



HEDG

HEALTH, ECONOMETRICS AND DATA GROUP

THE UNIVERSITY *of York*

WP 21/04

Hang Up on Stereotypes: Domestic Violence and Anti- Abuse Helpline Campaign

Marco Colagrossi; Claudio Deiana;
Andrea Geraci and Ludovica Giua

February 2021

<http://www.york.ac.uk/economics/postgrad/herc/hedg/wps/>

Hang Up on Stereotypes: Domestic Violence and Anti-Abuse Helpline Campaign

Marco Colagrossi¹, Claudio Deiana², Andrea Geraci¹, and Ludovica Giua^{*1}

¹European Commission, Joint Research Centre (JRC)

²University of Cagliari, CRENoS and University of Essex

Abstract

We estimate the consequences of a Government-led anti-domestic-abuse campaign launched in the midst of the covid-19 pandemic on the number of calls to the Italian domestic violence helpline. In the week after the start of the campaign, we document a sharp increase in the number of calls. By exploiting geographical variation in the exposure to the campaign ads aired on public TV networks, we find that higher exposure is associated with an increase in the number of calls during the weeks after the launch of the campaign. Moreover, the effectiveness of the media campaign is hindered in areas where gender stereotypes are stronger, even when differentials in income and violence are accounted for. More efforts to break down gender stereotypes are needed to successfully increase domestic violence reporting.

Keywords: Domestic violence; Welfare policy; Gender stereotypes; Covid-19.

JEL codes: I18; I38; J12.

*Corresponding author: ludovica.giua@ec.europa.eu.

We thank Sonia Bhalotra, Davide Dragone, Antonella Ferrara, Massimiliano Ferraresi, Silvia Granato, Andrea Isoni, Giovanni Mastrobuoni, Marco Nieddu and audience at the University of Cagliari, the Joint Research Centre of the European Commission, the 2020 AIEL Conference, the 2020 SIE Conference and the 2021 ICEEE Conference for valuable comments. We are grateful to the Italian Department of Equal Opportunities and to the Italian National Institute of Statistics. Opinions expressed herein are those of the authors only and do not reflect the views of, or involve any responsibility for, the institutions to which they are affiliated. Any errors are the fault of the authors only.

1 Introduction

According to the World Health Organisation, one in three women will experience physical and/or sexual violence at some point in her life. The vast majority of violent acts against women are perpetrated by current or former intimate partners and consequences are far-reaching, as they affect both victims and their families in terms of worse physical and mental health (Ellsberg et al., 2008) and labour market outcomes (Sabia et al., 2013), in the short- and the long-run.¹

With the occurring of the covid-19 pandemic, Government authorities and NGOs across the world have promptly flagged that containment measures designed to protect people from the contagion, while successfully “flattening the curve” (Hsiang et al., 2020), might also have triggered an increase in domestic violence with victims trapped with their abusers (Evans et al., 2020). With personal movement limited and families confined to their homes, women will bear most of the costs of the crisis (Alon et al., 2020) and the surge in domestic violence simultaneously (UN Women, 2020).

In response to these growing concerns, two weeks after the introduction of the first national lock-down measures, the Italian government launched an awareness campaign to promote the usage of the official anti-violence helpline. While stay-at-home orders, by forcing cohabitation with abusive partners, have made violence more recurrent and seeking help more difficult, the campaign was especially conceived to encourage women undergoing intimate partner violence (IPV, hereafter) to contact the institutional 1522 helpline, which offers support to victims of abuse and stalking. To this end, the campaign was massively advertised on TV.

We assess the effectiveness of the Italian campaign on the take-up of the 1522 helpline usage and investigate the role of socio-economic and cultural mediating factors that can potentially favor or hinder its efficacy in encouraging help-seeking behaviour. Indeed, the perception of the abuse as something not serious, or as private or family matter, together with fear and shame, are the reasons most frequently associated with under-reporting. To shed light on potential mechanisms, we consider measures of women’s relative economic autonomy and empowerment and the prevalence of gender stereotypes at the local level.

Our perspective is different from other recent studies that focus on the effects of containment measures on the reporting of IPV using calls to the police or survey data (e.g., Beland et al., 2020; Silverio-Murillo & Balmori de la Miyar, 2020; Leslie & Wilson,

¹ See details on risk factors and health consequences of violence against women at <https://www.who.int/news-room/fact-sheets/detail/violence-against-women>.

2020; Agüero, 2021; Arenas Arroyo et al., 2021).² Although our results are in line with recent contributions that link stay-at-home restrictions and an overall increase in domestic violence, we are among the first to investigate the effectiveness of an anti-violence media campaign on the usage of support helplines. The only other similar contribution finds that awareness campaigns in Peru are followed by an increase in calls to anti-abuse helpline, femicides, and IPV-related visits to health clinics (Agüero, 2019). To our knowledge, no other study documents the effects of an anti-violence public intervention during the covid-19 pandemic. By uncovering relevant heterogeneity based on the pervasiveness of stereotypes at the local level, our analysis also speaks to the literature assessing the role of traditional cultural norms and customs in the response to public policies (La Ferrara & Milazzo, 2017; Ashraf et al., 2020).

Our outcome of interest is the number of calls to the anti-violence helpline. It is important to acknowledge that, similarly to all commonly used measures of (observed) IPV such as surveys questionnaires or calls to the police, calls to helplines are imperfect proxies of the incidence of domestic violence.³ In order to correctly detect IPV, in fact, victims should recognise the abuse as something serious and be willing to disclose it (in the case of surveys), willing to seek help (helpline calls), or willing to press charges (calls to the police). We provide evidence that calls to helpline positively correlate to both police and survey measures. Nonetheless, our measure, differently from most surveys, allows us tracing the phenomenon over time with relatively high frequency. Moreover, it is less likely to suffer from the under-reporting issues that typically affect police statistics, thanks to the fact that the helpline guarantees anonymity and only redirects calls to the police, health centres or shelters upon explicit request.⁴ Thus, assessing the effects of an awareness campaign on the usage of this necessary tool is key for policy-makers to understand what drives observed IPV and how to potentially curb the phenomenon by enhancing reporting from victims.⁵

² See Peterman et al. (2020) and Peterman & O'Donnell (2020a,b) for a thorough review on the recent literature on domestic violence during the covid-19 pandemic.

³ Likewise, official judicial and crime statistics on the incidence of IPV provide only a partial picture of the phenomenon. According to Italian Carabinieri, over 90% of victims do not press charges against their abusers. Similarly, a EU-wide survey of the European Agency for Fundamental rights reveals that only 14% of women who suffered an incident of physical and/or sexual violence by their partner contacted the police.

⁴ Additionally, our data allow us to pinpoint calls made by victims and separate them from those made for other reasons (such as psychological support). Yet, the path out of an abusive situation often goes through an initial contact where victims learn about their outside options, the more so in a period where the covid-19 pandemic made judicial restraining orders and reception in shelters especially problematic.

⁵ Cheng & Hsiaw (2020) recently study issues related to the under-reporting of sexual violence to public authorities in the context of the *#MeToo* movement. The authors discuss the importance of re-

A simple conceptual framework accompanies the discussion on how helpline calls (i.e., our observed measure of violence) relate to the underlying IPV intensity and the reporting bias which might dampen the emergence of the phenomenon. Comparing country-level daily totals of calls received in 2020 and 2019 from the beginning of February to the end of May, we observe that in comparison to pre-crisis averages, the number of calls drop by 50% with the start of the lock-down. As experts repeatedly warned, this is likely to result not from decreased IPV rates, but from the victims' failure to find safe solutions, i.e. the increase in the true violence is more than compensated by the corresponding decrease in reporting rates. Then, following the launch of the awareness campaign, abuses reported via the 1522 helpline increase by about 100% in the first week (March 23-29) and by almost 300% in the fifth week (April 13-19). This suggests that the campaign *de facto* increases observed violence by raising awareness and encouraging reporting, without necessarily affecting the true level of violence. Although accumulation effects might be present, the spike in daily calls precisely at its launch, coupled with supporting descriptive evidence, points to an unquestionable increase in calls driven by the awareness campaign.

Our identification strategy exploits the fact that the campaign ads were aired only on public TV channels (*Rai Radiotelevisione Italiana*, henceforth *Rai*). We show that the cross-regional variation in the share of *Rai* viewers over its major competitor, *Mediaset*, has not been affected by the lock-down. Moreover, cross-sectional variation in TV shares is not correlated with the pre-determined observed prevalence of violence at the local level, implying that we can isolate the effect of the campaign via the exposure to TV ads. Difference-in-Differences (DiD) estimates confirm the success of the campaign, such that a standard deviation (0.26) higher shares of *Rai*-over-*Mediaset* viewers enhance calls to the helpline by 40%. The results hold true also considering differential trends in pre-determined characteristics such as income, violence, education and mobility.

Next, we investigate possible drivers of domestic violence reporting to understand potential interferences or complementarities with the awareness campaign. Typically, the decision to seek help can be explained by a combination of personal, interpersonal, and socio-cultural factors. These include coercion by the abusive partner, women's socio-economic status relative to their partner, religious and social norms, identification with traditional gender roles, acceptability of violence, availability and awareness of formal support services and trust in the judicial system (Liang et al., 2005; Palermo et al., 2014; Lelaurain et al., 2017).⁶ Heise & Kotsadam (2015) put together 66 surveys from

ducing uncertainty about the consequences of escaping from abusers and of weakening fears of retaliation, also through psychological support.

⁶ The economic literature on social norms, following the seminal contribution by Akerlof & Kranton

44 different countries to test the role of women’s status and other gender-related factors on the prevalence of IPV using victimization survey data. According to their analysis, partner violence is less prevalent in countries with a higher fraction of women in formal employment, while norms related to men’s authority over women and norms justifying women beating are good predictors of the geographical distribution of domestic abuse.

Thus, we explore potential mechanisms in the effectiveness of the campaign based on two measures of socio-economic status of women relative to men (Atkinson et al., 2005; Aizer, 2010; Iyer et al., 2012; Alonso-Borrego & Carrasco, 2017; Guarnieri & Rainer, 2018): the female-to-male wage ratio at province level and the share of female politicians in local government institutions. We fail to find differential patterns in help-seeking depending on women’s relative economic status, with the campaign being as much effective in areas with low and medium-high female-to-male wage ratio and share of women serving in local governments.

On the opposite, we uncover different effectiveness of the anti-abuse campaign in increasing IPV reporting depending on the prevalence of gender norms. Recent works by Tur-Prats (2019), González & Rodríguez-Planas (2020) and Alesina et al. (2020), document the prominent role of cultural and social norms, which mainly refer to sexual stereotypes and to the role of women in society.⁷ We use data from a recent ad-hoc survey carried out by the Italian National Statistics Institute in 2018 to analyse the importance of different survey-based measures of the pervasiveness of inequitable gender norms. In the aftermath of the campaign, the number of calls to the helpline increases less in areas where masculine sexual domination and violence within the intimate relationship are more accepted. Importantly, all results are robust to considering differentials in per capita income and incidence of female homicides, which account for the potential correlation

(2000), analyses the drivers and consequences of social norms with a specific reference to women’s labor market outcomes (Fortin, 2005; Fernandez, 2007; Alesina et al., 2013; Bertrand et al., 2015). Culture is also studied as mediating factor in the relationship between IPV and women’s economic status (Cools & Kotsadam, 2017; Tur-Prats, 2017). Recently, Bhalotra et al. (2020) show that in countries where women have limited access to divorce, domestic violence is increasing with higher female employment rates. The opposite is true in countries where women have more difficulties in leaving their violent husbands. Fajardo-Gonzalez (2020) finds a positive association between domestic violence and women’s employment in Colombia, possibly because women choose to improve their options outside an abusive relationship via labour market participation.

⁷ Tur-Prats (2019) uses contemporaneous and historical Spanish data to test the hypothesis that family structures are associated with different beliefs about gender roles and can explain differences in rates of IPV. González & Rodríguez-Planas (2020) identify the effects of traditional gender norms measured in the country of origin on IPV incidence and intensity among first- and second-generation immigrant women in Europe. Alesina et al. (2020) show that ethnic groups’ historical-cultural traits on women’s economic role, marriage, and living arrangements have long-lasting effects on current levels of domestic violence and women’s labor market participation in African countries.

with economic factors and violence pervasiveness at the local level. Overall, our evidence points to gender stereotypes being, to some extent, more relevant in affecting help-seeking behaviour than local-level economic factors.

The remainder of this paper is structured as follows. In the next Section we describe the context with the aid of a simple theoretical framework and a daily time-series at national level. Section 3 presents the data sources and the identification strategy. Section 4 describes the findings on the overall impact of the campaign at provincial level and the heterogeneous analysis based on the role of socio-economic factors and cultural norms. Section 5 concludes.

2 Helpline calls and the awareness campaign

The 1522 helpline is the official hotline created by the Italian government in 2006 with the specific aim of responding to and supporting individuals suffering from violence or stalking.⁸ Operators at the helpline are specifically trained to deal with victims of abuse and to offer psychological support. They also act as first contact point for information about health centers and shelters. While anonymity is always guaranteed to those who call, the helpline can redirect calls to the police, hospitals or health centres upon request or in case of emergency. Its services are especially relevant considering that victims of IPV tend to report abuses to the police only once they find refuge in a safe place.⁹

Every year the helpline receives around 17,320 calls, the majority of which consists of requests for help from victims of stalking or violence or requests for information (6,847 and 7,095 on average, respectively, see Figure 1).¹⁰ The latter potentially hide a number of attempts of first contact from people in need of help. Indeed, most requests for information concern the services provided by anti-violence centres and shelters. Additionally, almost 1,300 calls (i.e., 7% of the total) report violence that is perpetrated on a third person.

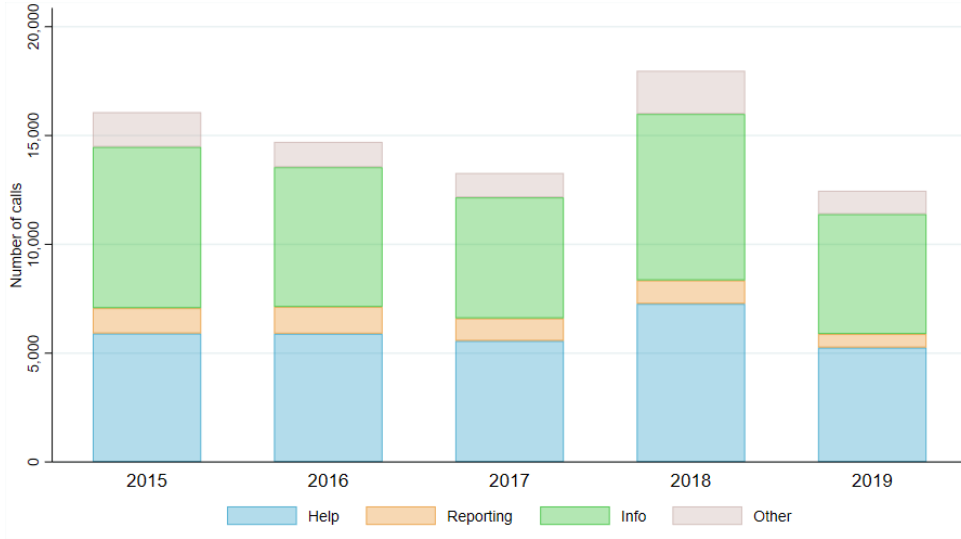
Because of its institutionalised nature, the 1522 helpline is the most appropriate tool to quantify the incidence of violence against women in the Italian context. Nonetheless, the number of calls to the helpline positively correlates to other observed measures of violence, namely the share of survey female respondents that have experienced physical or sexual violence in the past 12 months and the number of charges for family abuse

⁸ The helpline is free-toll and available 24/7 in five languages. Its services also include live chats with operators via the official website or an app for smartphones.

⁹ With some exceptions, which depend on the type of offence but never last for more than 15 days, the Italian system does not guarantee transfer to a protected accommodation to IPV victims who press charges, leaving them exposed to retaliation from their (usually co-habiting) abuser.

¹⁰ The rise in calls in 2018 is likely due to the burst of the *#MeToo* movement at the end of 2017.

Figure 1: Helpline calls, other proxies for violence and TV shares



Note: Number of calls to the 1522 helpline by reason. “Help” includes requests by victims of violence (34%) or stalking (5%) and emergency calls (1%); “Reporting” calls are made by third persons (7%); “Info” are requests for info on Anti-violence Centres and shelters (27%), info on the service (10%), legal info (4%) and info on procedures from professionals (0.15%); “Other” (11%) includes reporting on malfunctioning of services, reporting on misleading media coverage, international call out of office hours.

reported to the police where the victim is a woman (Figure A.1).¹¹ This holds no matter the type of call considered: from all users, requests for help and requests for information.

As with any proxy of violence, helpline calls allow a partial measurement of the underlying phenomenon. The relationship between the intensity of domestic violence at time t in area i and its actual quantification can be represented as follows:

$$y_{it} = f(V_{it}^*, \psi_{it}) \quad (1)$$

$$V_{it}^* = g(X_{it}, v_{it}) \quad (2)$$

$$\psi_{it} = h(Z_{it}, \epsilon_{it}) \quad (3)$$

where y_{it} is the observable proxy of violence such as IPV measures in surveys, reports to the police and, as in our case, calls to helpline. V_{it}^* is the true latent violence intensity and

¹¹ The first comes from a multi-purpose survey conducted by ISTAT in 2014, which contains specific questions on violence against women. The second measure is drawn from aggregate statistics provided by the Italian State Police. We obtain identical results if we consider the share of survey female respondents that have experienced physical or sexual violence from partners or non-partners, separately, and the number of charges reported by the police on all crimes attributable to violence against women (i.e., including also beating, harassment and sexual violence).

ψ_{it} represents the generic reporting bias for proxy y_{it} . We assume that $\frac{\partial y}{\partial \psi} < 0$, meaning that observed violence decreases as reporting bias increases, taken V_{it}^* fixed. Both V_{it}^* and ψ_{it} are related to a set of observable and unobservable characteristics, respectively X_{it} and Z_{it} . Importantly, both sets can include time-varying and time-constant characteristics, such as the socio-economic status of women relative to men, gender norms and the availability and awareness of support to IPV victims. v_{it} and ϵ_{it} are random shocks.

The start of lock-down measures in 2020 was flagged as potentially triggering an increase in domestic violence, as victims would be confined in the house with their cohabiting abusers, thus increasing the chances of violent episodes occurring. Indeed, the Italian lock-down has been particularly stringent in comparison to other European countries. Since March 9, 2.7 million people stopped working (11% of total employment), while almost 8 millions switched to remote working arrangements, as the government imposed closure to most retail shops, bars and restaurants.¹² Two weeks later, the lock-down was strengthened and all non-necessary businesses and industries interrupted. As a consequence, around 5.2 million additional workers remained at home (Barbieri et al., 2020).¹³ These provisions were extended until May 4, when lock-down measures began to be eased. At the same time, shelter-in-place orders might have played a role in the victims' propensity to seek help, due to abusive partners preventing them from reaching out, thus leading to a potential a drop in IPV reporting. As a matter of fact, official statistics show that the number of IPV-associated episodes reported to the Italian Police dropped by one-third with respect to 2019.¹⁴

Thus, the introduction of stay-at-home orders can be conceived as a positive exogenous shock to both components of the latent representation, via v_{it} and ϵ_{it} . In other words, the lock-down potentially induces higher levels of true violence V_{it}^* but also raises reporting bias ψ_{it} , because forced cohabitation with violent partners makes violence more recurrent and seeking help more difficult. The net effect of these two opposite forces determines the observed proxy of violence y_{it} .

In response to the concerns over the expected increase in violence and the simultaneous drop in reporting, the Italian government launched the *Libera puoi* (“*You can be free*”) campaign on March 23. It primarily addressed women, reminding them of the existence

¹² Schools and universities closed on March 5 nationwide, although in some areas in Northern Italy their closure started around the last week of February.

¹³ Only groceries, pharmacies, necessities shops, and industries defined as essential (about 49,4% of the total of Italian industries) were allowed to operate, along with remote work activities. The decree also imposed restrictions on traveling, as it prohibited moving across municipalities, except for proven work needs, health reasons, or reasons of absolute urgency.

¹⁴ From 3,297 to 2,177 in March and from 3,122 to 2,267 in April.

and the availability of the 1522 helpline. Its effect can be thought of as an increase in awareness (A_{it}) of existing services for victims of IPV. This *per se* is not likely to induce higher levels of V_{it}^* , but it encourages reporting by decreasing ψ_{it} . Thus, $A_{it} \in Z_{it}$.¹⁵

We examine patterns in y_{it} using a novel and unique administrative database detailing calls to the 1522 anti-abuse helpline, that is provided by the Italian Department for Equal Opportunities. Data are released in two different formats, both covering the period February 1-May 31 for the years 2015-2020: (i) the number of calls at the national level with daily frequency, that we analyse in this Section; and (ii) the weekly number of calls disaggregated by province, which are discussed in Section 3.¹⁶

Figure A.2 presents the time-series of daily calls to the 1522 helpline over the period February 1-May 31 for the years 2019 and 2020. The 2019 series fluctuates around an average of 58 calls per day. While the number of calls in the first weeks of the 2020 series traces over the same stable pattern, a substantial increase follows the launch of the campaign on March 23, 2020. On the first day of the campaign the number of calls almost doubles and keeps increasing until the end of the period.¹⁷

We corroborate this descriptive evidence by comparing the 2019 and 2020 daily time-series with a typical event-study analysis.¹⁸ Estimates are shown in Figure 2 and mirror the pattern presented in Figure A.2. The coefficients associated with the weeks preceding March 9 are not statistically different from the baseline. Over the first week of the lock-down, calls to the helpline slightly decrease, which we interpret as being due to a more than proportional decrease in reporting rates ψ_{it} with respect to the rise in the true level of violence V_{it}^* . Conversely, with the start of the campaign, we observe a sudden upward jump of 50 additional calls per day, i.e. by about 100%. Coefficients become increasingly positive over time and reach almost 120 calls per day by the 12th week observed, implying a striking increase of almost 300%.¹⁹ Importantly, the number of calls remains higher after lock-down measures are eased on May 4.²⁰ Additionally, if we compare the trend in calls

¹⁵ If anything, it could be that V_{it}^* decreases when abusers are exposed to an anti-violence campaign. This would yield to a lower-bound estimation of the effect of A_{it} .

¹⁶ Unfortunately, data at such detail covering the whole year are not available.

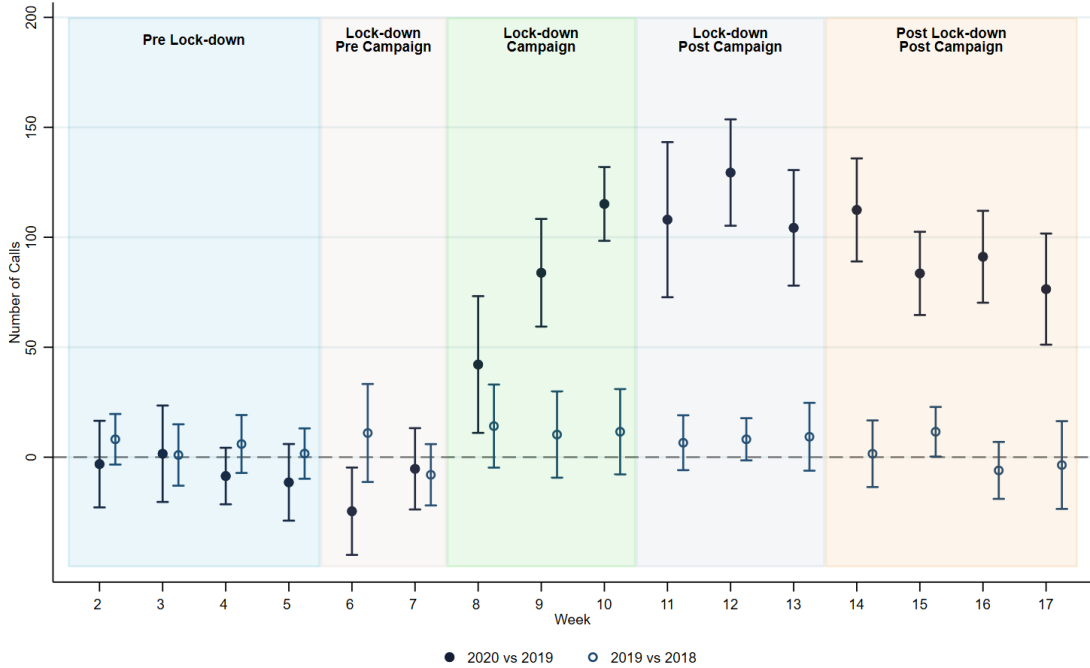
¹⁷ The last official communication about the campaign is recorded on April 16.

¹⁸ The event-study is based on the following model: $Y_d = \alpha + \sum_{\tau=2}^{17} \delta_{\tau} D_{w+\tau} + \epsilon_d$, where Y_d is the daily difference in calls to the 1522 helpline between 2019 and 2020 and $D_{w+\tau}$ are weekly dummy variables (with baseline on the first week of February, i.e. $\tau=1$).

¹⁹ The number of operators at the 1522 call-centre did not vary throughout the period before March 23. It was gradually raised *only after* the surge in the number of calls that followed the launch of the media campaign in response to the increased demand. Therefore, we can confidently exclude that the number of calls prior to the start of the campaign are underestimated due to the congestion of the helpline.

²⁰ The exercise holds also comparing calls in 2020 to: (i) the average number of calls over the years 2015-2019, to exclude specific pattern in 2019; (ii) the calls in 2015, to account for day-of-the-week

Figure 2: Event study on time series data



Note: Confidence intervals at $p < 0.05$. In dark blue the weekly differences between calls in 2020 and 2019. In light blue differences between calls in 2019 and 2018. Each week consists of a 7-day period (e.g., week 2 corresponds to February 9-15), while the baseline is the first week (February 2-8).

over previous years, we do not find any similar increase. We estimate the same model using as dependent variable the difference between calls received in 2019 and in 2018. The coefficients, reported in light blue in Figure 2, show no departure from zero.

While the sudden increase in the number of calls soon after the launch of the campaign speaks in favour of the awareness effect described, the evolution of y_{it} throughout the post-campaign period is likely to be driven by a combination of increased awareness A_{it} and increased violence V_{it}^* . If the increase observed in helpline calls were only due to the large number of people being forced to stay at home, we would expect this to occur when mobility plunges in the first two weeks of March (Carteni et al., 2020). Data from Google Mobility Reports demonstrate that the time spent at residential places increases sharply after the first lock-down announcement on March 9, while the subsequent tightening of the restrictions has a limited effect on mobility (Figure A.3). Daily relative search volumes of Google queries corroborate the evidence on the rise in interest in the 1522 helpline in the same days (Figure A.4).²¹

heterogeneity, since in both years January 1 is a Wednesday.

²¹ We cannot fully exclude that victims of IPV decide to call for help only after some time. If that was

Disentangling the effect of the campaign from the increased level of violence is difficult because the two are observationally similar, i.e. they both raise y_{it} , and the campaign is in principle homogeneous across geographic areas. We play on the fact that ads were extensively aired on public *Rai* TV channels, and exploit this cross-sectional variation to separately identify the effect of the campaign.²²

As individuals found themselves confined into their homes, the pool of people reached by the media campaign promoting the use of the 1522 helpline has been unusually vast. Indeed, TV viewing soared in 2020. During the first days of the campaign (March 23-April 2), about 5.25 million people watched the networks on which the campaign was aired. Over the same days in 2019, roughly 3.7 million people watched the same channels, i.e., a 41% increase from 2019 to 2020. This helps explaining why the campaign was so successful in enhancing the usage of the 1522 helpline.

We exploit cross-sectional variation in the pre-campaign exposure to *RAI* TV channels in a DiD setup. We proxy TV viewing habits with the share of *Rai-over-Mediaset* TV viewers measured in 2019, RAI_i . The use of TV viewing habits might be problematic if they correlate with drivers of violence and help-seeking, and the latter are associated with differential trends across geographic areas, threatening the parallel trends assumption. To partially mitigate these concerns, we show that our proxy RAI_i is not correlated with the number of calls to the 1522 helpline in 2019 (Figure A.1).²³ A detailed discussion of our DiD setup and the validity of the parallel trend in our context is provided in Section 3.2.

Finally, we consider the interactive effect of the campaign with local characteristics S_i such as the relative socio-economic status of women and the pervasiveness of gender stereotypes. The existing literature has shown that S_i alone does influence V_{it}^* and ψ_{it} .²⁴

the case, however, we would not expect to observe such a sharp increase in the number of calls exactly at the launch of the campaign on March 23.

²² Since the end of 1990, the Italian TV broadcasting market had been dominated by *Rai* and its private competitor *Mediaset*, until the recent transition to digital leads with the creation of numerous new free-to-air thematic networks owned by new operators. However, a situation of oligopoly still remains, with *Rai* and *Mediaset* holding a dominant position, with 17 and 14 free-to-air channels, respectively. They represent *de facto* a duopoly as regards terrestrial broadcasting (Durante et al., 2019).

²³ Its correlation with the other two proxies of violence drawn from IPV survey responses and police charges is also non-distinguishable from zero.

²⁴ These characteristics tend to be very persistent over time, therefore we treat them as time-invariant. Atkinson et al. (2005), Alonso-Borrego & Carrasco (2017) and Guarnieri & Rainer (2018) provide evidence consistent with the predictions of the male backlash theory, according to which increased economic opportunities for women might lead to a higher prevalence of IPV because men would feel threatened of losing their traditional breadwinner role in the household. In sharp contrast, Aizer (2010) and Anderberg et al. (2016) find results compatible with a bargaining model where higher economic independence of women has a negative effect on IPV due to improved outside options and intra-household bargaining power (Tauchen et al., 1991; Farmer & Tiefenthaler, 1997). The works of Tur-Prats (2019), González & Rodríguez-Planas (2020) and Alesina et al. (2020) document the preponderance of historical gender

Nonetheless, its interaction with A_{it} is unlikely to affect violence, but may alter the victims’ propensity to report it (i.e., $A_{it} * S_i \in Z_{it}$). In particular, we are interested in studying how IPV reporting reacts to A_{it} at different levels of S_i . This is addressed in Section 4.

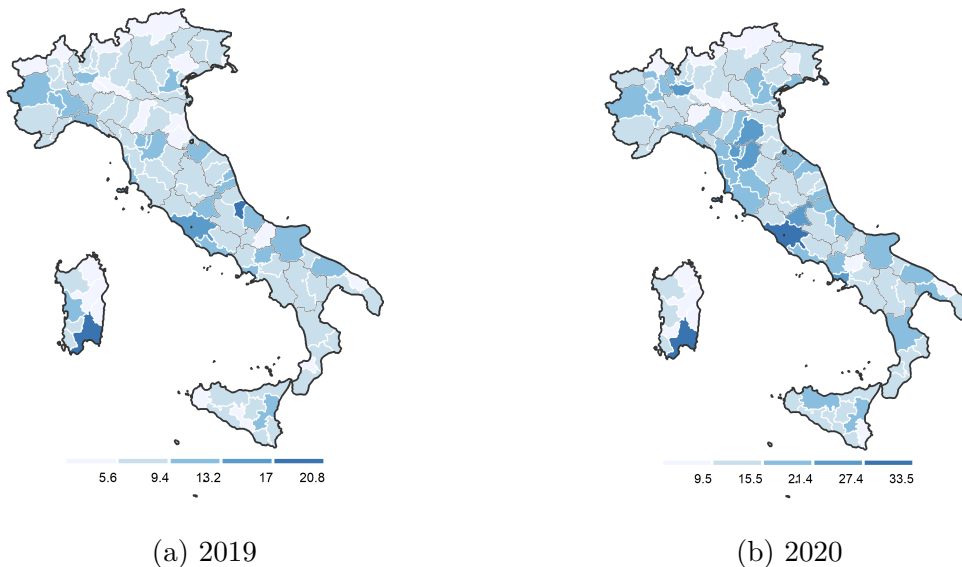
3 Data and empirical strategy

3.1 Data description

Province-level data on the 1522 helpline calls cover the period February 1-May 31 for the years 2019-2020 with weekly frequency. Figure 3 displays the geographical distribution of the average number of calls per 100,000 inhabitants in 2019 and 2020 by province. The maps highlight a sizeable degree of geographical heterogeneity across the 110 provinces and within the 20 regions, and show no evidence of the typical North-South Italian divide.

As said, the campaign was extensively aired on the public *Rai* TV networks. During the lock-down TV viewing intensified, but the increase in viewers has been rather homogeneous across broadcasters. Weekly data on TV audience shares from the the Italian

Figure 3: Calls to the 1522 from users



Note: Average number of calls per 100,000 inhabitants in the period February-May 2019 and 2020 for each of the 110 provinces considered. Grey and white lines are regional (NUTS-2) and province (NUTS-3) boundaries, respectively.

norms in IPV incidence and reporting.

Table 1: TV audience shares

	2019				2020				2020-2019
	Avg viewers	Avg share	Min share	Max share	Avg viewers	Avg share	Min share	Max share	Growth viewers
<i>Rai</i>	3,836,984	0.411	0.392	0.478	4,577,774	0.409	0.394	0.488	19%
<i>Mediaset</i>	3,349,892	0.354	0.309	0.367	4,055,147	0.353	0.308	0.363	19%
Other	2,202,422	0.235	0.213	0.250	2,724,761	0.238	0.204	0.250	20%

Notes: Average number of viewers and audience shares computed over the period February-May. “Other” channels include De Agostini, Discovery, La7, Fox and SKY.

competition authority for the communication industries (AGCOM) shows that, while the number of viewers equally increases by roughly 20 percent across *Rai*, its main competitor *Mediaset* and other TV channels, audience shares are almost unchanged when comparing 2019 and 2020 (Table 1). Figure A.5 also shows that trends in audience shares over the period February-May in 2020 have remained identical to 2019 (solid and dashed lines, respectively). In our analysis, we leverage on the fact that in areas with higher *Rai* audience shares people were more exposed to the campaign ads promoting the 1522 helpline.

We also consider potential mediating factors that might have influenced the effectiveness of the campaign. We use the female-to-male wage ratio and women’s political representation as measures of women’s socio-economic status in a given province. The former, gathered from the Labour Force Survey, is the ratio of the female hourly wage over that of males the years 2015-2018 and proxies for women’s relative economic status at province level. The share of women in politics is computed as the average share of women elected in municipal councils over the period 2015-2018 using data by the Ministry of Interior. This indicator accounts for the empowerment of women in a given area (Iyer et al., 2012). Although the average share of women holding office in local Italian governments increases from 6.66% in 1986 to 31.88% in 2018, it is far from being balanced with male representativeness.

Moreover, we exploit an ad-hoc designed survey on gender stereotypes carried out by the Italian National Institute of Statistics (ISTAT) and the Department for Equal Opportunities in 2018.²⁵ The survey spotlights the role of gender stereotypes, distinguishing between what women and men believe to be acceptable or agreeable on violence, abuse, and gender discrimination-related topics. Each variable measures the share of respondents

²⁵ The survey covers 15,034 families and it is representative of the population aged 18-74 at provincial level, albeit only regional aggregation is available. The survey follows the same sampling scheme of the Italian Labour Force Survey (LFS). In particular, the sample of the survey on intimate partner violence and gender stereotypes is a sub-sample of the fourth wave of the 2018 LFS. Only one individual per household is selected to respond to the questionnaire. Interviews, which are done using the Computer-Assisted Telephone Interviewing (CATI) method, have been carried out from June to November 2018.

Table 2: Gender stereotypes

SDO	<i>Sexual dominance (Agree)</i>
.1	Women can incite sexual violence with how they dress
.2	Women who do not wish to have sexual intercourse can avoid it
.3	Dependable women are never sexually harassed
.4	If a man forces his wife/girlfriend into having sex this is not violence
.5	When offered to have sexual intercourse women often say no but they mean yes
.6	If a woman is sexually abused while under influence of alcohol or drugs she's partially responsible of the abuse
.7	Violence claims are often false
VAC	<i>Violence acceptability (Sometimes/always acceptable)</i>
.1	A man slapping his girlfriend because she flirted with another man
.2	Slapping in the couple every once in a while is normal

Notes: Variables appearing in the survey provided by ISTAT. Each variable measures the share of respondents that agree or find acceptable the corresponding statement. The aggregate categories (SDO and VAC) are calculated as having at least one of the specific subcategories above the 75th percentile of the corresponding distribution.

that agree or find acceptable the corresponding statement. They are listed in Table 2 and summarized in Table A.1. We aggregate the information provided into two indicators that summarize different dimensions: male entitlement and sexual dominance (SDO) and acceptability of violence (VAC). Thus, the regional information on beliefs and opinions of women and men quantifies the pervasiveness of inequitable gender norms.

3.2 Difference-in-differences using TV viewers' shares

Our main analysis consists of evaluating the effects of the campaign on the usage of the 1522 helpline. Since the campaign was advertised nationwide, it is difficult to isolate its effects from other concurrent changes. We address concerns on confounding effects by exploiting variation in the regional exposure to ads on national TV, i.e., differences in the initial prevalence of *Rai-over-Mediaset* audience shares. To test whether the anti-abuse campaign has been effective, we use the following DiD specification:

$$\begin{aligned}
 Y_{p,r,w} = & \alpha + \sum_{\tau=2}^6 \beta^\tau D_w^\tau I_w^{2020} + \sum_{\tau=2}^6 \delta^\tau D_w^\tau RAI_r + \sum_{\tau=2}^6 \phi^\tau D_w^\tau I_w^{2020} RAI_r \\
 & + \gamma RAI_r I_w^{2020} + \theta X_{p,w} + \tau I_w^{2020} + \omega_{p,r} + \epsilon_{p,r,w},
 \end{aligned} \tag{4}$$

where $Y_{p,r,w}$ is the number of calls per 100,000 inhabitants in province p , region r and week

$w; \tau = \{2 \dots 6\}$ represents the pre-lock-down (*PreLD*), lock-down and pre-campaign (*PreCamp*), lock-down and campaign (*Camp*), lock-down and post-campaign (*PostCamp*), and post-lock-down and post-campaign (*PostLD*) periods, respectively, and D_w^τ is the corresponding dummy variable.²⁶ I_w^{2020} is a dummy variable for the year 2020, while RAI_r is the demeaned share of TV audience for the public *Rai* television channels over that for the private *Mediaset* channels in a given region during our baseline period, i.e., the first week of February 2019. Given that the campaign ads were aired on *Rai* channels only, this indicator measures the exposure to the campaign of a given regional population.

The set $X_{p,w}$ includes double and triple interactions between period, year, and income per capita and the number of female homicides per 100,000 inhabitants measured at province level (2015-2018 and 2015-2017 averages, respectively).²⁷ We allow for non-linear differential trends based on these characteristics to rule out potential residual correlations between pre-existing cross-sectional differences in income and violence against women with both the prevalence of IPV and TV viewing habits, which might confound our main estimates. Last, $\omega_{p,r}$ account for province-specific unobservable factors, while $\epsilon_{p,r,w}$ is the error term.²⁸

The main coefficients of interest are the full set of ϕ^τ estimates. They identify the differences in calls to 1522 per 100,000 inhabitants across regions with higher and lower exposure to the campaign TV advertising in each period. Thus, we expect estimates to be positive after March 23 if a higher initial *Rai-over-Mediaset* exposure predicts a larger increase in calls via a rise in awareness. A critical assumption for our identification strategy is that differences in the shares of *Rai-over-Mediaset* viewers are not associated with differential trends in the absence of the campaign. The event-study design allows us to test for the existence of differentials in the pre-implementation period. This test, though not a formal proof, is usually interpreted as supportive of the parallel trend assumption

²⁶ Periods are defined as follows: pre-lock-down (February 23-March 7); lock-down and pre-campaign (March 8-21); the lock-down period is divided into two sub-periods of equal length, namely, lock-down and campaign (March 22-April 11) and lock-down and post-campaign (April 12-May 2); post-lock-down and post-campaign (May 3-May 31). Our baseline (February 9-22) is prior to the first quarantine zone, which was imposed in 11 municipalities in Northern Italy on February 23. All regressions are weighted by province level population as from the 2011 Census.

²⁷ Both variables are provided by ISTAT. Data on female homicides come from the administrative data on causes of death which cover all deaths occurring in a calendar year. The medical information contained in the individual death certificates is encoded according to the WHO International Statistical Classification of Diseases, Injuries and Causes of Death, X Revision (ICD-10). The latest available data refer to 2017.

²⁸ Standard errors are clustered at province-level (110). Similarly to [Agüero \(2021\)](#), we compute robust standard errors clustered at the region-year (40 clusters) and region-week level (340) and find robust evidence. Using the Driscoll-Kraay correction yields smaller standard errors, which would imply larger t-statistics. Hence, we opt for a more conservative approach.

(Bertrand et al., 2004). Indeed, in the absence of pre-policy differential patterns, we should detect no impact in the periods prior to the campaign. Finally, the double interactions between I_w^{2020} and our period dummy variables τ indicate the evolution of the underlying violence.

4 Results

4.1 Main

Table 3 reports our main results, where column 1 refers to the baseline specification without control variables and column 2 to our preferred fully-specified model.²⁹

The first set of coefficients, which are associated to the interaction between the 2020 indicator and period dummy variables, denote that stay-at-home orders, while potentially yielding an overall increase in violence, might have simultaneously hindered the chances of seeking help for IPV victims, as discussed in Section 2. The coefficients associated to the reference group become positive in the weeks following the launch of the campaign, implying an overall increase in the number of calls that is consistent with the surge in IPV throughout the country during stay-at-home orders (Agüero, 2021; Arenas Arroyo et al., 2021) and a rise in awareness across the less exposed areas also.

Our coefficients of interest, which are also shown in Figure 4, are those associated with the differential effect of the campaign on the number of helpline calls between areas with a larger share of *Rai* channels viewers for each of the periods considered (Panel *Main Effects*, Table 3). Estimates show that, while calls did not change across groups in the period prior to the lockdown (PreLD) nor in the first weeks since the stay-at-home order was enacted (PreCamp), they increase significantly after the launch of the campaign to promote the 1522 helpline. The rise amounts to 0.73 in the weeks the campaign was aired on TV and persists in the following weeks (0.50), meaning that a standard deviation higher shares of *Rai* over *Mediaset* (0.26) produces almost 40% and 30% more calls, respectively. The estimated effects then return being non-distinguishable from zero after the end of the lock-down, as highly-exposed areas reduce helpline calls. This may be driven by the fact that when restrictions are eased victims are again able to distance themselves from their violent partner.

Importantly, the coefficients associated to the triple interactions in the pre-lock-down and lock-down periods uncover the absence of differential effects in the weeks preceding

²⁹ Adding also region-by-year fixed effects yields identical results.

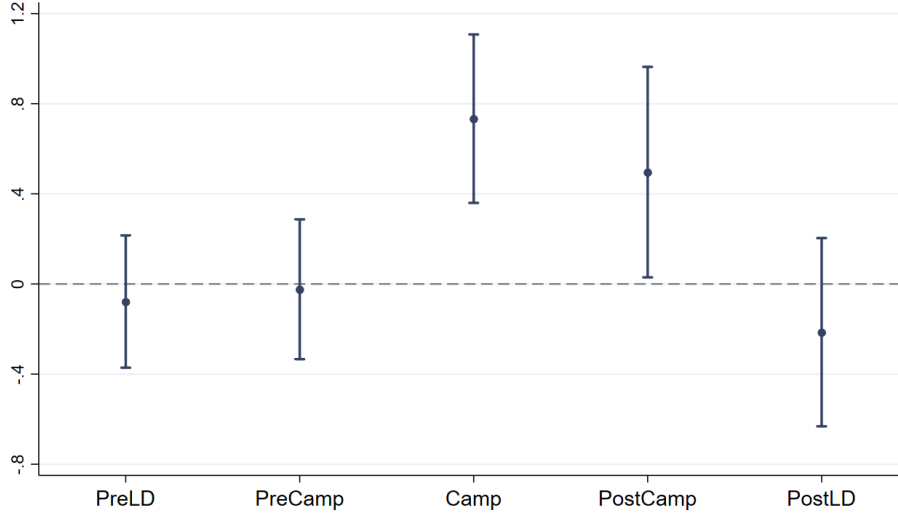
Table 3: Calls to 1522 and *Rai*/*Mediaset* shares

	(1)	(2)	(3)	(4)
	Calls per 100,000 inhabitants			
<i>RAI</i> :	Share <i>RAI</i> -over- <i>Mediaset</i>	High <i>RAI</i> -over- <i>Mediaset</i>		
2020 * Pre Lock-down	-0.105** (0.043)	-0.084 (0.233)	-0.106** (0.048)	-0.026 (0.221)
2020 * Lock-down	-0.122*** (0.041)	-0.277 (0.247)	-0.134*** (0.043)	-0.257 (0.226)
2020 * Campaign	0.820*** (0.111)	0.670* (0.342)	0.666*** (0.072)	0.201 (0.322)
2020 * Post Campaign	1.100*** (0.131)	0.965** (0.399)	0.979*** (0.117)	0.647 (0.450)
2020 * Post Lock-down	0.791*** (0.077)	0.259 (0.360)	0.788*** (0.091)	0.401 (0.376)
<i>Main Effects</i>				
2020 * Pre Lock-down * <i>RAI</i>	-0.085 (0.165)	-0.078 (0.177)	0.013 (0.105)	0.012 (0.109)
2020 * Lock-down * <i>RAI</i>	0.019 (0.174)	-0.024 (0.187)	0.051 (0.103)	0.022 (0.109)
2020 * Campaign * <i>RAI</i>	0.764* (0.423)	0.734*** (0.225)	0.608* (0.330)	0.469*** (0.137)
2020 * Post Campaign * <i>RAI</i>	0.520 (0.544)	0.496* (0.282)	0.484 (0.356)	0.312** (0.143)
2020 * Post Lock-down * <i>RAI</i>	-0.070 (0.329)	-0.214 (0.252)	0.021 (0.182)	-0.096 (0.130)
<i>Controls</i>				
2020 * Pre Lock-down * Femicide		0.008 (0.024)		0.010 (0.025)
2020 * Lock-down * Femicide		0.030 (0.019)		0.030 (0.022)
2020 * Campaign * Femicide		0.184*** (0.037)		0.158*** (0.029)
2020 * Post Campaign * Femicide		0.240*** (0.034)		0.222*** (0.038)
2020 * Post Lock-down * Femicide		0.126*** (0.039)		0.133*** (0.039)
Observations	3,740	3,740	3,740	3,740
R-squared	0.559	0.613	0.564	0.614
Province FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
Province-specific Income Trends	N	Y	N	Y

Notes: * p<.10 ** p<.05 *** p<.01. The dependent variable is the total number of calls per 100,000 inhabitants. The exposure variable is defined as the average share of *Rai* viewers over the average share of *Mediaset* viewers in the period 2-15 February 2019 (columns 1-2) or as a dummy equal to one for regions in the top quartile of the *Rai*-over-*Mediaset* distribution over the same period (columns 3-4). Sub-periods are defined as: baseline (February 9–22), pre lock-down (February 23–March 7), pre-campaign (March 8–21), campaign (March 22–April 11), post-campaign (April 12–May 2) and post lock-down (May 3–31). All regressions include province fixed effects. Controls account for province-specific differential trends in income per capita and number of female homicides per 100,000 inhabitants, as defined in Equation 4 (columns 2 and 4).

the launch of campaign. This supports the validity of the design. We further substantiate the reliability of the common trend assumption by extending our panel to 2017 and substituting our period indicators τ with weekly dummy variables. Figure A.6 shows that this alternative strategy yields no differences in the number of calls across highly and less exposed areas until the launch of the campaign, when the first statistically significant rise

Figure 4: Calls to 1522 and *Rai/Mediaset* shares



Note: Coefficients and their respective 90% confidence intervals, estimated as from Equation 4. The extended set of coefficients is displayed in Table 3, column 2. The dependent variable is the total number of calls per 100,000 inhabitants. The exposure variable is defined as the average share of *Rai* viewers over the average share of *Mediaset* viewers in the period 2-15 February 2019. Sub-periods are defined as: baseline (February 9–22), pre lock-down (February 23–March 7), pre-campaign (March 8–21), campaign (March 22–April 11), post-campaign (April 12–May 2) and post lock-down (May 3–31). Includes province and period-year fixed effects and province-specific differential trends in income per capita and number of female homicides per 100,000 inhabitants.

in helpline calls is registered.

It is worth stressing that our fully specified model accounts for differential trends in pre-2017 averages of income per capita and female homicides rates. While differential trends in income are never different from zero, places characterised by higher degree of extreme violence against women display differential positive trends in helpline calls. Yet, our main coefficients of interest are not affected by the inclusion of these additional controls. Nonetheless, we acknowledge that these might not fully capture locality characteristics that are potentially correlated with TV watching habits or the prevalence of domestic violence. Thus, in Figure A.7 we increasingly add non-linear differential trends in pre-existing levels of education, sexual violence and residential mobility, which are meant to absorb other possible confounding factors. Again, this does not change our results.

In columns 3 and 4 of Table 3 we consider a dichotomous exposure variable that takes value one for regions in the top quartile of the *Rai-over-Mediaset* distribution. Regardless of the specification used, estimates presented in Table 3 display an increase in the number of calls after the launch of the campaign in areas where *Rai* channels are more viewed.

The evidence is robust also to considering calls from victims only (Table A.2, column

1) and to computing different TV exposure measures: the share of *Rai* viewers or the share of *Mediaset* viewers taken separately and the share of *Rai* audience over that of all other channels (columns 2-4). In column 3, the sign of the coefficients is rightly inverted, as *Mediaset* channels audience would not experience viewing the campaign ads. Finally, in column 5 we find similar results on the basis of a Poisson’s pseudo log-likelihood (PPML), which might better account for potential incidental parameters issues (Santos Silva & Tenreyro, 2006).³⁰

4.2 Heterogeneous effects of the campaign

After assessing the impact on the reporting of domestic violence, we investigate whether a set of local characteristics is associated with a differential response to the campaign. In our exercise, we are especially interested in pinpointing the relevant drivers of help-seeking behaviour from victims of IPV.

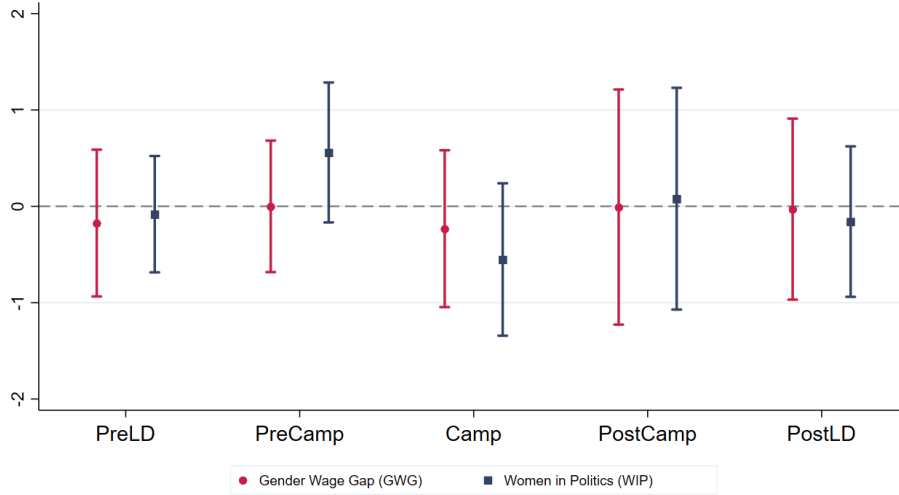
We begin by following a long-established literature investigating the relationship between IPV and women’s socio-economic status (Atkinson et al., 2005; Aizer, 2010; Iyer et al., 2012; Alonso-Borrego & Carrasco, 2017; Guarneri & Rainer, 2018). We exploit variation in the female-to-male wage ratio and women’s political representation to proxy for women’s relative economic autonomy and empowerment, respectively.

To our main specification (Equation 4) we include an interaction with the dummy variable H_p , which takes value one when province p belongs to the bottom quartile of the national distribution of the variables considered. Thus, our coefficient of interest is the new set σ_H^r associated with the interaction term $D_w^r I_w^{2020} RAI_r H_p$, which captures the differential effect of the exposure to the campaign in areas with low women’s socio-economic status. By considering provinces at the bottom quartile of the distribution of the female-to-male wage ratio, we identify areas where women’s degree of autonomy is lower with respect to men and victimisation is likely to be disproportionately under-reported. Similarly, areas, where the share of women elected officials in local government institutions is lower, are those where women tend to have a lack of empowerment. For this reason, reporting rates in these areas are expected to be lower.

Our analysis, however, indicates no differential trends in the reporting of violence episodes to the 1522 helpline across provinces with different levels of female relative

³⁰ PPML accounts for dependent variables with many zeros, different patterns of heteroskedasticity, and it is robust to outcome measurement errors. Its consistency does not depend on the distributional assumption on the dependent variable, rather on the correct specification of its conditional mean (Santos Silva & Tenreyro, 2006).

Figure 5: Calls to 1522 and socio-economic factors



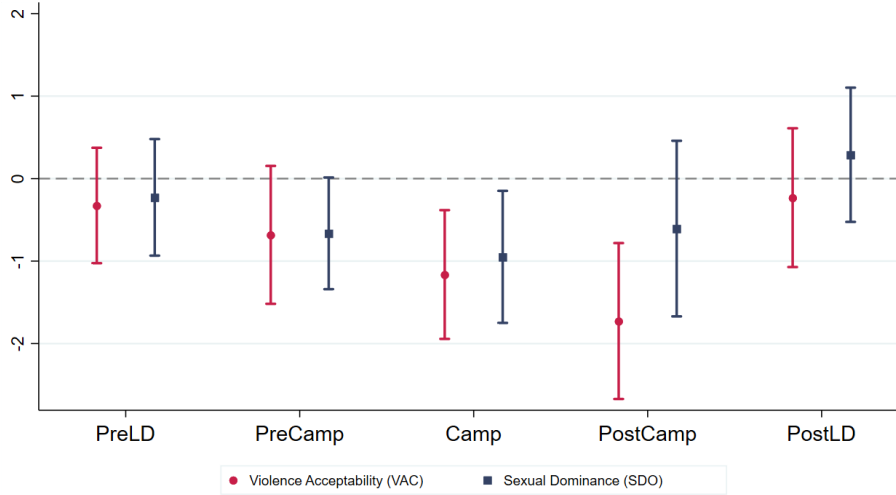
Note: Coefficients and their respective 90% confidence intervals associated to the interactions with a dummy variable that takes value 1 for provinces at the bottom quartile of the distribution of the female-to-male median hourly wage ratio and of the share of women elected in local government institutions. The extended set of coefficients is displayed in Table A.3, columns 1-2. Sub-periods are defined as: baseline (February 9–22), pre lock-down (February 23–March 7), pre-campaign (March 8–21), campaign (March 22–April 11), post-campaign (April 12–May 2) and post lock-down (May 3–31). All regressions include province and period-year fixed effects. Controls account for province-specific differential trends in income per capita and number of female homicides per 100,000 inhabitants.

autonomy or empowerment during the campaign, holding constant differentials in pre-determined levels of income per capita and homicides perpetrated against women (Figure 5 and Table A.3, columns 1-2). This suggests that the effectiveness of the campaign in enhancing help-seeking from victims of IPV is not significantly affected by factors that can be directly ascribed to female socio-economic status.

We then explore the role of gender norms. Recent works by González & Rodríguez-Planas (2020), Tur-Prats (2019) and Alesina et al. (2020) identify deeply-rooted traditional gender norms and gender stereotypes as important determinants of IPV and its reporting. Building on these findings we investigate whether pre-existing differences in cultural factors across regions are associated with differential effects of the campaign in fostering the use of the anti-abuse helpline.

We consider the two indicators conveying information on the pervasiveness of male entitlement and sexual dominance (SDO) and acceptability of violence (VAC). Also in this case we include in our main specification an interaction with the dummy variable H_p , which takes value one when province p belongs to the the top quartile of the national distribution of the indicator considered.

Figure 6: Calls to 1522 and gender stereotypes



Note: Coefficients and their respective 90% confidence intervals associated to the interactions with a dummy variable that takes value 1 for provinces at the top quartile of the distribution of the violence acceptability and sexual dominance indicators. The extended set of coefficients is displayed in Table A.3, columns 3-4. Sub-periods are defined as: baseline (February 9–22), pre lock-down (February 23–March 7), pre-campaign (March 8–21), campaign (March 22–April 11), post-campaign (April 12–May 2) and post lock-down (May 3–31). All regressions include province and period-year fixed effects. Controls account for province-specific differential trends in income per capita and number of female homicides per 100,000 inhabitants.

Figure 6 shows the set of estimated interaction coefficients σ_H^T , separately for the SDO and the VAC indicators based on female respondents.³¹ In both cases, the interaction terms corresponding to the campaign and the post-campaign periods are negative and statistically significant. In order to address concerns over these findings being explained by a lower increase of actual IPV during the lock-down in areas with stronger gender stereotypes with respect to areas where they are less pervasive, our estimates account for differential trends in the rate of female homicides and income at province level.³² Once restrictions are eased, the differential effect disappears, suggesting constant trends in calls between areas with high and low exposure to gender stereotypes.

The correlation between the exposure to the campaign and the reporting to the 1522 helpline is significantly lower in areas where gender stereotypes are more pervasive with respect to “low-stereotype” areas. In the latter, the gradient is positive and statistically significant (Table A.3, columns 3-4). Thus, we interpret these results as suggestive of

³¹ Full list of coefficients reported in Table A.3 (columns 3-4). Detailed results by sub-category are provided in Table A.4.

³² Importantly, while other measures of gender violence suffer from under-reporting, this is hardly the case for homicides.

a lower degree of effectiveness of the media campaign in fostering help-seeking in areas where inequitable gender norms are more prevalent. This holds both when considering gender norms in terms of masculine sexual domination and of acceptability of violence within the intimate relationship.

Finally, the comparison across answers reported by women and men suggests that the differential effect of the media campaign is similar, although less precisely estimated (Table A.3, columns 5-6).

5 Conclusion

Even outside times of crisis, women face the greatest dangers within their own households. In the EU, 33% of women have been physically or sexually abused since the age of 15. Out of those who have had at least one partner, one in five has experienced physical or sexual violence by an intimate partner (European Union Agency for Fundamental Rights, 2015). Besides being a major problem in terms of violation of human rights, violence against women also has numerous consequences to women’s physical and mental distress that hamper female autonomy.

Our analysis takes place during an extraordinary period characterized by the enactment of measures to contain the spread of the covid-19 pandemic. We demonstrate that reporting of domestic violence sharply increases following the advertising campaign of the 1522 anti-abuse helpline launched in Italy two weeks after the nation-wide lock-down in 2020. We observe a drop in calls over the first week of lock-down while the domestic violence awareness campaign triggers a sudden and exceptional increase in calls by victims. After an immediate jump, calls increase by about 300% after a month. The number of calls remains high even once lock-down measures are eased.

We address the challenge of identifying the effects of a national intervention separately from increasingly stringent lock-down measures by exploiting the regional variation in the share of the only broadcaster where the ads were aired. Both the fact that Rai TV share are not correlated with violence and common trends hold, we claim that 1522 anti-abuse helpline differentially affect the areas based on their exposure to the anti-abuse help line ads.

We then investigate how the policy effectiveness varies depending on the role of gender stereotypes. Exploiting an ad-hoc survey, we find evidence that gender stereotypes hamper the effectiveness of the anti-abuse campaign. This holds true after accounting for differentials in income and violence, the latter being proxied by female homicides. We do

not find robust evidence on differential effects on calls based on women's socio-economic status at the local level. This suggests that the success of the media campaign is, to some extent, responsive to the women's stereotypes rather than female economic status.

Although our findings refer to a period of exceptional circumstances, they raise questions on how to design appropriate interventions to encourage reporting of abuse and ultimately taper domestic violence. If only income matters, policy-makers should invest in programs aimed at reinforcing women's autonomy, via improvements in labour market opportunities and the expansion of shelters availability. However, our analysis shows that the presence of stereotypes plays a substantial role. Neglecting the relevance of social norms might lead to an imperfect understanding of domestic violence and the mechanisms that incentivise the reporting of abuse and, in turn, loosely designed policies.

The final message of this paper points to the need of breaking down stereotypes while promoting women's socio-economic status and autonomy. Potential policies may aim at informing people about their own bias or training them to ensure equal behaviour, both within and outside the household. Other solutions may target the self-confidence of women and provide alternative role models. Indeed, supporting the civil society and public services in preventing and combating gender stereotypes is a priority of the European Commission's Gender Equality Strategy 2020-2025.

References

- Agüero, J. M. (2019). *Information and behavioral responses with more than one agent: the case of domestic violence awareness campaigns*. Technical Report University of Connecticut, Department of Economics Working Paper Series. URL: <https://media.economics.uconn.edu/working/2019-04.pdf>.
- Agüero, J. M. (2021). Covid-19 and the rise of intimate partner violence. *World Development*, 137.
- Aizer, A. (2010). The gender wage gap and domestic violence. *American Economic Review*, 100, 1847–59.
- Akerlof, G. A., & Kranton, R. E. (2000). Economics and identity. *The Quarterly Journal of Economics*, 115, 715–753.
- Alesina, A., Brioschi, B., & La Ferrara, E. (2020). Violence against women: a cross-cultural analysis for africa. *Economica*, 1, 1–35.
- Alesina, A., Giuliano, P., & Nunn, N. (2013). On the origins of gender roles: women and the plough. *The Quarterly Journal of Economics*, 128, 469–530.
- Alon, T. M., Doepke, M., Olmstead-Rumsey, J., & Tertilt, M. (2020). *The impact of covid-19 on gender equality*. Technical Report National Bureau of Economic Research. URL: <https://www.nber.org/papers/w26947.pdf>.
- Alonso-Borrego, C., & Carrasco, R. (2017). Employment and the risk of domestic violence: does the breadwinner’s gender matter? *Applied Economics*, 49, 5074–5091.
- Anderberg, D., Rainer, H., Wadsworth, J., & Wilson, T. (2016). Unemployment and domestic violence: theory and evidence. *The Economic Journal*, 126, 1947–1979.
- Arenas Arroyo, E., Fernandez-Kranz, D., & Nollenberger, N. (2021). Intimate partner violence under forced cohabitation and economic stress: Evidence from the covid-19 pandemic. *Journal of Public Economics*, 194.
- Ashraf, N., Bau, N., Nunn, N., & Voena, A. (2020). Bride price and female education. *Journal of Political Economy*, 128, 591–641.

- Atkinson, M. P., Greenstein, T. N., & Lang, M. M. (2005). For women, breadwinning can be dangerous: Gendered resource theory and wife abuse. *Journal of Marriage and Family*, *67*, 1137–1148.
- Barbieri, T., Basso, G., & Scicchitano, S. (2020). *Italian workers at risk during the covid-19 epidemic*. Technical Report GLO Discussion Paper Series. URL: https://www.bancaditalia.it/pubblicazioni/qef/2020-0569/QEF_569_20.pdf.
- Beland, L.-P., Brodeur, A., Haddad, J., & Mikola, D. (2020). *Covid-19, family stress and domestic violence: remote work, isolation and bargaining power*. Technical Report IZA Institute of Labor Economics. URL: <http://ftp.iza.org/dp13332.pdf>.
- Bertrand, M., Duflo, E., & Mullainathan, S. (2004). How much should we trust differences-in-differences estimates? *The Quarterly journal of economics*, *119*, 249–275.
- Bertrand, M., Kamenica, E., & Pan, J. (2015). Gender identity and relative income within households. *The Quarterly Journal of Economics*, *130*, 571–614.
- Bhalotra, S., Kambhampati, U., Rawlings, S., & Siddique, Z. (2020). Intimate partner violence: the influence of job opportunities for men and women. *The World Bank Economic Review*, *0*, 1–19.
- Cartenì, A., Di Francesco, L., & Martino, M. (2020). How mobility habits influenced the spread of the covid-19 pandemic: Results from the italian case study. *Science of the Total Environment*, *741*, 140489.
- Cheng, I.-H., & Hsiaw, A. (2020). Reporting sexual misconduct in the# metoo era. *American Economic Journal: Microeconomics*, .
- Cools, S., & Kotsadam, A. (2017). Resources and intimate partner violence in sub-saharan africa. *World Development*, *95*, 211–230.
- Durante, R., Pinotti, P., & Tesei, A. (2019). The political legacy of entertainment tv. *American Economic Review*, *109*, 2497–2530.
- Ellsberg, M., Jansen, H. A., Heise, L., Watts, C. H., Garcia-Moreno, C. et al. (2008). Intimate partner violence and women’s physical and mental health in the who multi-country study on women’s health and domestic violence: an observational study. *The lancet*, *371*, 1165–1172.

- European Union Agency for Fundamental Rights (2015). *Violence against women: an EU-wide survey. Main results*. Technical Report Publications Office of the European Union. URL: https://fra.europa.eu/sites/default/files/fra_uploads/fra-2014-vaw-survey-main-results-apr14_en.pdf.
- Evans, M. L., Lindauer, M., & Farrell, M. E. (2020). A pandemic within a pandemic—intimate partner violence during covid-19. *New England journal of medicine*, *383*, 2302–2304.
- Fajardo-Gonzalez, J. (2020). Domestic violence, decision-making power, and female employment in colombia. *Review of Economics of the Household*, (pp. 1–22).
- Farmer, A., & Tiefenthaler, J. (1997). An economic analysis of domestic violence. *Review of social Economy*, *55*, 337–358.
- Fernandez, R. (2007). Women, work, and culture. *Journal of the European Economic Association*, *5*, 305–332.
- Fortin, N. M. (2005). Gender role attitudes and the labour-market outcomes of women across oecd countries. *Oxford Review of Economic Policy*, *21*, 416–438.
- González, L., & Rodríguez-Planas, N. (2020). *Gender norms and intimate partner violence*. Technical Report.
- Guarnieri, E., & Rainer, H. (2018). *Female empowerment and male backlash*. Technical Report CESifo Working Paper. URL: https://www.cesifo.org/DocDL/cesifo1_wp7009.pdf.
- Heise, L. L., & Kotsadam, A. (2015). Cross-national and multilevel correlates of partner violence: an analysis of data from population-based surveys. *The Lancet Global Health*, *3*, e332–e340.
- Hsiang, S., Allen, D., Annan-Phan, S., Bell, K., Bolliger, I., Chong, T., Druckenmiller, H., Huang, L. Y., Hultgren, A., Krasovich, E. et al. (2020). The effect of large-scale anti-contagion policies on the covid-19 pandemic. *Nature*, *1*, 1–9.
- Iyer, L., Mani, A., Mishra, P., & Topalova, P. (2012). The power of political voice: women’s political representation and crime in india. *American Economic Journal: Applied Economics*, *4*, 165–93.

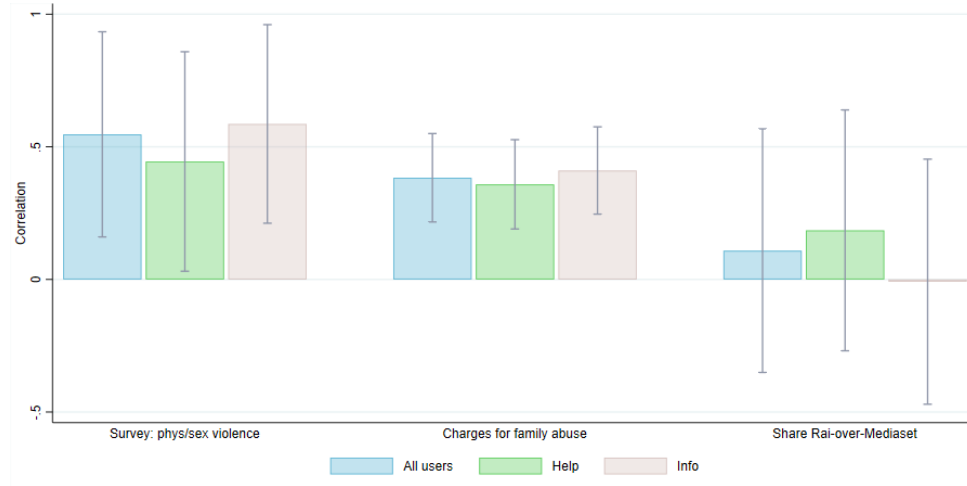
- La Ferrara, E., & Milazzo, A. (2017). Customary norms, inheritance, and human capital: evidence from a reform of the matrilineal system in Ghana. *American Economic Journal: Applied Economics*, *9*, 166–85.
- Lelaurain, S., Graziani, P., & Monaco, G. L. (2017). Intimate partner violence and help-seeking. *European Psychologist*, *22*, 263–281.
- Leslie, E., & Wilson, R. (2020). Sheltering in place and domestic violence: evidence from calls for service during covid-19. *Journal of Public Economics*, *Forthcoming*.
- Liang, B., Goodman, L., Tummala-Narra, P., & Weintraub, S. (2005). A theoretical framework for understanding help-seeking processes among survivors of intimate partner violence. *American journal of community psychology*, *36*, 71–84.
- Palermo, T., Bleck, J., & Peterman, A. (2014). Tip of the iceberg: reporting and gender-based violence in developing countries. *American journal of epidemiology*, *179*, 602–612.
- Peterman, A., & O'Donnell, M. (2020a). Covid-19 and violence against women and children: A second research round up. *CGD Note*, .
- Peterman, A., & O'Donnell, M. (2020b). Covid-19 and violence against women and children: A third research round up for the 16 days of activism. *CGD Note*, .
- Peterman, A., O'Donnell, M., & Palermo, T. (2020). Covid-19 and violence against women and children: What have we learned so far? *CGD Note*, .
- Sabia, J. J., Dills, A. K., & DeSimone, J. (2013). Sexual violence against women and labor market outcomes. *American Economic Review*, *103*, 274–78.
- Santos Silva, J., & Tenreyro, S. (2006). The log of gravity. *The Review of Economics and statistics*, *88*, 641–658.
- Silverio-Murillo, A., & Balmori de la Miyar, J. R. (2020). *Families under confinement: covid-19, domestic violence, and alcohol consumption*. Technical Report. URL: https://movendi.ngo/wp-content/uploads/2020/06/ipv_covid_19.pdf.
- Tauchen, H. V., Witte, A. D., & Long, S. K. (1991). Domestic violence: a nonrandom affair. *International Economic Review*, *1*, 491–511.
- Tur-Prats, A. (2017). *Unemployment and intimate-partner violence: a gender-identity approach*. Technical Report UPF Working Paper. URL: https://www.barcelonagse.eu/sites/default/files/working_paper_pdfs/963.pdf.

Tur-Prats, A. (2019). Family types and intimate partner violence: a historical perspective. *Review of Economics and Statistics*, 101, 878–891.

UN Women (2020). *Covid-19 and ending violence against women and girls*. Technical Report United Nations Entity for Gender Equality and the Empowerment of Women. URL: <https://www.unwomen.org/en/digital-library/publications/2020/04/issue-brief-covid-19-and-ending-violence-against-women-and-girls>.

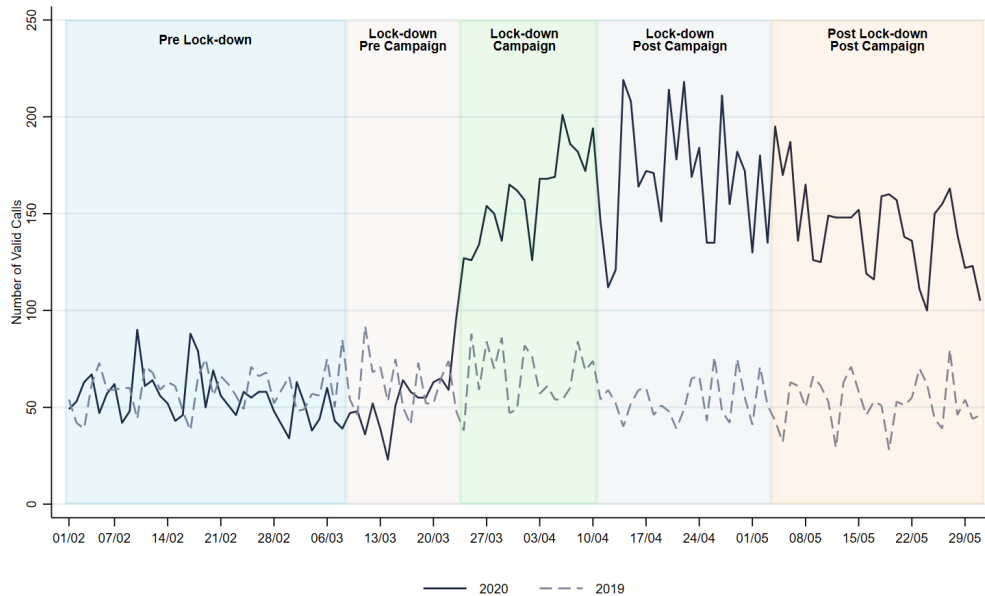
Appendix

Figure A.1: Helpline calls, other proxies for violence and TV shares



Note: Correlations and corresponding 95% confidence intervals between the number of calls to the 1522 helpline (from all users, requests for help and requests for information) and (i) the share of survey female respondents that have experienced physical or sexual violence in the past 12 months, (ii) the number of charges for family abuse reported to the police and (iii) the share of *Rai-over-Mediaset* TV viewers.

Figure A.2: Daily calls to the 1522 helpline



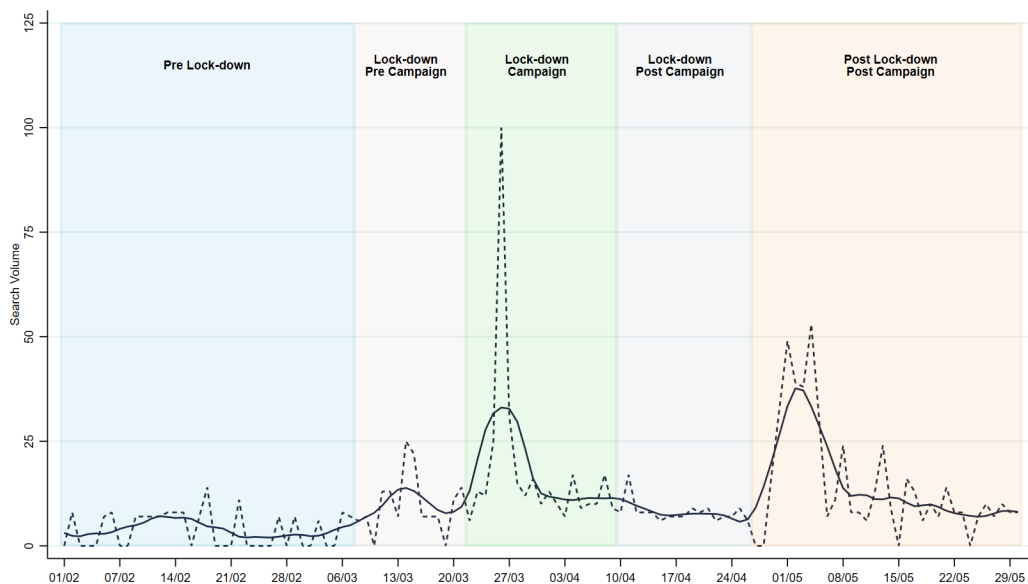
Note: Daily number of valid calls to the 1522 helpline over the period February-May in the years 2019 (light blue) and 2020 (dark blue).

Figure A.3: Time spent at residential places



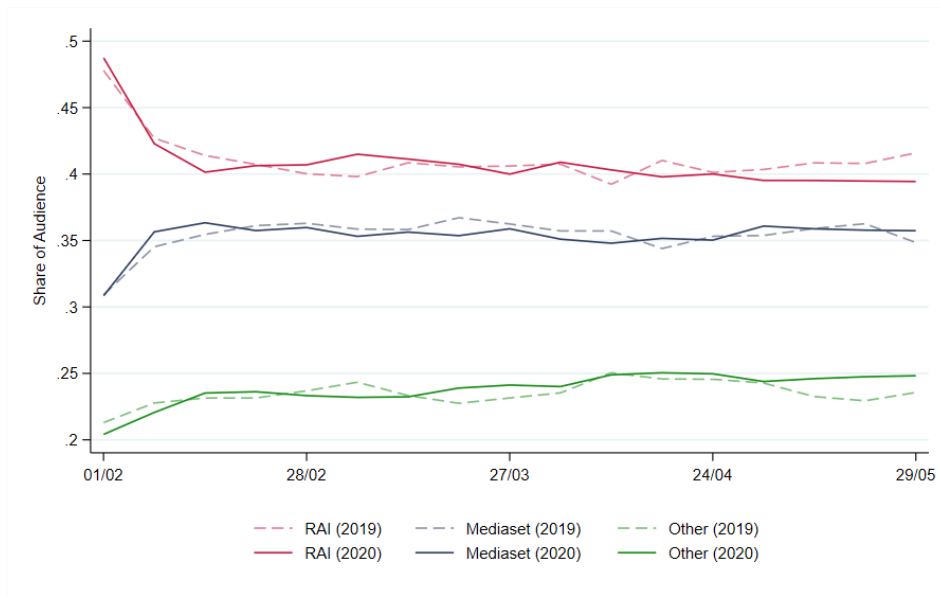
Note: Mobility trends, Google Mobility reports. The index measures time spent at residential places with respect to a baseline (the median value in the corresponding day of the week, during the 5-week period from January 3 to February 6, 2020). The values shown are the residuals of a regression of the index on day-of-the-week dummies. Residential places are the usual places of residence of Google and Android users.

Figure A.4: Web searches for 1522



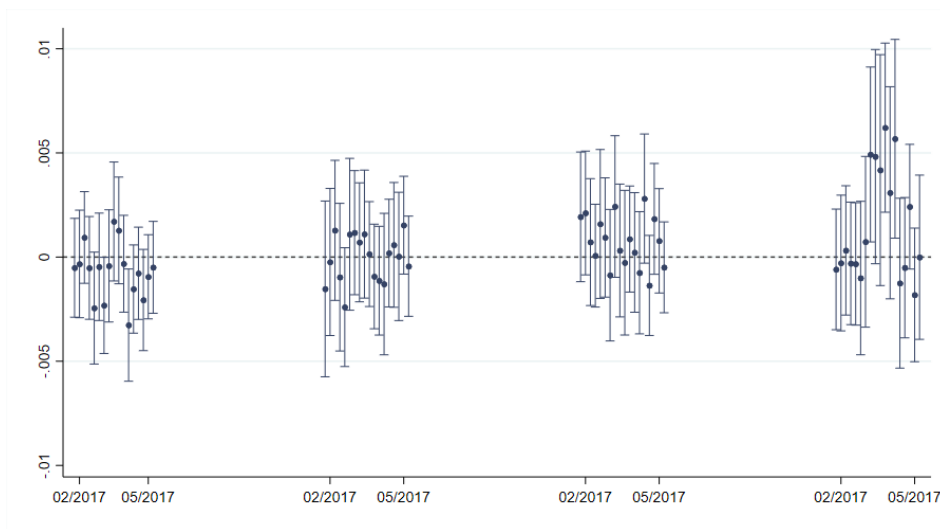
Note: Data are collected from Google Trends. The search for the query “1522” is normalised for its relative popularity on a 0 to 100 scale over the period February 1-May 31. The light blue line is the raw data; the dark blue line is its local polynomial regression fitting (i.e., LOWESS) with $\alpha = 0.1$.

Figure A.5: Trends in the shares of audience



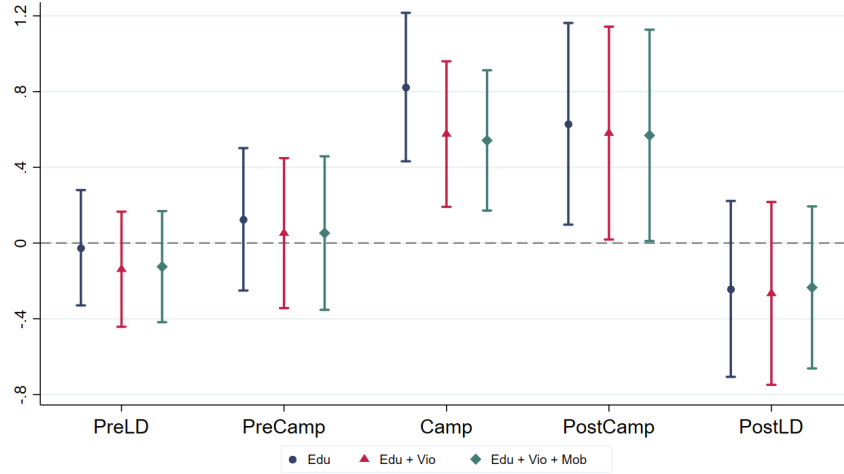
Note: TV audience shares computed on data from AGCOM for the period February-May 2019 and 2020. “Other” channels include De Agostini, Discovery, La7, Fox and SKY.

Figure A.6: Alternative DiD with weekly coefficients, 2017-2020



Note: Coefficients and their respective 90% confidence intervals, estimated as from Equation 4, where weekly dummy variables substitute period indicators τ . Data cover the years 2017-2020. The dependent variable is the total number of calls per 100,000 inhabitants. The exposure variable is defined as the average share of *Rai* viewers over the average share of *Mediaset* viewers in the period 2-15 February 2019. Includes province and year-week fixed effects and province-specific differential trends in income per capita and number of female homicides per 100,000 inhabitants.

Figure A.7: Calls to 1522 and *Rai/Mediaset* shares: additional controls



Note: Coefficients and their respective 90% confidence intervals, estimated as from Equation 4. Sub-periods are defined as: baseline (February 9–22), pre lock-down (February 23–March 7), pre-campaign (March 8–21), campaign (March 22–April 11), post-campaign (April 12–May 2) and post lock-down (May 3–31). All regressions include province and year-period fixed effects and province-specific differential trends in income per capita and number of female homicides per 100,000 inhabitants. Estimates that also include differential trends in education, proxied by the number of illiterates per capita (Edu, blue circles); differential trends in violence, measured by sexual violence per capita (Vio, red triangles); and differential trends in the degree of residential mobility (Mob, green diamonds). All variables come from the 2011 Census.

Table A.1: Categories of violence and gender stereotypes: descriptive statistics

	Women				Men			
	mean	min	max	sd	mean	min	max	sd
SDO	6.78	0.30	22.65	5.99	8.15	0.00	30.20	6.86
.1	11.57	6.70	15.35	2.56	12.24	8.20	18.10	2.68
.2	18.42	14.30	22.65	2.51	21.82	13.80	30.20	3.39
.3	2.67	1.45	4.35	0.86	3.54	0.75	8.80	2.00
.4	0.98	0.30	2.10	0.44	0.88	0.00	2.20	0.59
.5	2.83	1.45	5.60	1.12	4.20	1.65	7.45	1.42
.6	6.80	3.10	9.40	1.70	7.69	3.10	14.35	2.37
.7	4.17	2.70	6.05	0.89	6.72	4.45	9.30	1.49
VAC	2.44	0.70	4.40	1.03	4.37	1.15	11.00	2.08
.1	2.85	1.60	4.40	0.81	4.74	2.60	11.00	2.06
.2	2.02	0.70	4.40	1.07	3.99	1.15	8.75	2.08

Notes: Each indicator refers to the share of women and men that agree or find acceptable on several gender stereotype topics. See table 2 for definitions of variables. *Mean* represents the national average; *min* and *max* describes, respectively, the lowest and highest value recorded across regions; *sd* is the standard deviation.

Table A.2: Calls to 1522 and *Rai*/*Mediaset* shares, robustness checks

Calls per 100,000 inhabitants from <i>RAI</i>	(1)	(2)	(3)	(4)	(5)
	Victims Share <i>RAI</i> over <i>Mediaset</i>	Share <i>RAI</i>	Share <i>Mediaset</i>	Users Share <i>RAI</i> over all others	Share <i>RAI</i> over <i>Mediaset</i>
2020 * Pre Lock-down	-0.136 (0.188)	-0.041 (0.235)	-0.229 (0.287)	-0.037 (0.233)	-0.289 (0.402)
2020 * Lock-down	-0.124 (0.196)	-0.312 (0.246)	-0.526* (0.306)	-0.309 (0.245)	-0.667* (0.402)
2020 * Campaign	0.226 (0.175)	-0.064 (0.323)	0.948** (0.424)	-0.047 (0.321)	0.836** (0.420)
2020 * Post Campaign	0.398 (0.269)	0.387 (0.487)	0.909** (0.401)	0.403 (0.484)	1.248** (0.512)
2020 * Post Lock-down	0.065 (0.180)	0.401 (0.411)	-0.036 (0.404)	0.407 (0.408)	0.457 (0.471)
Main Effects					
2020 * Pre Lock-down * <i>RAI</i>	-0.067 (0.112)	0.401 (1.405)	1.184 (1.380)	0.087 (0.389)	-0.146 (0.319)
2020 * Lock-down * <i>RAI</i>	-0.093 (0.113)	1.607 (1.837)	1.569 (1.236)	0.458 (0.504)	-0.047 (0.352)
2020 * Campaign * <i>RAI</i>	0.322*** (0.111)	6.329*** (1.846)	-4.745*** (1.733)	1.749*** (0.507)	0.454** (0.241)
2020 * Post Campaign * <i>RAI</i>	0.047 (0.174)	6.783*** (2.241)	-1.775 (2.127)	1.895*** (0.613)	0.347 (0.324)
2020 * Post Lock-down * <i>RAI</i>	-0.079 (0.135)	0.396 (1.889)	2.647 (2.037)	0.056 (0.519)	-0.350 (0.317)
Controls					
2020 * Pre Lock-down * Femicide	-0.001 (0.013)	0.010 (0.026)	0.004 (0.023)	0.010 (0.025)	0.027 (0.034)
2020 * Lock-down * Femicide	-0.001 (0.016)	0.029 (0.022)	0.022 (0.020)	0.030 (0.022)	0.055* (0.033)
2020 * Campaign * Femicide	0.031*** (0.012)	0.163*** (0.038)	0.191*** (0.041)	0.165*** (0.038)	0.048** (0.024)
2020 * Post Campaign * Femicide	0.068*** (0.019)	0.224*** (0.038)	0.237*** (0.034)	0.227*** (0.037)	0.082** (0.033)
2020 * Post Lock-down * Femicide	0.049*** (0.016)	0.131*** (0.043)	0.118*** (0.036)	0.131*** (0.043)	0.026 (0.037)
Estimator	OLS	OLS	OLS	OLS	PPML
Observations	3,740	3,740	3,740	3,740	3,740
R-squared	0.447	0.613	0.612	0.614	

Notes: * $p < .10$ ** $p < .05$ *** $p < .01$. The dependent variable is the number of calls from victims only per 100,000 inhabitants (column 1), the total number of calls per 100,000 inhabitants (columns 2-4) and the total number of calls (column 5). The exposure variable is defined as the average share of *Rai* viewers over the average share of *Mediaset* viewers in the period 2-15 February 2019 (columns 1 and 5), the share of *Rai* viewers or the share of *Mediaset* viewers taken separately (columns 2 and 3) and the share of *Rai* audience over that of all other channels (column 4). Sub-periods are defined as: baseline (February 9-22), pre lock-down (February 23-March 7), pre-campaign (March 8-21), campaign (March 22-April 11), post-campaign (April 12-May 2) and post lock-down (May 3-31). All regressions include province fixed effects and province-specific differential trends in income per capita and number of female homicides per 100,000 inhabitants, as defined in Equation 4.

Table A.3: Heterogeneity I

Calls per capita <i>H</i>	(1)	(2)	(3)	(4)	(5)	(6)
	WIP	GWG	SDO (Women)	VAC (Women)	SDO (Man)	VAC (Man)
<i>RAI</i>	Share <i>RAI</i> over <i>Mediaset</i>					
2020 * Pre Lock-down	-0.061 (0.248)	-0.190 (0.241)	-0.115 (0.342)	-0.265 (0.276)	-0.213 (0.284)	-0.186 (0.295)
2020 * Lock-down	-0.305 (0.285)	-0.372 (0.245)	-0.418 (0.411)	-0.376 (0.340)	-0.350 (0.312)	-0.664** (0.301)
2020 * Campaign	0.788* (0.413)	0.679** (0.332)	0.660 (0.441)	0.791* (0.408)	0.426 (0.398)	0.420 (0.492)
2020 * Post Campaign	0.887** (0.417)	0.856** (0.379)	0.413 (0.451)	0.887** (0.374)	0.704* (0.414)	0.649 (0.536)
2020 * Post Lock-down	0.279 (0.370)	0.101 (0.353)	0.077 (0.441)	0.170 (0.362)	0.200 (0.404)	0.165 (0.437)
2020 * Pre Lock-down * <i>RAI</i>	-0.046 (0.198)	-0.059 (0.215)	0.102 (0.336)	0.088 (0.242)	0.683 (0.682)	-0.009 (0.204)
2020 * Lock-down * <i>RAI</i>	-0.013 (0.242)	-0.180 (0.194)	0.372 (0.402)	0.258 (0.284)	0.303 (0.887)	-0.114 (0.208)
2020 * Campaign * <i>RAI</i>	0.744*** (0.274)	0.885*** (0.249)	1.353*** (0.370)	1.013*** (0.342)	2.010* (1.030)	0.800*** (0.288)
2020 * Post Campaign * <i>RAI</i>	0.528 (0.326)	0.471 (0.329)	1.545*** (0.399)	0.748* (0.396)	1.775** (0.767)	0.411 (0.313)
2020 * Post Lock-down * <i>RAI</i>	-0.215 (0.264)	-0.176 (0.321)	-0.048 (0.355)	-0.275 (0.301)	0.068 (0.970)	-0.187 (0.289)
2020 * Pre Lock-down * <i>H</i>	-0.040 (0.139)	-0.186* (0.095)	-0.025 (0.125)	0.091 (0.135)	0.039 (0.164)	0.012 (0.105)
2020 * Lock-down * <i>H</i>	0.026 (0.110)	-0.076 (0.081)	-0.014 (0.101)	-0.048 (0.090)	0.098 (0.202)	0.378*** (0.125)
2020 * Campaign * <i>H</i>	-0.134 (0.164)	-0.066 (0.121)	-0.142 (0.128)	-0.261** (0.129)	0.188 (0.230)	0.128 (0.133)
2020 * Post Campaign * <i>H</i>	0.071 (0.196)	-0.167 (0.128)	0.066 (0.131)	-0.053 (0.158)	0.260 (0.198)	0.320 (0.195)
2020 * Post Lock-down * <i>H</i>	-0.021 (0.150)	-0.284** (0.117)	0.065 (0.131)	0.117 (0.131)	0.064 (0.218)	0.046 (0.140)
Main Effects						
2020 * Pre Lock-down * <i>RAI</i> * <i>H</i>	-0.174 (0.459)	-0.082 (0.364)	-0.326 (0.422)	-0.227 (0.426)	-1.009 (0.705)	-0.234 (0.357)
2020 * Lock-down * <i>RAI</i> * <i>H</i>	-0.001 (0.411)	0.559 (0.438)	-0.682 (0.504)	-0.663 (0.408)	-0.294 (0.935)	0.712* (0.407)
2020 * Campaign * <i>RAI</i> * <i>H</i>	-0.232 (0.491)	-0.552 (0.477)	-1.163** (0.470)	-0.949* (0.482)	-1.482 (1.063)	-0.101 (0.450)
2020 * Post Campaign * <i>RAI</i> * <i>H</i>	-0.008 (0.736)	0.079 (0.694)	-1.726*** (0.570)	-0.606 (0.641)	-1.362 (0.865)	0.636 (0.692)
2020 * Post Lock-down * <i>RAI</i> * <i>H</i>	-0.029 (0.566)	-0.159 (0.471)	-0.231 (0.507)	0.289 (0.490)	-0.289 (1.009)	-0.047 (0.498)
Observations	3,740	3,740	3,740	3,740	3,740	3,740
R-squared	0.614	0.616	0.619	0.617	0.616	0.616

Notes: * p<.10 ** p<.05 *** p<.01. GWG is the female-to-male hourly wage ratio computed at the median of the wage distribution; WIP is the share of women holding office in local governments; SDO and VAC are the sexual dominance and violence acceptability indicators computed for female and male respondents, separately. All regressions include province and period-year fixed effects. Controls account for province-level differential trends in income per capita and number of female homicides per 100,000 inhabitants, as defined in Equation 4.

Table A.4: Heterogeneity II

Heterogeneity	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	VAC		Calls per 100,000 inhabitants						
	1	2	1	2	3	4	5	6	7
<i>RAI</i>			Share <i>RAI</i> over <i>Mediaset</i>						
2020 * Pre Lock-down	-0.101 (0.239)	-0.265 (0.276)	-0.174 (0.263)	-0.151 (0.238)	-0.167 (0.257)	-0.133 (0.259)	-0.150 (0.255)	-0.242 (0.286)	-0.075 (0.234)
2020 * Lock-down	-0.260 (0.298)	-0.376 (0.340)	-0.414 (0.338)	-0.302 (0.266)	-0.453 (0.279)	-0.284 (0.264)	-0.368 (0.300)	-0.640** (0.309)	-0.260 (0.241)
2020 * Campaign	0.621 (0.375)	0.791* (0.408)	0.845** (0.397)	0.750* (0.387)	0.684 (0.421)	0.839** (0.359)	0.760* (0.422)	0.796* (0.436)	0.700** (0.346)
2020 * Post Campaign	0.682* (0.355)	0.887** (0.374)	0.780** (0.372)	0.986*** (0.376)	0.909** (0.433)	1.089** (0.440)	0.833** (0.411)	0.391 (0.374)	1.040*** (0.392)
2020 * Post Lock-down	-0.016 (0.346)	0.170 (0.362)	0.132 (0.378)	0.115 (0.341)	0.020 (0.378)	0.391 (0.375)	0.302 (0.359)	-0.559 (0.348)	0.222 (0.335)
2020 * Pre Lock-down * <i>RAI</i>	0.017 (0.232)	0.088 (0.242)	-0.064 (0.211)	-0.020 (0.189)	-0.061 (0.182)	-0.049 (0.197)	-0.096 (0.198)	-0.048 (0.184)	-0.062 (0.210)
2020 * Lock-down * <i>RAI</i>	0.172 (0.251)	0.258 (0.284)	0.127 (0.227)	0.115 (0.245)	0.063 (0.234)	0.015 (0.225)	0.065 (0.211)	0.105 (0.230)	0.017 (0.202)
2020 * Campaign * <i>RAI</i>	0.861*** (0.303)	1.013*** (0.342)	0.830*** (0.288)	0.952*** (0.260)	0.941*** (0.253)	0.989*** (0.229)	0.714** (0.273)	0.851*** (0.249)	0.811*** (0.255)
2020 * Post Campaign * <i>RAI</i>	0.649* (0.341)	0.748* (0.396)	0.810** (0.326)	0.601* (0.309)	0.668** (0.304)	0.807*** (0.298)	0.524* (0.315)	0.811*** (0.287)	0.692** (0.338)
2020 * Post Lock-down * <i>RAI</i>	-0.130 (0.276)	-0.275 (0.301)	-0.146 (0.248)	-0.164 (0.265)	-0.104 (0.261)	-0.162 (0.278)	-0.257 (0.247)	0.062 (0.231)	-0.337 (0.276)
2020 * Pre Lock-down * <i>H</i>	-0.036 (0.151)	0.091 (0.135)	0.108 (0.167)	0.050 (0.137)	0.059 (0.152)	0.067 (0.143)	0.196 (0.132)	0.075 (0.153)	-0.141* (0.072)
2020 * Lock-down * <i>H</i>	-0.151 (0.135)	-0.048 (0.090)	-0.008 (0.090)	-0.067 (0.083)	0.069 (0.086)	0.001 (0.080)	0.088 (0.164)	0.085 (0.089)	-0.102 (0.073)
2020 * Campaign * <i>H</i>	-0.009 (0.217)	-0.261** (0.129)	-0.378*** (0.109)	-0.272** (0.121)	-0.244* (0.124)	-0.329*** (0.122)	-0.194 (0.195)	-0.268** (0.121)	-0.091 (0.131)
2020 * Post Campaign * <i>H</i>	0.320 (0.256)	-0.053 (0.158)	-0.161 (0.136)	-0.106 (0.182)	-0.137 (0.141)	-0.275** (0.125)	0.289 (0.244)	-0.030 (0.127)	-0.254** (0.124)
2020 * Post Lock-down * <i>H</i>	0.352** (0.176)	0.117 (0.131)	0.088 (0.140)	0.162 (0.141)	0.101 (0.134)	-0.216 (0.143)	-0.039 (0.293)	0.212 (0.130)	-0.267* (0.149)
Main Effects									
2020 * Pre Lock-down * <i>RAI</i> * <i>H</i>	-0.297 (0.456)	-0.227 (0.426)	0.152 (0.538)	-0.170 (0.421)	-0.014 (0.522)	-0.346 (0.334)	0.530 (0.400)	-0.041 (0.555)	-0.201 (0.282)
2020 * Lock-down * <i>RAI</i> * <i>H</i>	-0.755 (0.462)	-0.663 (0.408)	-0.476 (0.414)	-0.505 (0.347)	-0.305 (0.353)	-0.235 (0.279)	-0.155 (0.638)	-0.484 (0.390)	-0.268 (0.368)
2020 * Campaign * <i>RAI</i> * <i>H</i>	-0.326 (0.619)	-0.949* (0.482)	-0.978** (0.393)	-0.887* (0.455)	-1.159** (0.448)	-0.709 (0.554)	-0.370 (0.412)	-0.908** (0.452)	-0.413 (0.525)
2020 * Post Campaign * <i>RAI</i> * <i>H</i>	0.227 (0.754)	-0.606 (0.641)	-1.255** (0.617)	-0.411 (0.720)	-0.889 (0.730)	-1.177** (0.523)	0.559 (0.796)	-1.506** (0.716)	-1.060** (0.495)
2020 * Post Lock-down * <i>RAI</i> * <i>H</i>	0.454 (0.526)	0.289 (0.490)	-0.052 (0.587)	-0.085 (0.507)	-0.374 (0.586)	0.233 (0.563)	0.084 (0.931)	-1.000* (0.576)	0.257 (0.482)
Observations	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740	3,740
R-squared	0.617	0.617	0.618	0.617	0.617	0.618	0.614	0.619	0.617

Notes: * $p < .10$ ** $p < .05$ *** $p < .01$. SDO and VAC are the sexual dominance and violence acceptability indicators computed for female respondents. Sub-categories are defined as in Table 2. All regressions include province and period-year fixed effects. Controls account for province-level differential trends in income per capita and number of female homicides per 100,000 inhabitants, as defined in Equation 4.