	0.0149	0.0119
SM Individual = TV (p-value)	0	0	0.1647	0.544	0.2802	0.9706	0.2834	0.638	0.0414	0.1009	0.0041
SM Group= TV (p-value)	0	0	2e-04	0.1535	0.2983	0.8673	0.1363	0.9105	0.0569	0.4508	0.7136
Num. Lasso covariates	6	4	9	3	8	2	7	5	3	7	10
R²	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 dependent variable at baseline (if available)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
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	0.004 (−0.070, 0.079) p = 0.454	−0.038 (−0.124, 0.048) p = 0.807	−0.046 (−0.138, 0.045) p = 0.319	0.043 (−0.031, 0.116) p = 0.254	0.024 (−0.054, 0.102) p = 0.272	0.104*** (0.018, 0.191) p = 0.009	0.030 (−0.032, 0.092) p = 0.173	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	−0.034 (−0.128, 0.059) p = 0.766	−0.065 (−0.164, 0.033) p = 0.193	−0.00002 (−0.079, 0.079) p = 1.000	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	−0.037 (−0.117, 0.044) p = 0.814	0.030 (−0.064, 0.123) p = 0.268	−0.080 (−0.179, 0.019) p = 0.114	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)	0.6574	0.0258	0.0248	0.5899	0.9384	0.7019	0.2844	0.5643	0.7643	0.0102	0.0142
SM Individual = TV (p-value)	0	0	0.0693	0.3138	0.1521	0.5039	0.5047	0.4423	0.1449	0.0365	0.0043
SM Group= TV (p-value)	0	0	1e-04	0.1328	0.1867	0.7792	0.0913	0.8491	0.2585	0.6565	0.6848
R²	0.289	0.295	0.225	0.328	0.101	0.158	0.340	0.261	0.089	0.479	0.270

Panel C: No covariates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
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	−0.008 (−0.100, 0.085) p = 0.567	−0.034 (−0.128, 0.059) p = 0.766	−0.065 (−0.164, 0.033) p = 0.193	−0.015 (−0.105, 0.075) p = 0.739	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	0.030 (−0.064, 0.123) p = 0.268	−0.080 (−0.179, 0.019) p = 0.114	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	−0.271	−0.703	−0.193	−0.016	−0.015	0.01	−0.014	−0.058	−0.07	−0.147	−0.076
SM Individual = SM Group (p-value)	0.3109	0.0535	0.0513	0.5388	0.9384	0.7019	0.322	0.7658	0.7643	0.0019	0.0051
SM Individual = TV (p-value)	0	0	0.1256	0.7653	0.1521	0.5039	0.6479	0.2775	0.1449	0.0052	0.0018
SM Group= TV (p-value)	0	0	7e-04	0.3755	0.1867	0.7792	0.1599	0.4416	0.2585	0.7817	0.7431
Observations	3,910	3,910	3,910	3,910	3,910	3,910	3,910	3,910	3,910	3,910	3,910
R²	0.206	0.275	0.176	0.107	0.101	0.158	0.149	0.109	0.089	0.437	0.088

Notes: We report estimates from WGLS regressions where the weights are the product of the inverse probability of treatment assignment and weights to mimic Facebook 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 in parenthesis (due to positive one-sided t-tests). Columns (6) and (7) show 95% confidence intervals (due to two-sided t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 39: 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***	−0.018*	0.012	−0.003	0.060***	0.076***	0.007	0.042**
	(0.203)	(0.011)	(0.010)	(0.021)	(0.021)	(0.021)	(0.021)	(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). Two-sided t-tests were used to test the null hypothesis. * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.

Supplementary Table 40: Treatment effect on main indexes including 210 rrespondents who responded more than once to the endline

Panel A: Controlling by the lagged dependent variable and covariates selected by LASSO

	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	0.139^{***} (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	−0.010 (−0.087, 0.068) p = 0.596	−0.019 (−0.097, 0.060) p = 0.642	0.024 (−0.043, 0.091) p = 0.481	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	−0.035 (−0.121, 0.050) p = 0.419	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	0.0003 (−0.074, 0.075) p = 0.498	0.081^{**} (−0.004, 0.166) p = 0.032	−0.029 (−0.115, 0.056) p = 0.503	0.029 (−0.045, 0.102) p = 0.445	0.096^{***} (0.017, 0.176) p = 0.009	0.021 (−0.060, 0.103) p = 0.306	0.069^{**} (0.005, 0.134) p = 0.018	0.075^{**} (−0.003, 0.152) p = 0.030
SM Individual = SM Group (p-value)	0.3391	0.0188	0.1219	0.7338	0.6357	0.7034	0.657	0.8576	0.898	0.2693	0.006
SM Individual = TV (p-value)	0	0	0.006	0.3424	0.039	0.8074	0.9059	0.6248	0.0399	0.7397	0.1914
SM Group= TV (p-value)	0	0	0	0.2085	0.1201	0.8945	0.5838	0.7621	0.0602	0.4542	0.1609
Num. Lasso covariates	6	3	8	6	6	1	6	4	2	7	7
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 dependent variable at baseline (if available)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
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	0.042 (−0.027, 0.110) p = 0.119	−0.017 (−0.096, 0.063) p = 0.658	−0.018 (−0.098, 0.061) p = 0.649	0.036 (−0.032, 0.104) p = 0.299	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	0.047 (−0.028, 0.122) p = 0.111	0.001 (−0.086, 0.088) p = 0.490	−0.036 (−0.122, 0.050) p = 0.415	0.013 (−0.061, 0.088) p = 0.726	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	0.016 (−0.061, 0.093) p = 0.340
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	−0.007 (−0.082, 0.069) p = 0.569	0.080^{**} (−0.007, 0.168) p = 0.036	−0.031 (−0.118, 0.055) p = 0.481	0.035 (−0.039, 0.109) p = 0.358	0.095^{***} (0.015, 0.174) p = 0.010	0.025 (−0.063, 0.112) p = 0.291	0.074^{**} (0.009, 0.138) p = 0.013	0.077^{**} (0.0001, 0.155) p = 0.025
SM Individual = SM Group (p-value)	0.4095	0.0186	0.1236	0.8891	0.6919	0.6915	0.5492	0.8255	0.9116	0.2515	0.0069
SM Individual = TV (p-value)	0	0	0.0084	0.2125	0.0304	0.7745	0.976	0.5641	0.1847	0.6319	0.248
SM Group= TV (p-value)	0	0	0	0.1765	0.0843	0.915	0.5796	0.7277	0.1609	0.518	0.1332
R^2	0.239	0.273	0.207	0.293	0.059	0.072	0.320	0.228	0.071	0.449	0.270

Panel C: No covariates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
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	0.001 (−0.086, 0.088) p = 0.490	−0.036 (−0.122, 0.050) p = 0.415	0.006 (−0.078, 0.091) p = 0.881	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	−0.0001 (−0.088, 0.088) p = 0.501
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	0.015 (−0.072, 0.101) p = 0.372	0.080^{**} (−0.007, 0.168) p = 0.036	−0.031 (−0.118, 0.055) p = 0.481	0.035 (−0.050, 0.119) p = 0.422	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	-0.263	-0.705	-0.185	-0.021	-0.011	0.013	-0.004	-0.047	-0.059	-0.14	-0.059
SM Individual = SM Group (p-value)	0.4362	0.0604	0.1503	0.9504	0.6919	0.6915	0.581	0.672	0.9116	0.1642	0.0025
SM Individual = TV (p-value)	0	0	0.0104	0.6945	0.0304	0.7745	0.9216	0.2598	0.1847	0.3739	0.0804
SM Group= TV (p-value)	0	0	1e-04	0.6573	0.0843	0.915	0.5264	0.492	0.1609	0.6286	0.2177
Observations	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375	4,375
R^2	0.162	0.247	0.161	0.065	0.059	0.072	0.128	0.081	0.071	0.426	0.059

Notes: We report estimates from WGLS regressions where the weights are in the inverse probability of treatment assignment, including randomization block fixed effects. Regressions in Panel A use as controls the covariates selected by LASSO in which the treatment indicators, lagged dependent variable, and fixed effects are forced into model and covariates are selected from the outcome family. Regressions in Panel B include the dependent variable at baseline (if available) as a control. Regressions in Panel C do not include any variable as a control. All columns but (6) and (7) show 90% confidence intervals in parenthesis (due to positive one-sided t-tests). Columns (6) and (7) show 95% confidence intervals (due to two-sided t-tests). * denotes p<0.1, ** denotes p<0.05, and *** denotes p<0.01.