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Immigration**

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ABSTRACT

News, Emotions, and Policy Views on Immigration*

How do emotions affect policy views on immigration? How do they influence the way people process and respond to factual information? We address these questions using a survey experiment in Italy, which randomly exposes around 7,000 participants to (i) sensational news about immigrant crimes, (ii) statistical information about immigration, or to (iii) the combination of both. First, we find different effects of news depending on the severity of the reported crime: while the news of a rape against a young woman significantly increases the demand for anti-immigration policies, there is no impact of the news of a petty theft. Consistent with a causal role of emotions, we find that the rape news triggers a stronger emotional reaction than the theft news, while having a similar effect on factual beliefs. Second, we document that information provision corrects beliefs, irrespective of whether participants are also exposed to the rape news. Yet, the exposure to the rape news strongly influences whether belief updating translates into change in policy views: when presented in isolation, information tends to reduce anti-immigration views; when combined with the rape news, the impact of the latter dominates and participants increase their anti-immigration views to the same extent as when exposed to the rape news only. This evidence suggests that, once negative emotions are triggered, having more accurate factual knowledge no longer matters for forming policy views on immigration.

JEL Classification: F22, C90, D91, D72, D83, J15

Keywords: news, information, immigration, experiment, belief, emotions

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1 Introduction

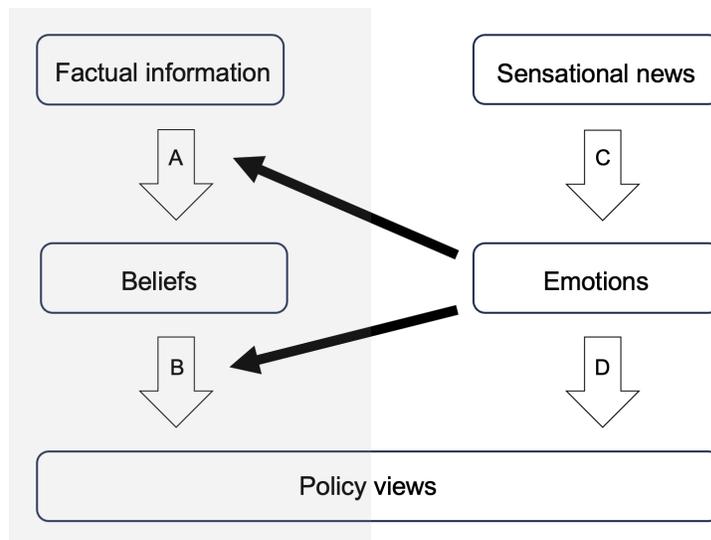
How do people form their views on policy issues? The literature has documented various factors, notably related to factual knowledge and understanding of the issue, self-interest or sociotropic concerns, or partisanship (Stantcheva, 2020, 2021, 2022). While these factors describe cold slow cognitive processes, less is known about the role of hot visceral factors in shaping policy views. This question is important given how often emotions are used in politics to persuade voters, in particular in populist rhetoric (Gennaro and Ash, 2022; Grosjean et al., 2023; Webster and Albertson, 2022). Emotions are also prevalent in the news, and notably in the media coverage of a highly contentious and polarized issue: immigration. In addition to factual information, the media also often report sensational news stories about immigrants, with, typically, emotional cues appealing to fear, anxiety, and other negative feelings.¹ As a result, news consumers are generally exposed to a mix of factual data and sensational stories, possibly influencing them both at a cognitive and affective level.

This paper examines the effect of sensational news and of the emotions they trigger on policy views on immigration. A simple conceptual framework, illustrated in Figure 1, can help clarify the goals and contribution of the paper. As proposed by Alesina et al. (2020), the standard framework to think about how information affects policy views is shown on the left panel: policy views are formed as functions of factual perceptions, i.e., subjective beliefs about relevant statistical parameters such as, for example, the population share of immigrants or the share of national income going to the top 1% (Arrow B). These perceptions in turn depend on the information signals that people receive (Arrow A). To this usual framework, we add the influence of sensational news, which differs from the typical information signal in that it triggers an emotional reaction, while the former does not (or to a lesser extent). The first question we investigate is whether news-induced emotions affect policy views on immigration (Arrows C and D). The second question is whether emotions influence the way people respond to factual information. More specifically, we explore whether emotions influence (i) the learning of new facts, i.e., belief updating (Arrow A) and (ii) the way in which belief updating translates into change in policy views (Arrow B). The interaction between emotions and beliefs is relevant to study given the high level of factual misperceptions about immigration (Alesina et al., 2023), possibly contributing to the widespread opposition to immigration in the public opinion of receiving countries.

¹Figure A.1 in Appendix A illustrates the headlines of some sensational stories about immigrants in the U.S., UK, French, and Italian news media.

We address these questions by conducting an online survey experiment in Italy, with about 7,000 adult participants. To estimate the causal influence of emotions on policy views, the experiment randomly exposes participants to sensational news stories about crimes perpetrated by immigrants. We focus on immigrant crime as it is the typical issue that the media cover by using sensational stories appealing to readers’ emotions.² Italy is no exception, to the contrary: Italian mass media display significant bias in the coverage of crime news and exert a strong influence on political opinion, notably by instilling the fear of the immigrant criminal, often disconnected from reality and manipulated by the far-right.³

Figure 1: Emotions, beliefs, and policy views



The key identification challenge of the experiment is that news stories about immigrant crime are likely to not only induce emotions but also to impact factual beliefs about immigrants. To disentangle the attitudinal effect of emotions from the one of beliefs, we use two strategies. First, we expose participants to two different news stories: either the news of a rape against a young woman or the news of a petty theft of a woman’s handbag. Given the different severity of the crime, we expect that these news stories trigger different emotional reactions. Furthermore, as both news report an immigrant crime we expect them to have a similar impact on beliefs about immigrants’ criminality. Nonetheless, it could be that the

²See media communication analysis in [Harris and Gruenewald \(2020\)](#); [Haynes et al. \(2016\)](#); [Tuttle \(2017\)](#), among others.

³See [Bellucci et al. \(2019\)](#); [Bove et al. \(2023\)](#); [Mastrorocco and Minale \(2018\)](#); [Orrù \(2017\)](#) for media bias and its effects. See [Cervi et al. \(2020\)](#); [Colaci \(2020\)](#) for far-right’s rhetoric, and also [Barone et al. \(2015\)](#); [Durante et al. \(2019\)](#) for the influence of Italian mass media more in general.

two news differentially affect beliefs about the *type* of crime that immigrants tend to commit (rape or theft), which, in turn, may change policy views on immigration. To address this concern, our second strategy is to examine the effect of the rape news story conditional on having accurate and relevant statistical information about immigration and about immigrant crimes. We thus randomly expose participants to statistical information, to the rape news, or to the combination of both. Once provided with the statistics, the rape news story should not influence respondents' beliefs, as it does not bring any additional information other than the description a specific realization of the statistical distribution of crimes. Conditional on having correct knowledge of the statistics, the rape news story becomes uninformative from a quantitative point of view, which allows to isolate the effect of its qualitative features, which is to trigger emotions. Furthermore, the information treatments allow us to answer our second research question and thus to assess how news-induced emotions influence the way people process and respond to factual information.

Our experimental design comprises a control condition, in which participants are presented with a neutral news story about food and culture, and four treatments: *Rape news*, *Theft news*, *Info*, and *Info & rape news*.⁴ For comparability, and to make the experiment more realistic, all news stories were selected from the same mainstream Italian newspaper "La Repubblica" (without disclosing the name of the newspaper to participants). After the treatments we elicit emotions by asking participants how strongly they felt positive (joy and surprise) and negative (fear, anger, contempt, and disgust) emotions while reading the news article. We then measure beliefs by asking a series of questions about the same statistics provided in the information treatment. At the end of the questionnaire, we measure attitudinal outcomes by asking participants' views on whether the number of immigrants arriving in Italy should be reduced or increased, their willingness to sign a petition to decrease or increase the number of residence permits for foreigners, and their views on whether immigration makes Italy a better or worse place to live in.

The results of the experiment are the following. First, the rape and theft news stories have very different effects on attitudes. While the rape news significantly increases the demand for anti-immigration policies, there is no impact of the theft news. This is consistent with a causal influence of negative emotions on policy views, as we show that: (i) participants' emotional reaction to the rape news is significantly more intense than to the theft news,

⁴The statistical information in the *Info* treatment had a clear indication of the source, namely, the Italian National Institute of Statistics (ISTAT). After the statistics, the *Info* treatment group is subsequently exposed to the same neutral article used in the *Control* group.

(ii) there is no significant difference in how the news impact beliefs, both for the share of immigrants among offenders and the share of rape among immigrant offenses. Second, we find that the provision of statistical information corrects factual beliefs, irrespective of whether participants are also exposed to the rape news. Emotions have thus very little influence on the factual learning of new information. Yet, the exposure to the rape news strongly influences whether belief updating translates into change in policy views. When presented in isolation, information tends to reduce anti-immigration views, as it contradicts prior average beliefs, making participants realize that the percentage of crime committed by immigrants is lower and that rape is a less frequent type of immigrant crime than what they previously thought.⁵ In contrast, when information and rape news are presented together, the impact of the latter dominates and participants increase their anti-immigration views to the same extent as when exposed to the rape news only. Hence, the negative effect of rape news on immigration attitudes is unaffected by the provision of statistical information. These results suggest that, once negative emotions are triggered, having more accurate factual knowledge no longer matters for forming policy views on immigration.

Our paper contributes to four strands of literature. The first is the vast literature that documents the importance of emotions in influencing judgments, decisions and choices.⁶ Emotions can notably be understood as “visceral factors” directly influencing preferences and behaviors (Loewenstein, 1996, 2000). For example, anger has been shown to cause destructive behaviors in ultimatum game, and lower contributions in public good games (Drouvelis and Grosskopf, 2016; Van Leeuwen et al., 2018); fear tends to increase risk aversion in financial decisions (Cohn et al., 2015; Guiso et al., 2018) and emotional shocks can even influence court decisions (Eren and Mocan, 2018). Emotions can also provide information about people’s own tastes (e.g., “How do I feel about this?”), that can be used to form evaluative judgment (Schwarz, 2012). In either case, this implies that the emotional reaction to sensational news can move respondents’ views on immigration, independently of factual beliefs.⁷

Second, our paper contributes to the the growing literature on information provision experiments (Haaland et al., 2020). In particular, given the high level of factual misperceptions about immigration, there has been a growing interest in testing whether correcting

⁵Note that statistical information has almost no effect on emotions; if anything, it very slightly increases negative emotions.

⁶See Lerner et al. (2015); Rick and Loewenstein (2008).

⁷Emotions are also increasingly studied in political psychology, and notably their role in the demand and supply of populism. Some work shows that populist rhetoric use more appeals to negative emotions than non-populists, and also that anger and resentment are important determinants of populist voting (Ali et al., 2023; Altomonte et al., 2019; Webster, 2020; Webster and Albertson, 2022; Widmann, 2021).

the latter could reduce anti-immigration views. Various interventions have been tested, by providing survey’s participants with statistical information about either the size of the immigrant population (Alesina et al., 2023; Grigorieff et al., 2020; Hopkins et al., 2019), the labor market impact of immigration (Haaland and Roth, 2020), or its economic benefits for host societies (Cattaneo and Grieco, 2021; Facchini et al., 2022; Lergetporer et al., 2021). Some studies also examine whether fact-checking can counteract the effects of politicians’ misleading statements about refugees (Barrera et al., 2020). While information is usually found to improve factual knowledge, results are mixed on whether belief updating leads to a change in political attitudes and behaviors. Policy views are sometimes found to be resistant to change in response to factual information. So far, the most common explanation of this phenomenon has been motivated reasoning, i.e., the biased interpretation of new information in a way that aligns with prior attitudes and ideology (Zimmermann, 2020). We add to this literature by proposing a new alternative explanation: the role of emotions elicited by the news media.

Third, our paper relates to a recent set of studies on the influence of news media on attitudes towards immigration (Benesch et al., 2019; Couttenier et al., 2021; Djourelouva, 2023; Keita et al., 2023; Schneider-Strawczynski and Valette, 2023). In particular, media have been shown to influence people’s views either by increasing the salience of the immigration issue (bringing people’s attention to it), or by selecting the news event they cover, typically over-reporting negative news about immigrants. We instead provide evidence of a different persuasion mechanism based on emotional appeals. Furthermore, while these studies exploit observational data, we use a survey experiment, which allows us to abstract from the typical challenges of causal inference.

Finally, our paper also echoes recent evidence that narratives and anecdotes may exert stronger influence on people’s perceptions of outgroups compared to intervention providing hard statistical information (Alesina et al., 2023; Bursztyn and Yang, 2022). More generally, anecdotal stories can be easier to recall in memory than statistics, because they provide contextual cues (Graeber et al., 2022). We complement this evidence by showing that emotional news stories can exert stronger influence on attitudes than statistical data (even when the story does not bring additional quantitative information). Emotions may therefore provide another explanation of the differential effects of stories compared to statistics.

The rest of the paper is structured as follows. Section 2 describes the experimental design and the data. Section 3 presents the main results, the robustness checks, and the heterogeneity analysis. Section 4 concludes.

2 Experimental design and sample

In this section, we first report the main characteristics of our sample (2.1). We then describe the basic structure of the experiment (2.2), our treatments (2.3), and the main variables used for the empirical analysis (2.4).

2.1 Sample

Our respondents were recruited using Cint, a multinational market research platform. The survey was run in late April and May 2023. Our estimation sample is composed by 6,888 Italians aged between 18 and 64 years old that were randomized in five roughly equally-sized treatment groups.⁸ We implemented sampling quotas to ensure that the participants are representative of the adult 18-64 Italian population on gender, age, and geographical area.⁹ For a broad range of variables, Table 1 presents the means by treatment group. Table A.1 in Appendix A presents balance tests of each treatment against the control group, correcting for multiple hypotheses testing. We find no significant mean differences in the variables reported in Table 1.

2.2 Structure of the survey experiment

Upon clicking on the survey link participants were redirected to a Qualtrics survey (the whole text of the survey is reported in Appendix B). The design of the survey is composed by several blocks that follow the order we summarize in Figure 2. We describe the blocks in details below.

Initial sociodemographics: survey participants are asked about their gender, age, and political orientation on a spectrum from left to right (left, center-left, center, center-right, right).

Informed consent: participants are advised that some of the contents of the survey may hurt their sensibility and are asked whether they wish to continue further. They are also explicitly told they can leave the survey at any time.

Statistics (only in info treatments): in the *Info* and *Info & rape news* treatments (see below) subjects are presented with a series of statistics taken from ISTAT. Participants are

⁸As we used simple randomization (and not block randomization), the numbers of respondents across treatment groups are not exactly the same.

⁹Cint, allowed for three levels of quotas. Using data from the Italian population census, we imposed quotas on gender (49% male, 51% female), on age groups (11% 18-24, 17% 25-34, 22% 35-44, 26% 45-54, 24% 55-64) and on geographical area (27% North-West, 20% North-East, 20% Center, 23% South, 10% Islands).

Table 1: Descriptive statistics by randomized group

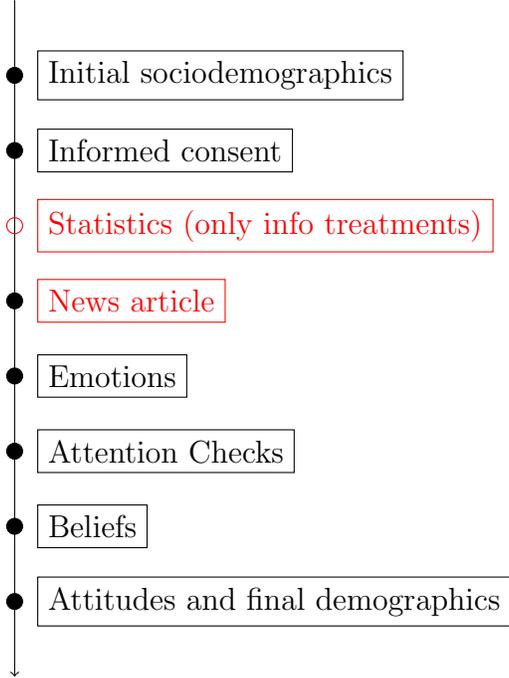
	(1)	(2)	(3)	(4)	(5)
	Control	Rape news	Info & rape news	Info	Theft news
<u>Demographics</u>					
Male	0.47	0.49	0.48	0.48	0.48
Age	43.49	43.14	42.78	42.71	43.11
Age: 18-24	0.10	0.12	0.13	0.12	0.11
Age: 25-34	0.17	0.16	0.17	0.17	0.18
Age: 35-44	0.22	0.21	0.20	0.21	0.20
Age: 45-54	0.26	0.26	0.25	0.27	0.27
Age: 55-64	0.25	0.24	0.24	0.23	0.24
Native-born	0.97	0.96	0.97	0.97	0.96
Native-born parents	0.94	0.95	0.94	0.94	0.94
Single	0.34	0.30	0.34	0.32	0.32
Married	0.44	0.45	0.43	0.43	0.43
Informal union	0.16	0.17	0.18	0.18	0.18
Highest edu. attain.: high school	0.53	0.53	0.55	0.52	0.51
Highest edu. attain.: bachelor	0.13	0.12	0.12	0.13	0.15
Highest edu. attain.: Master or more	0.26	0.24	0.22	0.25	0.22
Nb of household member aged >18	2.45	2.51	2.60	2.50	2.49
Nb of household member aged \leq 18	0.58	0.60	0.55	0.58	0.57
<u>Socio-Economics</u>					
Occupation:Employee	0.59	0.58	0.57	0.60	0.57
Occupation:Self-employed	0.12	0.12	0.12	0.12	0.13
Occupation:Student	0.08	0.09	0.09	0.08	0.08
Occupation:Retired	0.05	0.05	0.05	0.04	0.04
Income: <1000€	0.13	0.13	0.14	0.13	0.13
Income:1000-1500€	0.20	0.20	0.19	0.17	0.18
Income:1500-2000€	0.22	0.19	0.18	0.21	0.21
Income:2000-3000€	0.21	0.22	0.22	0.23	0.22
Income:3000-4000€	0.11	0.12	0.11	0.11	0.11
Income: >4000€	0.13	0.14	0.16	0.15	0.15
North Italy	0.47	0.47	0.47	0.46	0.48
Center Italy	0.19	0.20	0.19	0.19	0.21
South Italy	0.34	0.33	0.34	0.35	0.30
<u>Political views</u>					
Political views: Left	0.17	0.17	0.14	0.17	0.17
Political views: Center-Left	0.22	0.21	0.25	0.23	0.21
Political views: Center	0.23	0.22	0.24	0.23	0.21
Political views: Center-Right	0.24	0.24	0.22	0.24	0.26
Political views: Right	0.15	0.16	0.14	0.13	0.15
Observations	1261	1480	1380	1224	1543

Notes. The table presents the average characteristics of the sample by randomized group.

instructed to read them carefully and to note them down as these would be useful in the following screens.

News article: participants are asked to carefully read a text and are presented with one of our treatment articles (see below). We reveal that the article is taken from one important Italian newspaper but we do not reveal which newspaper. For the first minute after the article appears on their screens, participants cannot progress to the next screen.

Figure 2: Structure of the survey experiment



Emotions: after reading the article, participants are asked to report their emotions. We present participants with a list of seven emotions and ask them on a scale from 1 to 7 how strongly they felt each emotion while reading the article (Bosman et al., 2005; Bosman and Van Winden, 2002). Following Ekman et al. (1999), we chose seven basic emotions: anger, contempt, disgust, fear, joy, sadness, surprise. All emotions were presented in the same screen and the order in which the emotions were presented was randomized across participants.

Attention checks: In order to assess whether participants read carefully the article, we ask them whether they remembered the *topic* of the article (rape, theft, culture, or other), the *place* (north, center, or south of Italy) and the *time* of the day (morning, afternoon,

evening, night). These three variables are elicited using multiple choice questions. Given that our primary interest is to measure the effects of *actual* exposure to the news article, we remove from the analysis 461 participants (out of 7,349, i.e. 6.3% of the original sample) who wrongly answered to the *topic* question and are therefore unlikely to have actually read the article. Our final estimation sample is thus composed of 6,888 participants. We further control in the regression analysis whether participants responded correctly to the *place* and *time* questions. In Section 3.4 we check the robustness of the results to using the entire original sample, i.e., without removing inattentive participants (7,349 observations).

Beliefs: we ask five beliefs questions. First, we ask the percentage of foreigners in the population residing in Italy. Second, we ask them to estimate the percentage of foreigners among people reported to the judicial authority. Participants answer these two questions using a slider from 0 to 100. Furthermore, we ask in an open-ended format (i) the percentage of persons reported to the judicial authority among foreigners (ii) the percentage of petty theft among crimes committed by foreigners and (iii) the percentage of sexual violence among crimes committed by foreigners. In these three cases we also provide the corresponding percentages for natives as a benchmark.

Attitudes and final sociodemographics: in the last part of the questionnaire participants fill in additional sociodemographics and attitudes questions (e.g., risk attitudes, personality traits). In this part, we also elicit attitudes towards migration using three questions. The first question asks whether the number of migrants arriving in Italy every year should be reduced a lot/reduced a bit/left unchanged/increased a bit/increased a lot. The second is taken from the European Social Survey and asks whether the arrival of people from different countries has made Italy a better or a worse place to live on a scale from 0 to 10 (henceforth, ESS question). Finally, we ask whether participants would like to sign a petition to the Italian Parliament. They could select one of the following three options: (a) I would like to sign a petition to increase the number of residence permits issued each year to foreigners (b) I would like to sign a petition to reduce the number of residence permits issued each year to foreigners (c) I am not willing to sign any petition (see [Facchini et al., 2022](#), for a similar approach).

2.3 Treatments

Our treatments vary along two dimensions: the article participants read and whether they receive statistical information or not before reading the article. We describe each treatment

in detail below (see Appendix B for the full text of the articles).

Control: participants in the control group receive no statistical information and are asked to read a neutral article about a cultural festival in Italy.¹⁰

Rape News: in this treatment participants receive no statistical information and are asked to read an article reporting a rape perpetrated by an immigrant against a young women on her way to work.

Theft News: in this treatment participants receive no statistical information and read an article reporting a petty theft of a woman’s handbag committed by an immigrant.

Info: this treatment is identical to the control treatment except for the statistical information that participants receive before reading the article. As mentioned above, the statistical information contains all the data that we subsequently ask in the beliefs questionnaire, that is, the percentage of foreigners in the population, the percentage of foreigners among criminals, the percentage of criminals among foreigners, the percentage of rapes and thefts among crimes committed by foreigners. Participants were informed that all data are taken from Italian National Institute of Statistics (ISTAT) and refer to the year 2020.

Info & rape news: this treatment exposes participants first to statistical information and then to the rape news article in two consecutive screens.

2.4 Main variables

We summarize below the main variables we employ in our empirical analysis.

Policy preferences and attitudes towards immigration. Figures A.2, A.3 and A.4 in Appendix A respectively show the distribution of: (i) policy preferences on immigration levels (ii) willingness to sign a petition for increasing/decreasing the number of residence permits issued to foreigners (iii) views on whether immigration makes Italy a better or a worse place to live in, by treatment. The exposure to the rape news appears to move respondents towards more anti-immigration attitudes, for all three of these measures. Our first outcome variable is constructed as a binary indicator that takes value 1 if the respondent thinks

¹⁰More specifically, participants in the control group were randomly exposed either to an article about a tourism fair or to an article about a food fair. By comparing these two randomized sub-samples within the control group, we can assess whether these articles have per se any influence on attitudes and beliefs. Table A.4 in Appendix A shows that there are no significant differences in the main outcome variables between the two types of news (tourism versus food fair). Hence, we pool the two sub-samples for the remainder of the paper.

that the number of immigrants should be reduced a lot and zero otherwise. This outcome measures the demand for anti-immigration policies aimed at drastically cutting immigration levels. Our second outcome variable is constructed as a binary indicator taking value 1 if the participant is willing to sign a petition to increase the number of residence permits and zero otherwise. Our third outcome variable is a continuous measure (scale from 0 to 10) of respondent’s views about whether the arrival of people from different countries has made Italy a better or worse place to live (with 0 being a worse place, 5 being neutral, and 10 a better place).

Beliefs. Our main belief measure is the fraction of foreigners among individuals reported to the judicial authority. In some specifications, we will also use the belief about the overall proportion of foreigners in the population. In other cases, we use the specific beliefs on rape and theft to examine whether the news causes an update in the relevant crime domain.

Emotions. We use two measures of emotions. The first is constructed as the average of all the negative emotions (fear, anger, sadness, disgust, contempt), with values between 1 and 7. In line with recent literature on emotions (Fiala and Noussair, 2017; Noussair et al., 2023) we also construct a variable labelled “negative emotional valence” as the difference between negative emotions (fear, anger, sadness, disgust, contempt) and positive ones (joy and surprise). The variable is standardized to take values between -1 and 1, with higher values representing a more negative emotional state, and 0 a perfect balance between positive and negative emotions.

3 Results

In this section, we first present our estimation strategy (3.1). We then focus on our main research questions, by examining whether news-induced emotions have an effect on attitudes towards immigration (3.2), and by analyzing the combined effect of statistical information and sensational news (3.3). Finally, we present robustness checks and heterogeneity analyses (3.4), and rule out potential alternative explanations for our results (3.5).

3.1 Estimation

To investigate how the treatments affect respondents’ beliefs, emotions and policy views on immigration, we estimate the following equation using OLS:

$$Y_i = \alpha + \sum_{j=1}^4 \gamma_j T_i^j + X_i' \beta + \varepsilon_i \quad (1)$$

where Y_i is the outcome for individual i ; T_i^1 , T_i^2 , T_i^3 and T_i^4 are dummies indicating the four treatments, namely, exposure to the rape news, to the theft news, to the statistical information, or to both the rape news and information; the reference group is always the control group. X_i is a vector of controls including gender, age (dummies for the 18-24, 25-34, 35-44, 45-54, 55-64 age groups), respondents’ and parental birthplace (foreign or native born), marital status (4 categories), highest educational attainment (4 categories), number of adult and under-18 household member, current occupation (5 categories), family income (6 brackets), area of residence (North, Center or South Italy), and self-reported placement on the political scale (left, center-left, center, center-right, right). X_i also include the part of the day (morning, afternoon, or evening) in which the respondent started to fill the survey. The controls also include two attention checks for whether the respondent correctly identified the part of the day and the region in which the news story took place. ε_i is an individual-specific error term. We use heteroscedasticity-robust standard errors for all specifications.

To facilitate the presentation of the estimation results, we first focus on the effects of the rape news and theft news treatments (γ_1 and γ_2) in section 3.2, and then turn to examining the effects of information provision, either in isolation or combined with rape news (γ_3 and γ_4) in section 3.3.

3.2 Effects of rape vs. theft news

How do emotions triggered by sensational news influence attitudes towards immigration? In order to isolate the causal impact of emotions, we compare the effects of two news stories with different emotional load. The stories report two different types of crimes, namely, rape and theft, which are both committed by an immigrant against a young woman. As the petty theft of a woman’s handbag reported in the theft news is much less violent than the rape (in terms of physical and psychological harm), we expect the emotional reaction of respondents to be much less intense relative to the rape news. In contrast, as the informational signal

conveyed by the two types of news is relatively similar, we expect that they affect factual beliefs in a similar way.

We provide evidence that the treatments work as intended. Figure 3(a) shows the distribution of respondent’s beliefs about the share of immigrants among offenders for the rape news (left panel) and the theft news (right panel), both relative to the control group. While beliefs are higher in both news treatments relative to the control group, the shift is very similar between the rape and theft news. In fact, as the left panel of Figure 3(c) shows, beliefs are almost identically distributed between the rape and theft news treatment. Figure 3(b) shows the emotional reaction to the news for both treatments, as measured with negative valence, relative to control.¹¹ The right panel of Figure 3(c) directly compares the distributions of emotional valence between the rape and the theft news treatments. As Figure 3(b) and the right panel of Figure 3(c) show, both types of news increase respondents’ negative emotional valence, but the effect is more pronounced for rape than for theft news.

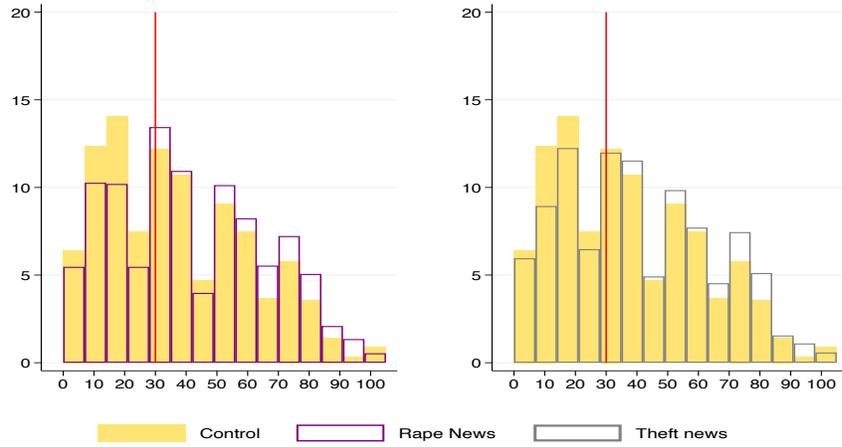
Table 2 reports the OLS estimates of the effects of rape and theft news relative to the control group. Column 1 and 2 confirm that, while *Theft news* increases the feeling of negative emotions, the emotional response it triggers is significantly less intense – about one third weaker – compared to *Rape news*. Column 2 in particular shows that, relative to the control group, the intensity of negative emotions more than triples after reading the rape news while it only doubles for the theft news. In contrast, we find no significant differences in the impacts of rape and theft news on beliefs, as the p-values reported at the bottom of Table 2 indicate. In both treatments, the perceived share of immigrants among offenders increases by about 4 percentage points on average, while the perceived share of immigrants in the population is no or little affected. Importantly, we also find no differential change in the perceived frequency of sexual violence (or theft) among offenses committed by immigrants between the rape and the theft news treatments. Neither of the two news stories significantly affects participant’s beliefs about the type of crime that immigrants tend to commit in terms of relative frequency.¹²

¹¹Negative emotional valence measures the overall net negativity of one’s emotional state and is standardized to take values between -1 and 1, with higher values representing a more negative emotional state, and 0 a perfect balance between positive and negative emotions. See section 2 for details.

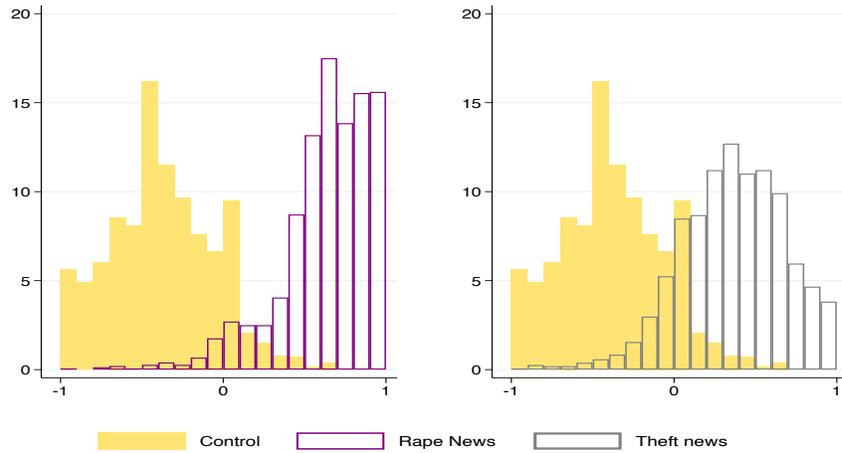
¹²We also examine beliefs about the share of criminals among foreigners. We find that the rape news and the theft news have no significant effect relative to the control group, and that the effects are not statistically different between the two treatments.

Figure 3: Beliefs and emotions in the Rape and Theft news treatments

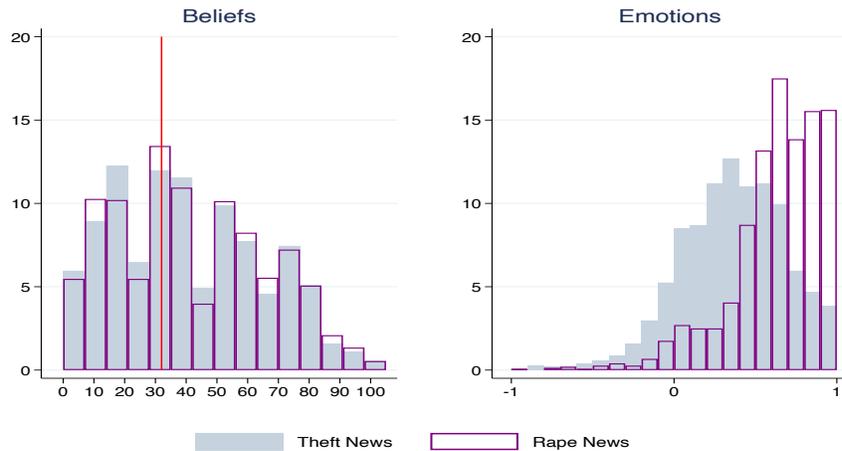
(a) Beliefs: share immigrants among offenders



(b) Emotions: Negative valence



(c) Comparison: Rape vs. Theft news



Notes. This figure shows the histogram of respondents' beliefs (answers to the question: "What do you think is the percentage of foreigners among all the criminals denounced to the judicial authorities in 2020 in Italy?") and emotions by treatment group. The red vertical line displays the true statistics (ISTAT).

Table 2: Rape versus Theft news: effects on beliefs and emotions

Dependent var.	Emotions		Beliefs			
	(1) Negative emotional valence	(2) Negative emotions (7-points scale)	(3) Share of immigrants among offenders	(4) Share of immigrants in population	(5) Share sexual violence among immigrant offenses	(6) Share theft
Rape news	1.011*** (0.012)	4.123*** (0.045)	4.172*** (0.880)	-0.020 (0.714)	1.159 (0.877)	0.537 (0.947)
Theft news	0.730*** (0.012)	2.797*** (0.049)	3.995*** (0.869)	1.224* (0.702)	1.083 (0.862)	1.745* (0.965)
R^2	0.655	0.662	0.102	0.206	0.046	0.032
Observations	6,888	6,888	6,888	6,888	6,871	6,578
Mean outcome in control group	-0.379	1.818	36.542	31.309	14.446	24.946
pval: Rape news =Theft news	0.000	0.000	0.837	0.072	0.929	0.194

Notes. The Table shows the estimation results of equation 1, in which the regressors include four treatment variables: Rape news, Theft news, Info & rape news, and Info. The regression controls include socio-demographic characteristics, pre-treatment political orientation and attention checks to the news story (see Table 3 ' notes for details). Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Looking at the specific emotions that the rape news triggers, we find an increase in the feeling of all negative emotions, i.e., anger, fear, sadness, despise and disgust (see Figure A.5 in Appendix A). Similarly, for theft news, we find an increase of negative emotions across the board, although significantly less pronounced compared to the rape news.

We now turn to examine the effects of theft and rape news on attitudes towards immigration. Table 3 reports the OLS estimates, relative to the control group. Column 1 shows that the exposure to the rape news significantly increases the support for less immigration by 4 percentage points. Rape news also significantly decreases the willingness to sign a pro-immigration petition (column 2) by 3.3 percentage points, which represents a 15% decrease with respect to the control group average. Finally, *Rape news* reduces pro-immigrant sentiments, elicited with the question on whether immigrants make Italy a better place to live.

In contrast to *Rape news*, *Theft news* has no significant impact on any of the three attitudinal outcomes. The effects of *Theft news* are order of magnitudes smaller than the ones of *Rape news*. We can reject the test for the equality of the effects for two out of three outcomes. Taken together, these results point to the important role of emotions in the formation of attitudes towards immigration. This leads to our first result:

Result 1. *Rape news triggers a strongly negative emotional reaction and increases respondent's anti-immigration attitudes. The exposure to a less emotionally loaded news about a petty theft, while moving factual beliefs in a very similar way as the Rape news, has much*

smaller and insignificant effects on anti-immigration attitudes.

The differential effect of rape and theft news also suggests that the way emotions affect attitudes may display non-linearities. Figure A.6 in Appendix A provides non-experimental semi-parametric estimates showing that the relationship between negatives emotions (measured with a scale from 1 to 7) and attitudes is indeed highly non-linear, for all three outcomes. Respondents reporting the lowest level of negative emotions and the ones reporting a level of 5 (about the sample median) display very similar attitudes. It is only past this point that the relationship becomes significant, with negative emotions being associated with more anti-immigrants attitudes.

Table 3: Rape versus Theft news: effects on attitudes

Dependent var. :	(1) Support for less immigration	(2) Sign pro-immigration petition	(3) Immigration makes Italy a better place to live (11pts scale)
Rape news	0.040** (0.017)	-0.033** (0.015)	-0.218** (0.090)
Theft news	-0.012 (0.017)	-0.014 (0.015)	0.055 (0.089)
R^2	0.164	0.118	0.155
Observations	6,888	6,888	6,875
Mean outcome in control group	0.381	0.216	3.861
pvalue: Rape =Theft news	0.002	0.167	0.002

Notes. The Table shows the estimation results of equation 1, in which the regressors include four treatment variables: Rape news, Theft news, Info & rape news, and Info. The regression controls include gender, age (dummies for the 18-24, 25-34, 25-44, 45-54, 55-64 age groups), respondents' and parental birthplace (foreign or native born), marital status (4 categories), highest educational attainment (4 cat.), number of adult and under-18 household member, current occupation (5 cat.), family income (6 brackets), area of residence (Center, South or North Italy), moment of the day (3 cat.) in which the respondent started to fill the survey, and self-reported political orientation. The controls also include two attention checks for whether the respondent has correctly identified the time of the day and the region in which the news story takes place. Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

3.3 The combined effects of information and rape news

We now turn to examine how news-induced emotions influence how people process statistical information. We explore two questions: (i) Do emotions affect the learning of statistical information, i.e., belief updating? (ii) Do emotions affect how (posterior) beliefs translate into attitudes towards immigration?

We address the first question by looking at the effects of statistical information provision either presented in isolation or combined with the rape news on respondents' factual beliefs. We address the second question by looking at the effects on respondents' attitudes.

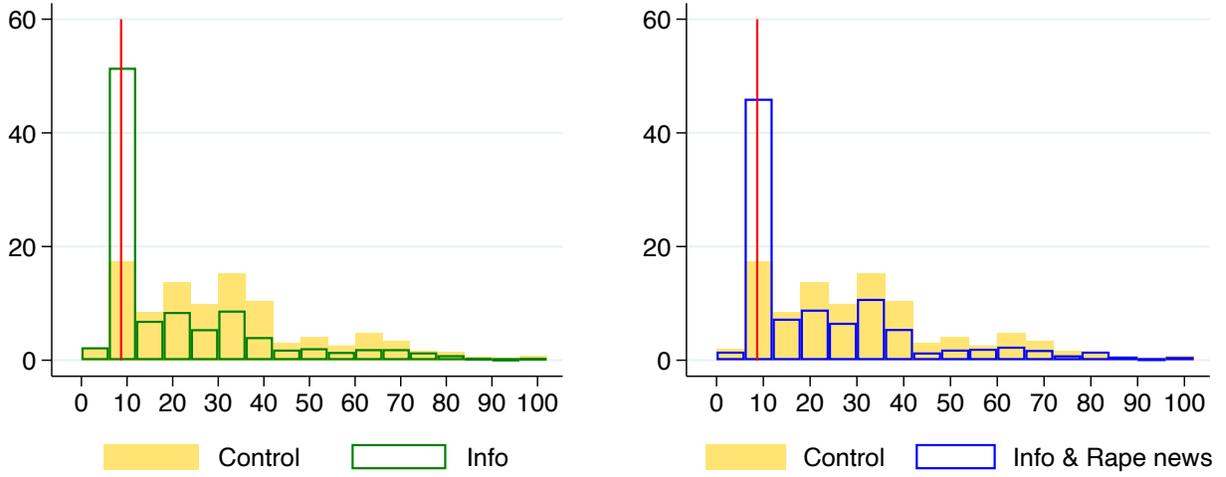
Figure 4 displays the distribution of beliefs about the share of immigrants in the population (Figure 4(a)), the share of immigrants among offenders (Figure 4(b)), and the share of rapes among immigrant offenses (Figure 4(c)). For each belief we present the *Info* vs. *Control* treatments in the left panel and the *Info & rape news* vs. *Control* in the right panel. Figure 4 shows that respondents in the *Info* treatment revise their beliefs substantially towards the truth, as compared to the control group. Importantly, respondents in the *Info & rape news* treatment also correct their beliefs, to a similar extent as the ones in the *Info* treatment. This improvement in factual knowledge occurs along three dimensions: in terms of beliefs about the share of immigrants in the population, the share of immigrants among offenders, and the share of rape among immigrant offenses (whose true statistics stands at 0.8%).

Table 4 presents the OLS estimates of the treatment effects, relative to the control group. Column 1 looks at the belief about the share of immigrants among offenders, while, in column 2, the dependent variable is the absolute value of the distance between individual answers and the true value of the statistics (30.1% according to ISTAT). While the rape news increases respondents' misperceptions (+1.87 ppts distant from the truth), the *Info & rape news* treatment significantly reduces beliefs' distance from the truth (-4.32 ppts), suggesting that statistical information from official sources dominates the impact of *Rape news*. In columns 3 to 6 of Table 4, we examine factual beliefs about the share of immigrants in the population and the share of sexual violence (rape) among immigrant-perpetrated offences. Consistently with column 1 and 2, we find that both the *Info* treatment and the *Info & rape news* treatment correct beliefs substantially towards the truth. Overall, the evidence suggests that respondents behave as Bayesians, updating their knowledge of statistical facts, irrespective of whether they are emotionally triggered by the rape news or not. This leads to our second result:

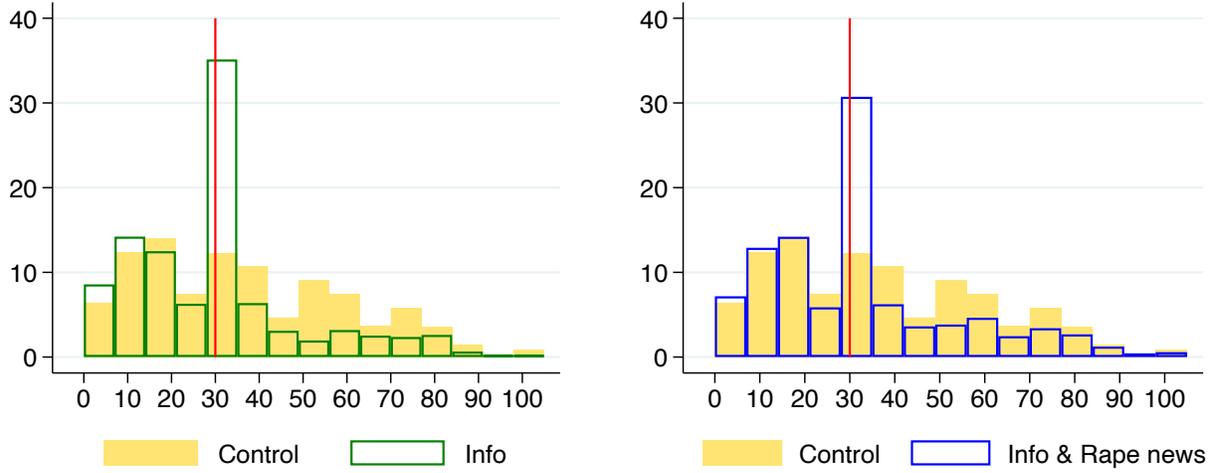
Result 2. *Presented with new information, respondents learn the statistical facts, irrespective of whether they are also exposed to the rape news or not.*

Figure 4: Beliefs on statistical facts, by treatment

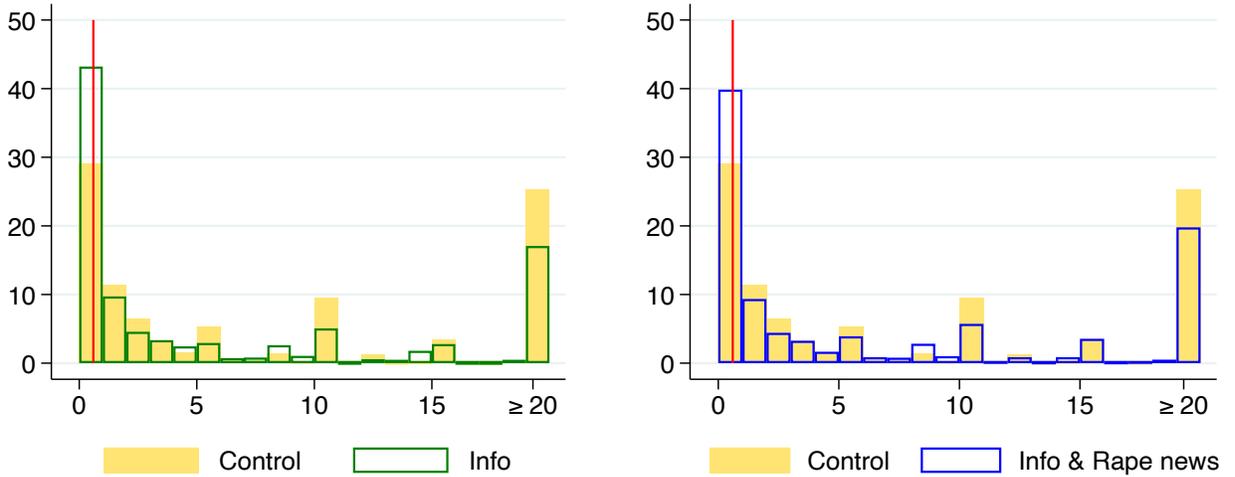
(a) Share of immigrants in the population



(b) Share of immigrants among offenders



(c) Share of rape among immigrant offenses



Notes. This figure shows the histogram of the distribution of individual beliefs. The red vertical line displays the true statistics (ISTAT).

Table 4: Effects of treatments on factual beliefs

Dependent var.:	(1)		(2)		(3)		(4)		(5)		(6)	
	Share of immigrants among offenders		Share of immigrants in population		Share of sexual violence among immigrant offenses							
	in %	distance to truth	in %	distance to truth	in %	distance to truth	in %	distance to truth	in %	distance to truth	in %	distance to truth
Info	-7.273*** (0.834)	-5.493*** (0.561)	-10.539*** (0.717)	-10.218*** (0.702)	-4.824*** (0.794)	-4.974*** (0.790)						
Info & rape news	-5.395*** (0.850)	-4.318*** (0.568)	-9.653*** (0.732)	-9.378*** (0.717)	-3.236*** (0.824)	-3.392*** (0.821)						
Rape news	4.172*** (0.880)	1.869*** (0.577)	-0.020 (0.714)	-0.007 (0.701)	1.159 (0.877)	1.126 (0.872)						
R^2	0.102	0.073	0.206	0.204	0.046	0.047						
Observations	6,888	6,888	6,888	6,888	6,871	6,871						
Mean outcome in control group	36.542	19.278	31.309	22.960	14.446	13.880						
pvalue: Rape=Info & rape	0.000	0.000	0.000	0.000	0.000	0.000						
pvalue: Info & rape=Info	0.019	0.036	0.224	0.238	0.029	0.029						

Notes. The Table shows the estimation results of equation 1, in which the regressors include four treatment variables: Rape news, Theft news, Info & rape news, and Info. The regression controls include socio-demographic characteristics, pre-treatment political orientation and attention checks to the news story (see Table 3's notes for details). Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

While not impeding factual learning, rape news still disrupts it slightly. In fact, we find a small difference in belief updating between the *Info* and *Info & rape news* treatments, as Figure A.7 of Appendix A illustrates. *Info* notably reduces beliefs' distance from the truth by 5.49 ppts on average (column 1 in Table 4), while *Info & rape news* does so by only 4.32 ppts, and we can reject the test of equality of coefficients (as shown by the p-value at the bottom of Table 4). We also find small but statistically significant differences in the rate of correct answers to the statistical questions (see Table A.3 in Appendix A).

Next, we explore the treatment effects on attitudes towards immigration. Table 5 presents the OLS estimates. When presented in isolation, information reduces anti-immigration attitudes: the *Info* treatment significantly decreases the support for less immigration by 4 ppts (column 1). Although the effect is not statistically significant, *Info* also tends to increase the view that immigrants make Italy a better place to live (column 3). The attitudinal effect of *Info* likely results from belief updating, as the statistics learned by the respondents tend to contradict their average prior beliefs (as inferred from the control group): respondents realize that immigrants are fewer in the population, that the percentage of crime committed by immigrants is lower, and that rape is a less frequent type of crime perpetrated by immigrants than what they previously thought. Conversely, *Info* has almost no effect on respondent's

emotions (if anything, it very slightly increases negative emotions).¹³

In contrast, when combined with rape news, information does not lead to an improvement in immigration attitudes. On the contrary, the *Info & rape news* treatment exacerbates anti-immigration views significantly. The effects of *Info & rape news* and *Rape news* are virtually identical for all three attitudinal outcomes, despite respondents hold more correct factual beliefs in the former compared to the latter. This indicates that the negative effect of the sensational news trumps any positive effect of statistical information. This is further highlighted by the tests of equality of coefficients for the *Info & rape news* and *Info* treatments, where the null is rejected for all outcomes.

These results have two implications. First, they show that, conditional on holding correct beliefs (i.e., in comparison with *Info*) the rape news still increases anti-immigration views, which provides additional evidence for a causal role of emotions.¹⁴ Second, they suggest that, once negative emotions are triggered by the rape news, having more correct factual beliefs does not matter for forming policy views towards immigration. Emotions thus make policy views more resistant to change in response to new information. This leads to our third result:

Result 3. *When presented in isolation, statistical information tends to reduce anti-immigration attitudes; when information is combined with the rape news, the impact of the latter dominates and participants increase their anti-immigration views, despite holding more correct factual beliefs.*

3.4 Robustness and heterogeneity

Robustness In Figure A.8, A.9, and A.10 in Appendix A, we examine the robustness of the main results to alternative sample specifications and regression controls. Regarding the sample, we estimate the attitudinal effects of the treatments either in the entire sample (7,349 observations) or the sample restricted to individuals who correctly identified the topic

¹³We also find that information does not change respondents' emotional reaction to the rape news: the latter is the same irrespective of whether it is combined with statistical information. See Table A.2 in Appendix A.

¹⁴The small difference in belief updating between *Info & rape news* and *Info* is unlikely to explain the difference in attitudinal response. In fact, if this were the case, we would a fortiori expect that the large difference in belief between *Rape news* and *Info & rape news* should translate into much more anti-immigration views in the *Rape news* than in in the *Info & rape news* treatment group. But this is not what we observe. Also, note that the emotional reaction to the rape news is the same between *Rape news* and *Info & rape news*).

Table 5: Effects of treatments on policy preferences and attitudes towards immigration

Dependent var. :	(1) Support for less immigration	(2) Sign pro-immigration petition	(3) Immigration makes Italy a better place to live (11pts scale)
Info	-0.041** (0.018)	0.005 (0.016)	0.122 (0.093)
Info & rape news	0.036** (0.018)	-0.031** (0.015)	-0.271*** (0.092)
Rape news	0.040** (0.017)	-0.033** (0.015)	-0.218** (0.090)
R^2	0.164	0.118	0.155
Observations	6,888	6,888	6,875
Mean outcome in control group	0.381	0.216	3.861
pvalue: Rape= Info & rape	0.820	0.863	0.543
pvalue: Info & rape=Info	0.000	0.018	0.000

Notes. The Table shows the estimation results of equation 1, in which the regressors include four treatment variables: Rape news, Theft news, Info & rape news, and Info. The regression controls include socio-demographic characteristics, pre-treatment political orientation and attention checks to the news story (see Table 3’s notes for details). Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

of the news article (6,888 observations), as we did in the main specification. For each of these two samples, we run five specifications starting with a regression without any controls and then progressively adding controls to the right-hand side. In particular, we add (i) age, sex and education (ii) other socio-demographic characteristics (like birthplace, marital status, occupation, etc.) (iii) political orientation (iv) attention checks. Overall, for the three attitudinal outcomes, we obtain estimates that are qualitatively similar across specifications and samples, even though the significance level of the treatment effects may vary a little. Importantly, when examining the distribution of the p-values of the test of equality of coefficients across 30 regressions (2 samples, 5 specifications, 3 attitudinal outcomes), we can always reject (at 5%) that the *Info* & *rape news* and the *Info* treatment have the same effect, while we can never reject that the *Rape news* and the *Info* & *rape news* treatment have the same impact (the lowest p-value being 0.5). With respect to *Rape news* and *Theft news*, we can reject that they have the same effect in most cases (21 regressions out of 30 yield a p-value below 10%) – see Figure A.11 in Appendix A.

We also test the robustness of the results to using ordered probit instead of OLS. Instead of dichotomizing the first two attitudinal outcomes (policy views on the number of migrants

and willingness to sign a petition) we treat them as ordinal variables, assuming that there is a latent continuous metric underlying their ordinal responses (with higher values implying a more pro-immigrant attitude). Table A.6 in Appendix A shows that the ordered probit estimates are qualitatively similar to the OLS obtained in the main specification (Tables 3 and 5).

Heterogeneity In Figures A.12, A.13, and A.14 in Appendix A, we explore various dimensions of heterogeneity of treatment effects on the main attitudinal outcomes, on factual beliefs and on emotions. Specifically, we examine heterogeneity in terms of gender, political orientation, education, distance from the respondent’s residence to the location of the rape reported in the *Rape news* (i.e., Milano, Cascina Gobba), share of immigrants in the respondent’s municipality, and whether the municipality is urban or not. For each of these variables, we estimate a separate regression and report the coefficients of treatment effect fully interacted with each category of the variable. The first row of each figure reports the Average Treatment Effect (ATE) as a reminder.

Figure A.12 shows the heterogeneous effects of rape news. The only dimension of heterogeneity that is consistently significant is gender (Figure A.12(a)). The attitudinal effect of rape news is mainly driven by women while being almost null for men, both in terms of support for less immigration and view on whether immigration makes Italy a better place to live. Yet, we find no gender difference in how the willingness to sign a pro-immigration petition responds to the treatment. We also find that, being the potential direct victim of sexual assaults, women’s emotional reaction to the rape news is significantly more intense than for men (Figure A.12(c)). This differential emotional reaction offers a plausible explanation as to why women’s demand for anti-immigration policies is more impacted than men’s. In contrast, the belief-based explanation is unlikely, as factual beliefs are impacted in a similar way for men and women. Also, we find the same gender gap in the attitudinal effect of the *Info & rape news* treatment (see Figure A.13).¹⁵

We find no significant heterogeneity of the attitudinal treatment effects in terms of political orientation (reported before the treatment), despite the latter being an important determinant of attitudes.¹⁶ The factual beliefs of right-wing respondents are yet more im-

¹⁵Just like *Rape news*, the *Info & rape news* treatment triggers a much more intense emotional reaction among women than among men (Figure A.13).

¹⁶For example, among right-wing participants (who account for 39% of the sample), the support for less immigration stands at 60% in the control group, while it stands at 25% among participants at the center,

pacted by the treatments relative to other respondents. When exposed to the rape news only, rightists revise upward their perception of the share of immigrants among offenders to a greater extent than other respondents (Figure A.12). When exposed to statistical information, they correct their factual belief to a greater extent (Figures A.13 and A.14). This is simply due the fact that, as information brings all respondents closer to the truth, the impact is stronger for those with more biased prior beliefs, which is the case of rightists, who overestimate immigrant criminality relatively more.¹⁷ The fact that rightists’ factual beliefs are more responsive to the treatments, while their attitudes are not, further suggests that the driving mechanism of the attitudinal treatment effects is not based on beliefs.

We also find some (statistically insignificant) heterogeneity of the effects of the *Info* treatment in terms of education and urban/rural areas. As Figure A.14 shows, the *Info* treatment tends to reduce anti-immigration attitudes to a greater extent for respondents with higher education (some tertiary education or more) and those in urban areas (relative to rural). Interestingly, this finding is not driven by differences in beliefs updating. Consistently with the theory of educated preferences (Hainmueller and Hiscox, 2007), it could be that the attitudes of more educated people (and urban dwellers) are less resistant to change in response to new (positive) information about immigrants. Interestingly, although *Info* significantly reduces tertiary educated individuals’ and urban dwellers’ anti-immigration attitudes (except for the willingness to sign a pro-immigration petition), the *Info* & *rape news* treatment has opposite and significant effects for them.

3.5 Alternative explanations

We now discuss whether our results could be explained by two alternative mechanisms: salience and experimenter demand effects, and conclude that they cannot be.

Salience We first consider whether the attitudinal effects of *Rape news* and *Info* & *rape news* could be driven by an increase in salience of the immigration issue in respondents’ minds. In fact, thinking about immigration may bring about fears associated with it and, therefore, may lead to oppose immigration more vehemently. Salience is sometimes invoked to either explain the ineffectiveness of informational treatment (e.g., fact-checking) in changing po-

center-left, or left of the political scale.

¹⁷This can be inferred from the control group. Among participants in the control group, rightists’ perceived share of immigrants among offenders stands at 42% on average while it stands at 33% for other individuals (the truth being 30%)

litical preferences towards immigration (Alesina et al., 2023; Barrera et al., 2020), or as a mechanism through which mass media influences public opinion about immigration (Benesch et al., 2019; Schneider-Strawczynski and Valette, 2023).

Our results are inconsistent with the salience mechanism for two main reasons. First, by bringing respondents' attention to statistical facts about immigration and crime, the *Info* treatment alone should exacerbate anti-immigration sentiments if the salience mechanism is at work. This is not what we find: OLS estimates in Table 5 show that *Info* either reduces or has little effect on anti-immigration attitudes. Second, salience can hardly explain why the exposure to the rape news triggers much stronger anti-immigration reaction compared to the theft news (Table 3). As both treatments raise salience in an arguably similar way, the latter cannot account for the differential effects that the two types of news generate.

Experimenter demand effects A potential concern with our results is that treatment effects could be biased due to experimenter demand effects (Zizzo, 2010). While recent evidence suggests that this bias may not be quantitatively important (De Quidt et al., 2018; Mummolo and Peterson, 2019) we take additional steps to address this concern. Guided by the recommendations of Haaland et al. (2023), we measure respondent's beliefs about the study purpose at the very end of the questionnaire. We first ask respondents whether they thought about the research objective while answering the questionnaire. If yes, we then ask whether these objectives had any influence on the way they answered the questionnaire. While 69% of the respondents report to have thought about the research objective, only 10% say to have been influenced by the latter. In Table A.5 in Appendix A, we test whether the treatment effects differ between respondents who had the research objective in mind and those who did not. Would experimenter demand effects drive the results, we would expect the attitudinal effects of the rape news to be weaker for respondents who were not paying attention to the experimenter objective while answering the survey. Panel A of Table A.5 shows that there are no statistically significant differences in the treatment effects between the two groups of respondents. For all three attitudinal outcomes, we cannot reject the test of joint nullity of the interacted coefficients (treatments*research objective not in mind) Finally, in Panel B, we obtain similar results when we restrict the sample to respondents reporting to not have been influenced by experimenter's objective.

Additional evidence that experimenter demand effects seem unlikely to drive our results comes from the fact that the rape and theft news have very different impacts on attitudes

towards immigration. Given that both news stories report a crime perpetrated by an immigrant, we would expect experimenter demand effects to influence answers to attitudinal questions in a very similar way between the two treatment groups.

4 Conclusion

Using a large-scale survey experiment, this paper investigates the combined effect of sensational news stories and statistical information on beliefs and policy views on immigration. We find evidence that the emotional reaction to the news of a rape committed by an immigrant moves policy views, with a significant increase in anti-immigration attitudes. Providing statistical information corrects factual beliefs, irrespective of whether participants are also exposed to the rape news. While the exposure to the rape news has little influence on factual learning, it strongly shapes whether belief updating translates into change in policy views. When presented in isolation, information tends to reduce anti-immigration views as it makes participants realize that the percentage of crime committed by immigrants is lower and that rape is a less frequent type of crime perpetrated by immigrants than what they previously thought. Yet, when information is combined with the rape news, the emotional reaction to the news dominates the beliefs-correcting effect of information: participants increase their anti-immigration views to the same extent as when exposed to the rape news only.

The result that emotions may trump cognition in the formation of policy views has two important implications. First, news media should be aware that reporting facts and statistics can correct people's factual beliefs but may not move their policy views, if sensational stories are reported alongside them. Second, in the political arena, populist rhetoric appealing to emotions are often responded to with factual and rational arguments. Yet, relying only on voters' cognition might not be the best strategy. How to counteract the effects of emotional communication is an important question for future research.

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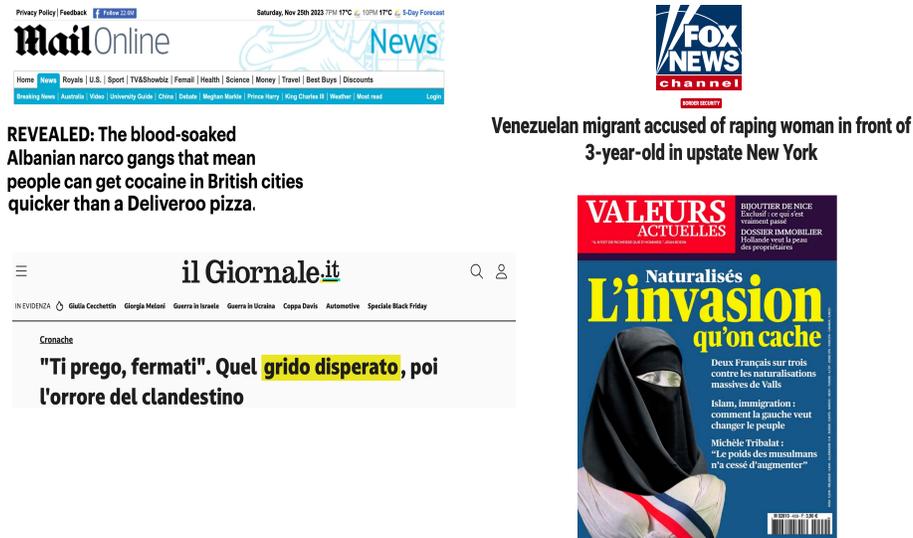
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Appendix

A Additional Figures and Tables

Figure A.1: Emotions in the news coverage of immigration



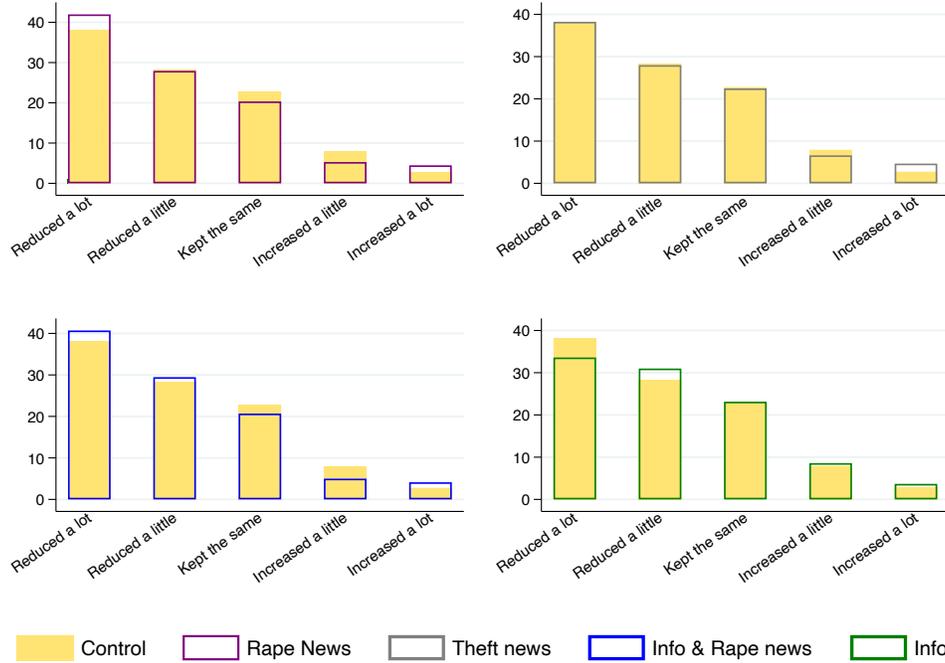
Notes. The figure presents headlines of immigration-related news in four outlets: The Daily Mail (UK), Fox News (US), Il Giornale (Italy), Valeurs Actuelles (France). The Italian and French headline respectively translates to “I beg you you, stop. A cry of despair and then the horror of the illegal immigrant” and to “Naturalized. The invasion that no one talks about.”

Table A.1: Balancing test across randomized groups

	Mean in Control	Mean Differences between				Significance under multiple hypotheses testing:
		Rape - Control	Info & rape - Control	Info- Control	Theft- Control	
Male	0.469	0.016	0.014	0.013	0.013	No
Age:18-24	0.105	0.012	0.026	0.015	0.007	No
Age:25-34	0.167	-0.003	0.005	0.007	0.008	No
Age:35-44	0.217	-0.003	-0.018	-0.011	-0.022	No
Age:45-54	0.260	0.003	-0.006	0.006	0.015	No
Age:55-64	0.251	-0.008	-0.008	-0.018	-0.008	No
Native-born	0.966	-0.005	-0.001	-0.000	-0.009	No
Native Parents	0.944	0.006	-0.006	0.001	-0.002	No
Single	0.337	-0.036	-0.002	-0.018	-0.016	No
Married	0.436	0.016	-0.006	-0.004	-0.004	No
Informal union	0.165	0.001	0.012	0.015	0.019	No
Highest educational attainment: high school	0.526	0.006	0.026	-0.001	-0.014	No
Highest educational attainment: bachelor	0.128	-0.005	-0.008	0.001	0.023	No
Master degree or more	0.255	-0.018	-0.040	-0.002	-0.033	No
Nb household member 18+	2.450	0.064	0.147	0.050	0.044	Yes (at 10%)
Nb household member 18-	0.584	0.019	-0.031	-0.004	-0.011	No
Center Italy	0.188	0.015	0.002	0.003	0.025	No
South Italy	0.341	-0.013	0.004	0.007	-0.036	No
Occupation:Employee	0.588	-0.007	-0.023	0.010	-0.016	No
Occupation:Self-employed	0.121	0.002	0.002	-0.005	0.006	No
Occupation:Student	0.079	0.006	0.015	0.004	0.004	No
Occupation:Retired	0.052	-0.005	-0.006	-0.009	-0.007	No
Income:1000€-1500€	0.197	-0.001	-0.010	-0.028	-0.012	No
Income:1500€-2000€	0.223	-0.030	-0.040	-0.010	-0.011	No
Income:2000€-3000€	0.213	0.006	0.008	0.016	0.003	No
Income:3000€-4000€	0.113	0.009	0.002	-0.006	0.001	No
Income; \geq 4000€	0.130	0.008	0.030	0.019	0.019	No
Political views: Left	0.166	0.009	-0.022	0.003	0.005	No
Political views: Center Left	0.221	-0.010	0.032	0.004	-0.009	No
Political views: Center	0.225	-0.008	0.012	0.008	-0.019	No
Political views:Center Right	0.236	0.002	-0.013	0.008	0.029	No

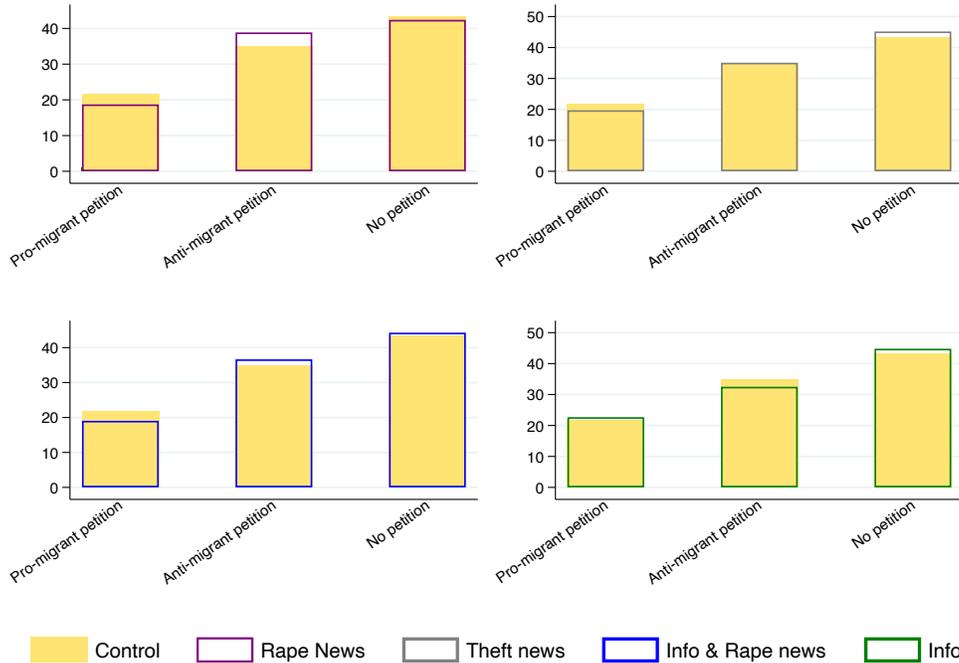
Notes. The first column present the mean value of covariates man the control group. The 2nd to the 5th column present the mean differences by treatment group, relative to the control group. Last column reports whether any of these mean differences is statistically significant when correcting for multiple hypotheses testing (Romano and Wolf, 2005) by using the wyoung STATA command (Jones et al., 2019).

Figure A.2: Distribution of policy preferences over immigration levels, by treatment



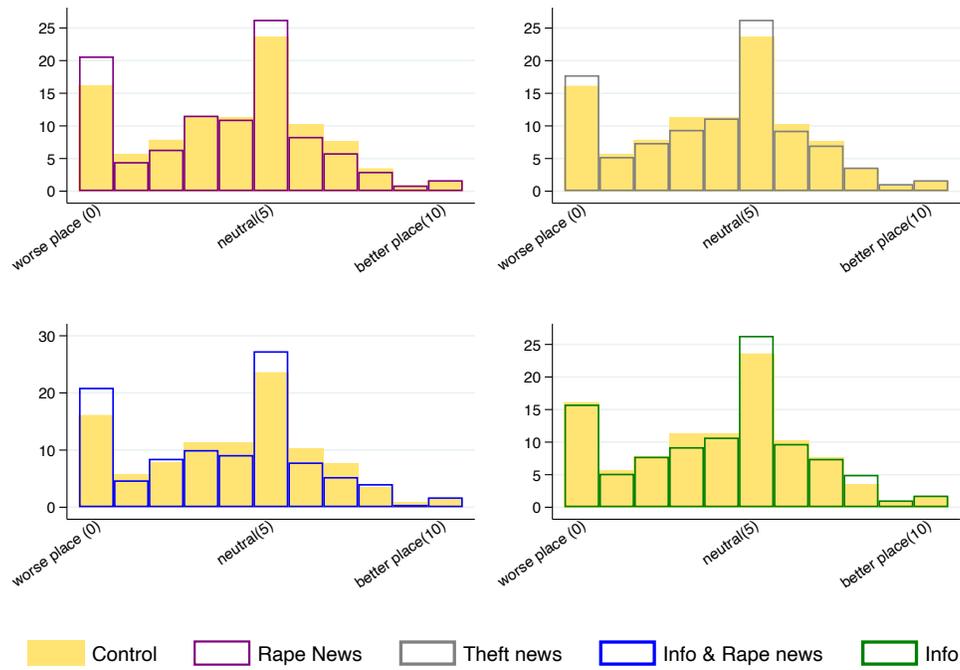
Notes. This figure shows answers to the question: “According to you, the number of immigrants arriving in Italy each year should be: reduced a lot/ reduced a little/ left at the current level/ increased a little/ increased a lot.”

Figure A.3: Distribution of willingness to sign a petition, by treatment



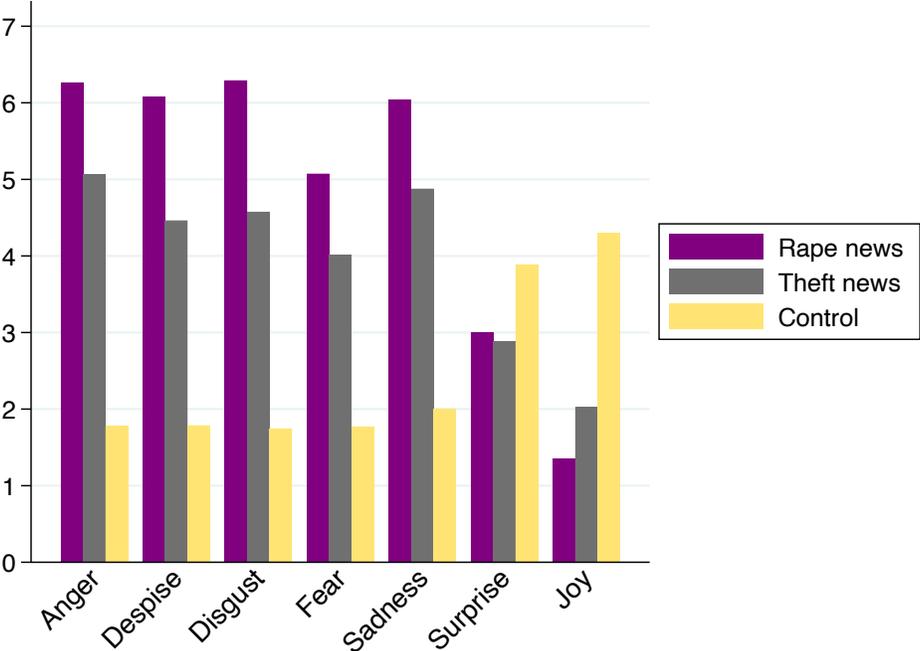
Notes. This figure shows participants’ willingness to sign a petition to the Italian Parliament: “I would sign a petition in favor of increasing the number of residence permits issued to foreign nationals/ I would sign a petition in favor of decreasing the number of residence permits issued to foreign nationals/ I would not sign any petition.”

Figure A.4: Distribution of participants' views on whether immigration makes Italy a better or worse place to live policy, by treatment



Notes. This figure shows answers to the question: “Has the arrival of people from other countries made Italy a worse or better place to live?”

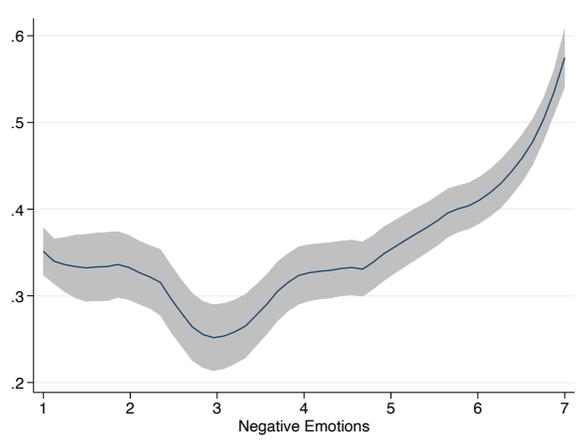
Figure A.5: Average emotions reported by respondents on a 1 to 7 points scale, by treatment



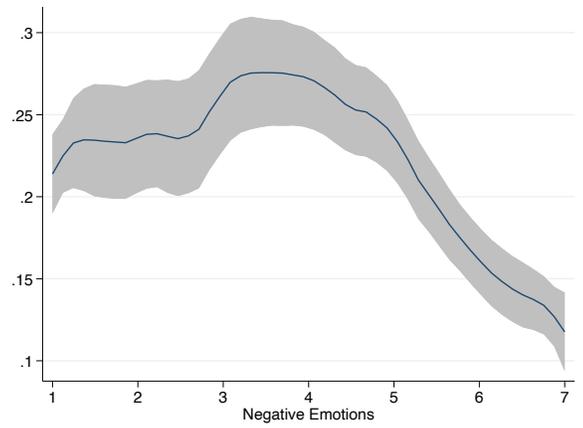
Notes. This figure shows the average feeling intensity of each emotions: anger, joy, sadness, despise, disgust and surprise

Figure A.6: Correlation between emotions and attitudes: Semi-parametric estimates

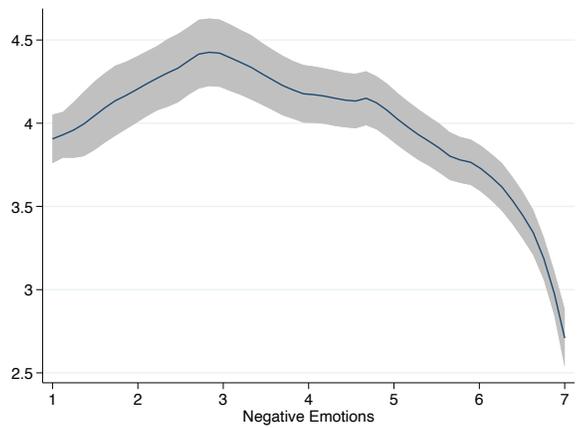
(a) Support for less immigrants



(b) Sign pro-immigration petition



(c) Immigration makes Italy a better place to live



Notes. Kernel-weighted local polynomial fit using the lpoly command provided by the statistical software Stata 17 (95th confidence interval are displayed)

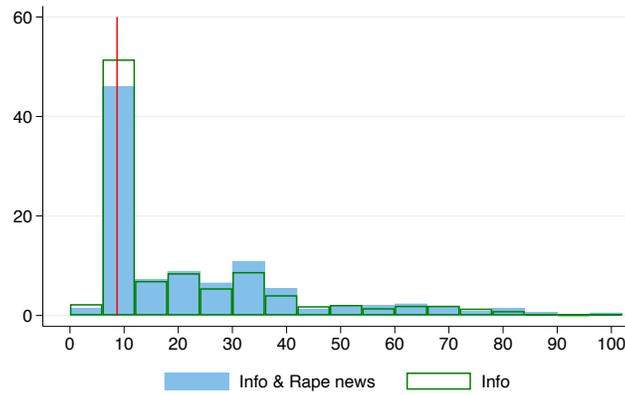
Table A.2: Effects of treatments on emotions

Dependent var.	(1) Negative emotional valence	(2) Negative emotions (7-points scale)
Info	0.100*** (0.013)	0.374*** (0.053)
Info & rape news	1.006*** (0.012)	4.125*** (0.046)
Rape news	1.011*** (0.012)	4.123*** (0.045)
R^2	0.655	0.662
Observations	6,888	6,888
Mean outcome in control group	-0.379	1.818
pvalue: Rape=Info & rape	0.646	0.966
pvalue: Info & rape=Info	0.000	0.000

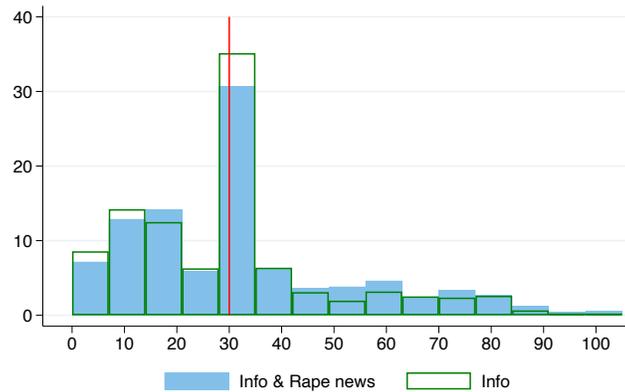
Notes. The Table shows the estimation results of equation 1, in which the regressors include four treatment variables: Rape news, Theft news, Info & rape news, and Info. The regression controls include socio-demographic characteristics, pre-treatment political orientation and attention checks to the news story (see Table 3's notes for details). Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Figure A.7: Beliefs in the Info versus Info & Rape news treatments

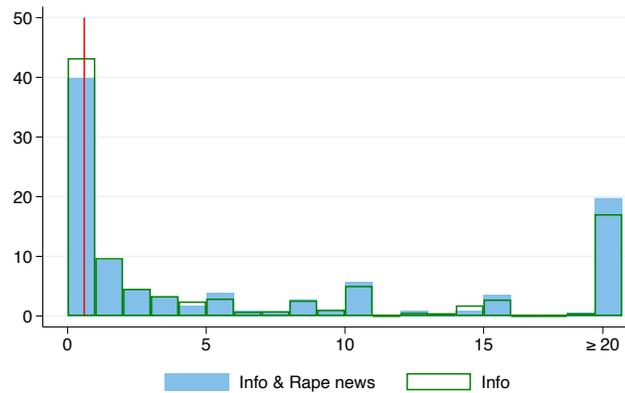
(a) Share of immigrants in the population



(b) Share of immigrants among offenders



(c) Share of rape among immigrant offenses



Notes. This figure shows the histogram of the distribution of individual beliefs. The red vertical line displays the true statistics (ISTAT).

Table A.3: Effects of treatments on correct factual beliefs

Dependent var.:	(1)	(2)	(3)
	Correct answer to the statistical question about:		
	Share of immigrants among offenders	Share of immigrants in population	Share of sexual violence among immigrant offenses
Info	0.219*** (0.017)	0.348*** (0.017)	0.271*** (0.017)
Info & rape news	0.179*** (0.017)	0.310*** (0.016)	0.253*** (0.017)
Rape news	0.005 (0.014)	-0.009 (0.013)	0.009 (0.014)
R^2	0.065	0.191	0.102
Observations	6,888	6,888	6,871
Mean outcome in control group	0.161	0.140	0.157
pvalue: Rape=Info & rape	0.000	0.000	0.000
pvalue: Info & rape=Info	0.033	0.045	0.352

Notes. The dependent variable is either: (i) a binary =1 if the respondent's answer to the question about the share immigrants among offenders is plus or minus 5 ppts around the true value (30.1%) (ii) a binary =1 if the answer to to the question about the population share of immigrants is plus or minus 2 ppts around the true value (8.7%) (iii) a binary =1 if the answer to to the question about the share of sexual violence among immigrant offenses is plus or minus 0.2 ppts around the true value (0.8%). The Table shows the estimation results of equation 1, in which the regressors include four treatment variables: Rape news, Theft news, Info & rape news, and Info. The regression controls include socio-demographic characteristics, pre-treatment political orientation and attention checks to the news story (see Table 3's notes for details). Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A.4: Tourism Fair news versus. Food Fair news among the control group

	Tourism fair news (1)	Food fair news (2)	(1)-(2)	Difference Multivariate Regression	
Support for less immigration	0.378 (0.019)	0.385 (0.019)	-0.007 (0.027)	0.001 (0.027)	0.008 (0.025)
Sign pro-immigration petition	0.228 (0.017)	0.204 (0.016)	0.024 (0.023)	0.012 (0.023)	0.010 (0.022)
Immigration makes Italy a better place to live (11pts scale)	3.881 (0.100)	3.840 (0.098)	0.041 (0.141)	0.014 (0.139)	-0.025 (0.129)
Share of immigrants among offenders: in %	36.276 (0.916)	36.813 (0.937)	-0.538 (1.311)	-0.086 (1.297)	0.298 (1.264)
Share of immigrants in the population: in%	31.080 (0.782)	31.542 (0.841)	-0.461 (1.148)	-0.299 (1.053)	0.172 (1.032)
Negative Emotional Valence	-0.354 (0.013)	-0.405 (0.012)	0.052 (0.018)	0.049 (0.018)	0.052 (0.018)
Negative emotions	1.921 (0.048)	1.713 (0.045)	0.208 (0.066)	0.204 (0.065)	0.234 (0.064)
Regression controls					
Socio-demographic controls				Yes	Yes
Political views (pre-treatment)					Yes
Attention Check					Yes

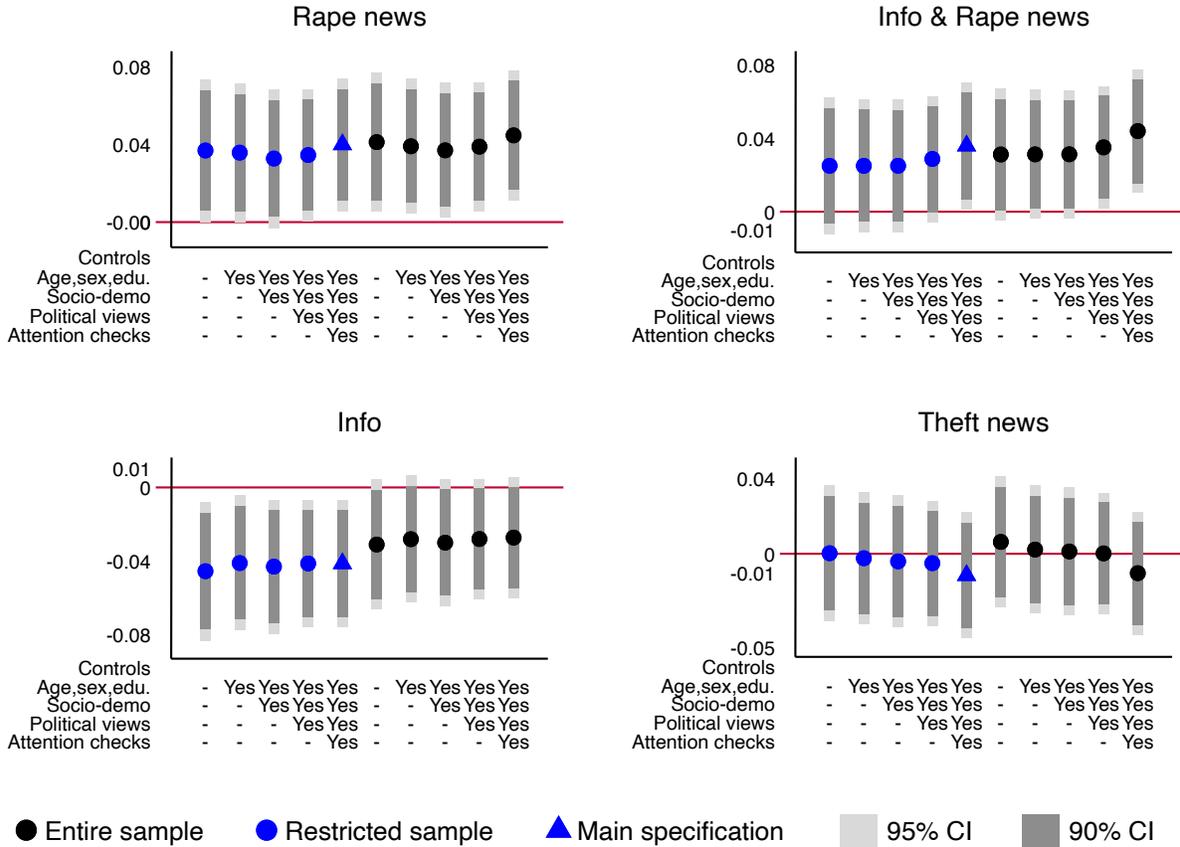
Notes. This table shows the average outcomes of participants in the control group either exposed to the Tourism Fair news or to the Food Fair news. The fourth column reports the standardized mean-difference (Z-score). The 4th and 5th columns report regression estimates of the mean difference after controlling for socio-demographic controls, for political views (pre-treatment) or for Attention Check. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$;

Table A.5: Probing experimenter demand effects

Dependent var. :	(1) Support for less immigration	(2) Sign pro-immigration petition	(3) Immigration makes Italy a better place to live (11pts scale)
Panel A: Differential effects			
Theft news	-0.014 (0.021)	-0.024 (0.018)	0.064 (0.107)
Rape news	0.051** (0.021)	-0.042** (0.018)	-0.301*** (0.109)
Info & rape news	0.027 (0.021)	-0.041** (0.019)	-0.245** (0.110)
Info	-0.043** (0.022)	0.002 (0.020)	0.081 (0.113)
Theft news * Experimenter's objective not in mind	0.003 (0.036)	0.026 (0.030)	-0.023 (0.192)
Rape news * Experimenter's objective not in mind	-0.042 (0.037)	0.020 (0.030)	0.291 (0.189)
Info & rape news * Experimenter's objective not in mind	0.025 (0.038)	0.025 (0.031)	-0.083 (0.196)
Info * Experimenter's objective not in mind	0.002 (0.038)	0.006 (0.032)	0.132 (0.199)
Experimenter's objective not in mind	-0.020 (0.026)	-0.035 (0.022)	0.035 (0.139)
R^2	0.165	0.119	0.156
Observations	6,888	6,888	6,875
pvalue: test of joint nullity of interacted coefficients	0.494	0.883	0.279
Panel B: Sample restricted to respondents not influenced by experimenter's objective			
Theft news	-0.012 (0.018)	-0.020 (0.015)	0.029 (0.092)
Rape news	0.053*** (0.018)	-0.039** (0.015)	-0.230** (0.094)
Info & rape news	0.041** (0.019)	-0.034** (0.016)	-0.253*** (0.095)
Info	-0.051*** (0.019)	-0.003 (0.016)	0.103 (0.097)
R^2	0.172	0.130	0.166
Observations	6,200	6,200	6,187

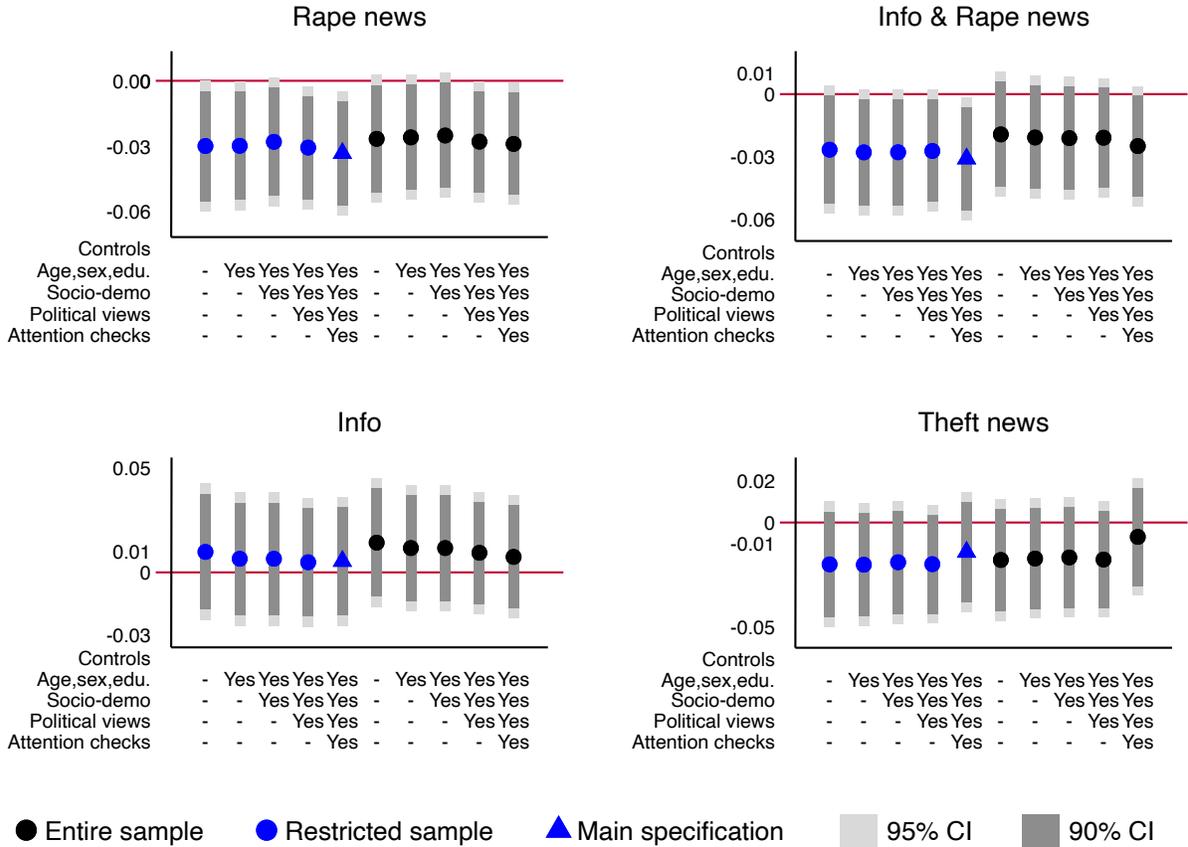
Notes. The regression controls include socio-demographic characteristics, pre-treatment political orientation and attention checks to the news story (see Table 3's notes for details). Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Figure A.8: Robustness checks: Treatment effects on support for less immigration



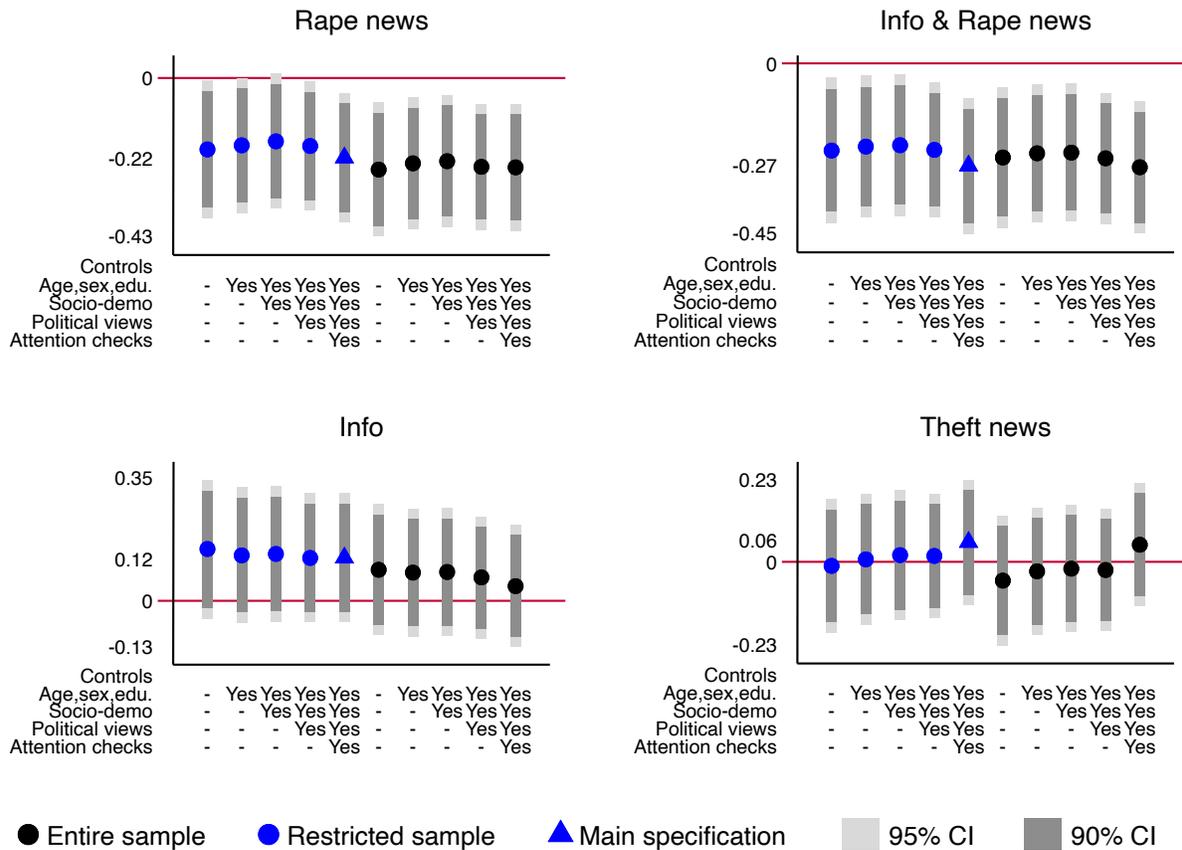
Notes. This Figure shows the estimates and confidence intervals of the treatment effects obtained from equation 1, in which the regressors include four treatment variables: Rape news, Theft news, Info & rape news, and Info. The estimates are obtained either using the entire sample (7,349 observations) or using the sample restricted to individuals who correctly identified the topic of the news article that they were asked to read (6,888 observations). We start with a regression without any controls and then progressively add to the right-hand side an increasing set of controls: (i) Age, sex and education (ii) Socio-demographic characteristics, namely, respondents' and parental birthplace, marital status, number of adult and under-18 household member, current occupation, family income, area of residence, moment of the day in which the respondent filled the survey (iii) Political orientation self-reported before the treatment (iv) Attention checks for whether the respondent has correctly identified the topic, the time of the day, and the region in which the news story takes place. We use robust standard errors. The baseline specification corresponds to the richest set of regression controls using the restricted sample.

Figure A.9: Robustness checks: Treatment effects on pro-immigration petition



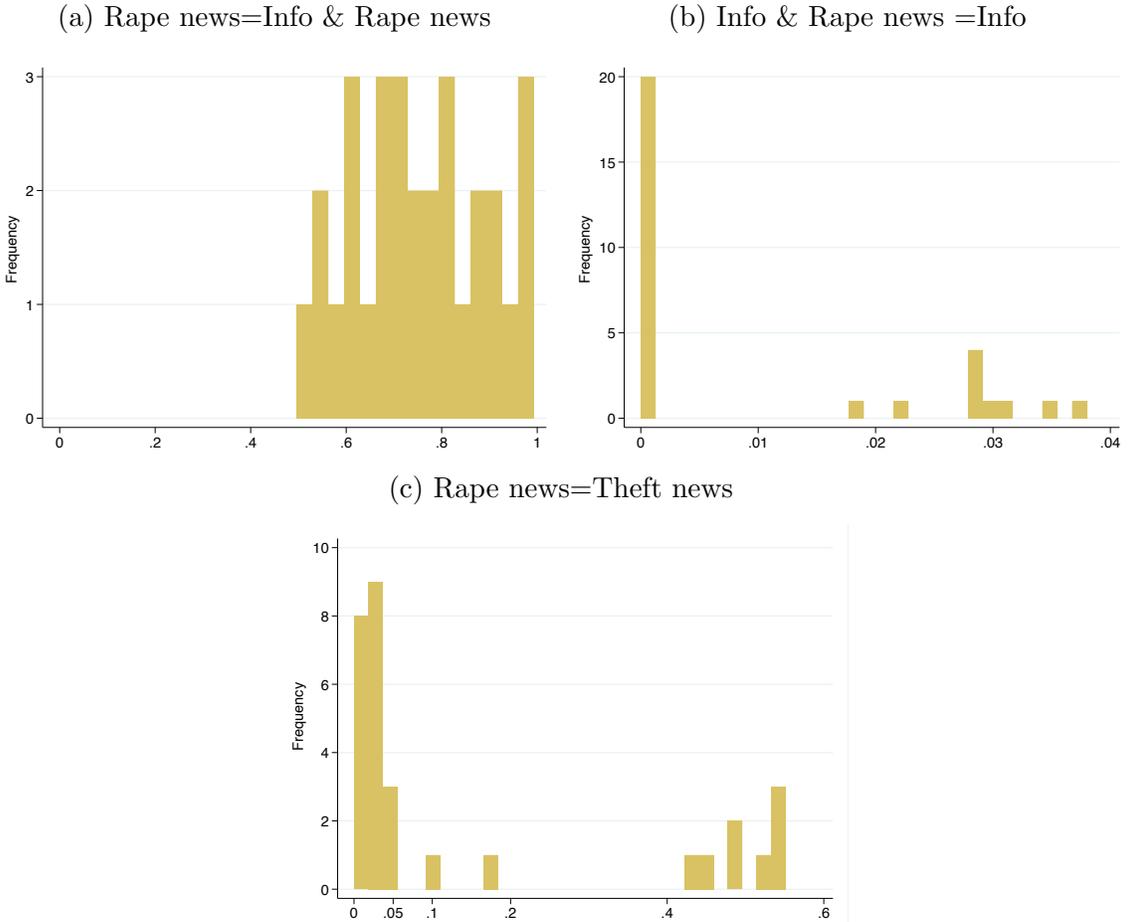
Notes. This Figure shows the estimates and confidence intervals of the treatment effects obtained from equation 1, in which the regressors include four treatment variables: Rape news, Theft news, Info & rape news, and Info. The estimates are obtained either using the entire sample (7,349 observations) or using the sample restricted to individuals who correctly identified the topic of the news article that they were asked to read (6,888 observations). We start with a regression without any controls and then progressively add to the right-hand side an increasing set of controls: (i) Age, sex and education (ii) Socio-demographic characteristics, namely, respondents' and parental birthplace, marital status, number of adult and under-18 household member, current occupation, family income, area of residence, moment of the day in which the respondent filled the survey (iii) Political orientation self-reported before the treatment (iv) Attention checks for whether the respondent has correctly identified the topic, the time of the day, and the region in which the news story takes place. We use robust standard errors. The baseline specification corresponds to the richest set of regression controls using the restricted sample.

Figure A.10: Robustness checks: Treatment effects on opinion about whether immigration makes Italy a better place to live



Notes. This Figure shows the estimates and confidence intervals of the treatment effects obtained from equation 1, in which the regressors include four treatment variables: Rape news, Theft news, Info & rape news, and Info. The estimates are obtained either using the entire sample (7,349 observations) or using the sample restricted to individuals who correctly identified the topic of the news article that they were asked to read (6,888 observations). We start with a regression without any controls and then progressively add to the right-hand side an increasing set of controls: (i) Age, sex and education (ii) Socio-demographic characteristics, namely, respondents' and parental birthplace, marital status, number of adult and under-18 household member, current occupation, family income, area of residence, moment of the day in which the respondent filled the survey (iii) Political orientation self-reported before the treatment (iv) Attention checks for whether the respondent has correctly identified the topic, the time of the day, and the region in which the news story takes place. We use robust standard errors. The baseline specification corresponds to the richest set of regression controls using the restricted sample.

Figure A.11: Distribution of p-values of test of equality of coefficients across 30 regressions



Notes. This figure shows the histogram of the distribution of p-values obtained from 30 different regressions using 3 different attitudinal outcomes, 5 specifications, and 2 samples (see Figure A.8, A.9 and A.10 for details). The p-values correspond to three different test of equality of coefficients: (i) Equal treatment effect of Rape news and Info & Rape news (ii) Equal treatment effect of Info & Rape news and Info (iii) Equal treatment effect Rape news and Theft news.

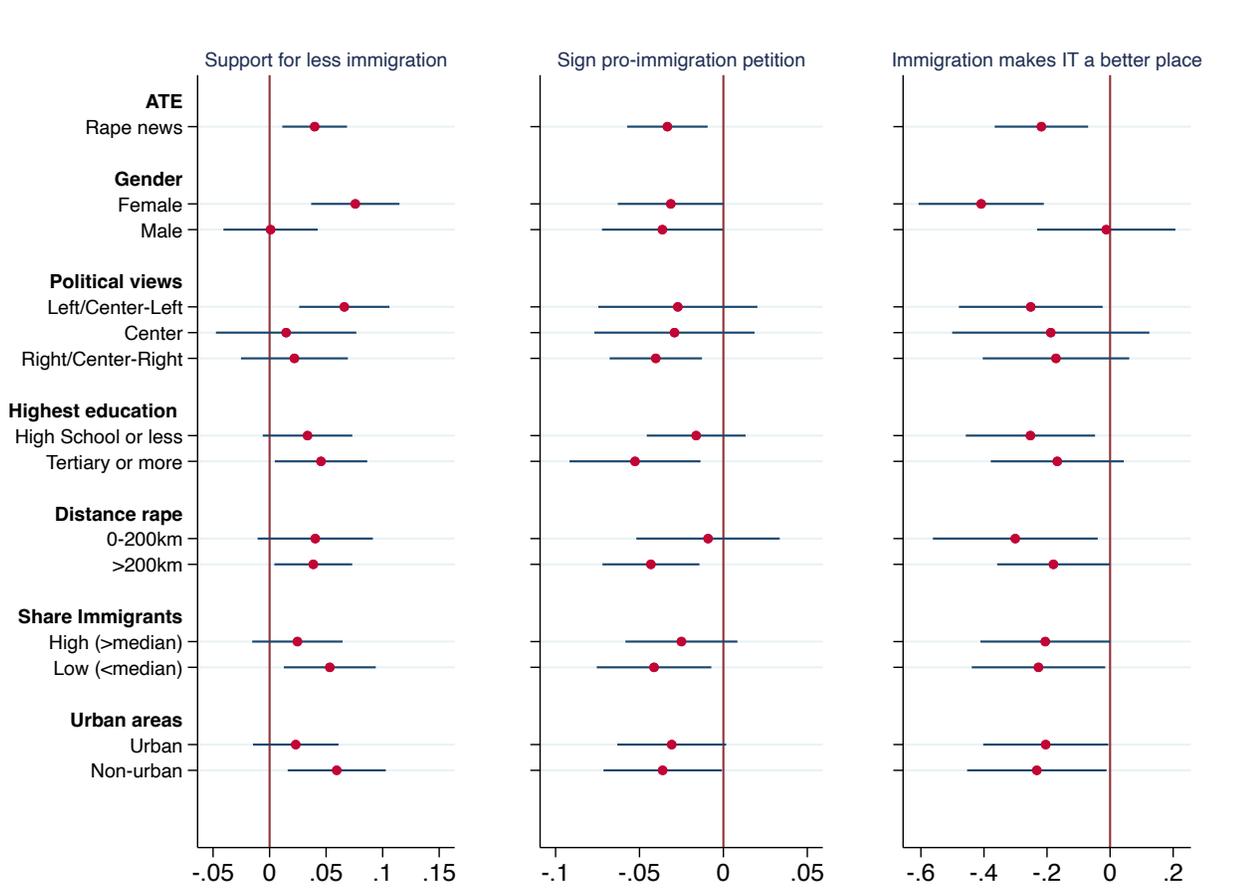
Table A.6: Robustness checks: Ordered Probit

Dependent var. :	(1) Policy preferences for more immigration	(2) Willingness to sign a pro-immigrant petition	(3) Immigration makes Italy a better place to live
Info	0.091** (0.042)	0.049 (0.046)	0.053 (0.041)
Info & rape news	-0.098** (0.043)	-0.076* (0.045)	-0.125*** (0.041)
Rape news	-0.094** (0.043)	-0.113** (0.044)	-0.109*** (0.040)
Theft news	0.054 (0.042)	-0.027 (0.044)	0.021 (0.039)
Observations	6,876	6,864	6,875
pvalue: Rape=Info & rape	0.820	0.863	0.543
pvalue: Info & rape=Info	0.000	0.018	0.000
cut1	-0.034 (0.137)	-0.306** (0.136)	-0.783*** (0.127)
cut2	0.805*** (0.138)	1.019*** (0.137)	-0.590*** (0.127)
cut3	1.665*** (0.140)		-0.338*** (0.127)
cut4	2.176*** (0.142)		-0.030 (0.127)
cut5			0.269** (0.127)
cut6			1.055*** (0.128)
cut7			1.438*** (0.129)
cut8			1.862*** (0.130)
cut9			2.310*** (0.132)
cut10			2.491*** (0.134)

Notes. The Table shows the ordered probit estimation results. The first dep. var measures views as to whether the number of migrants arriving in Italy should be reduced a lot (1) /reduced a bit (2) /left unchanged (3) /increased a bit (4) /increased a lot (5). The second dep. var takes 1 if the participant is willing to sign a petition to reduce the number of residence permits issued to foreigner, 2 if she is not willing to sign any petition, and 3 if she is willing to sign a petition to increase the number of residence permits. The third dep. var measure views as to whether the arrival of people from different countries has made Italy a better or worse place to live, with 11 possible answers, ranging from a worse place (0), neutral view (5), and a better place (10). The regression controls include socio-demographic characteristics, pre-treatment political orientation and attention checks to the news story (see Table 3's notes for details). Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

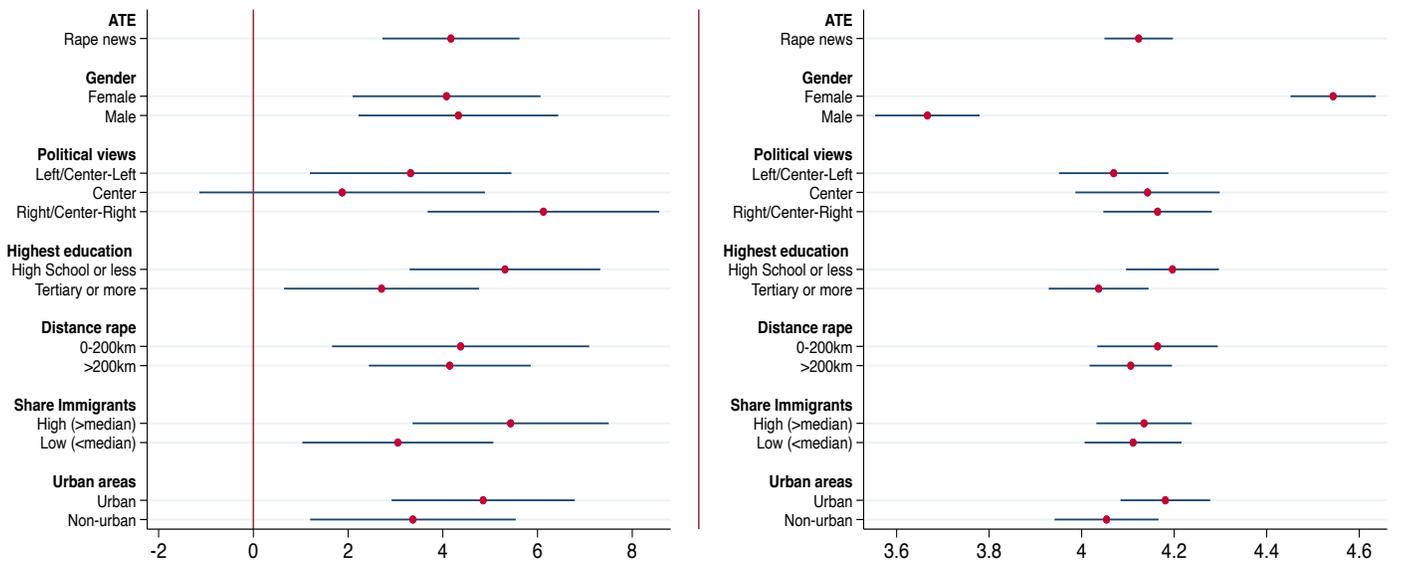
Figure A.12: Heterogeneous effects of Rape news

(a) Attitudes



(b) Beliefs: sh.immigrants among criminals

(c) Negative emotions



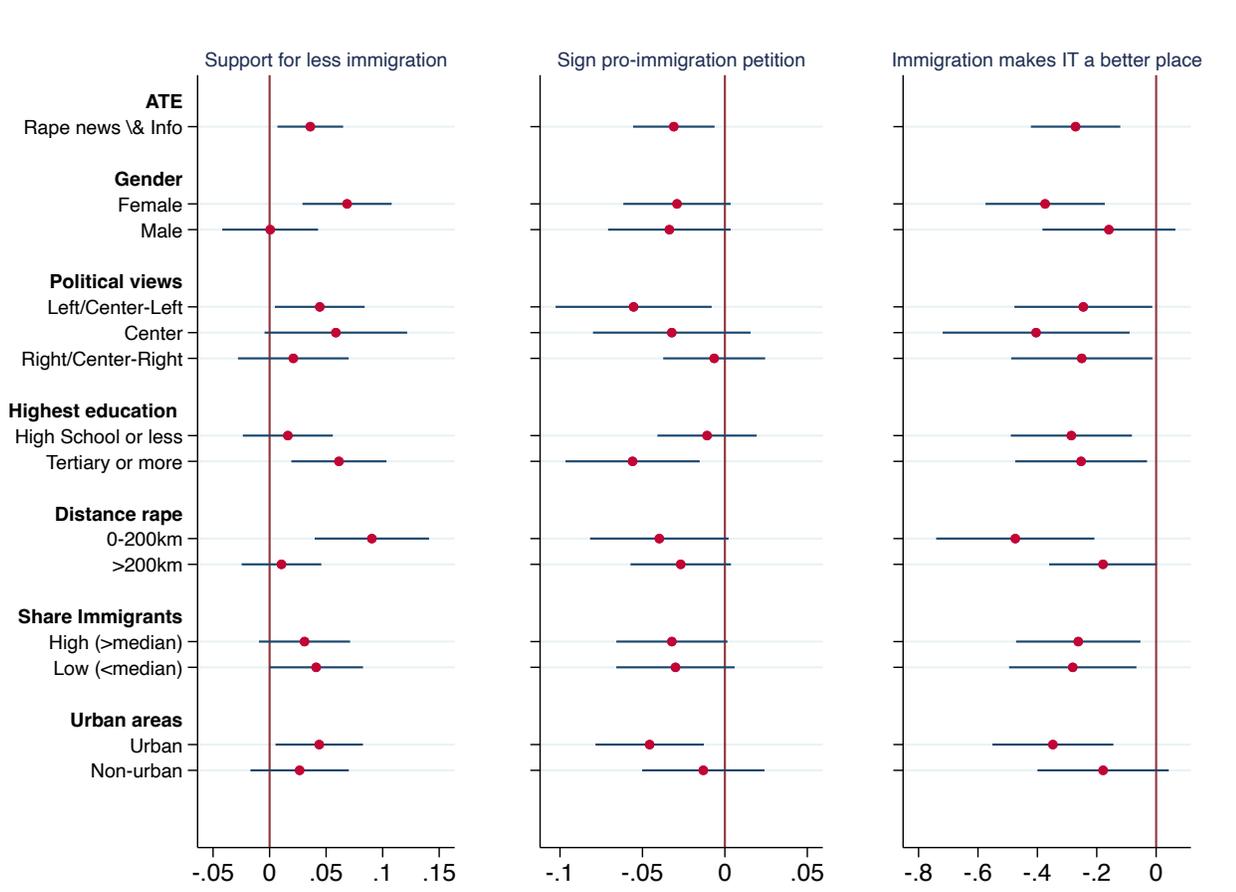
Notes. The figure displays the estimates and 90% confidence intervals of the treatment effect (rape news) interacted with different variables Z_i : sex, political orientation, highest education, distance to the rape news, share of immigrants in the respondent's municipality, and whether the municipality is urban or not. For each categorical variable $Z_i \in \{1, 2, \dots, K\}$, a separate regression is estimated, including the full interaction between Z_i and the four treatments:

$$Y_i = \alpha + \sum_{k=1}^K \sum_{j=1}^4 \gamma_{jk} T_i^j * \mathbb{1}\{Z_i = k\} + \sum_{k=1}^K \lambda_k \mathbb{1}\{Z_i = k\} + X_i' \beta + \varepsilon_i.$$

The figure displays the γ_{jk} coefficients of the interaction between Z_i and the treatment.

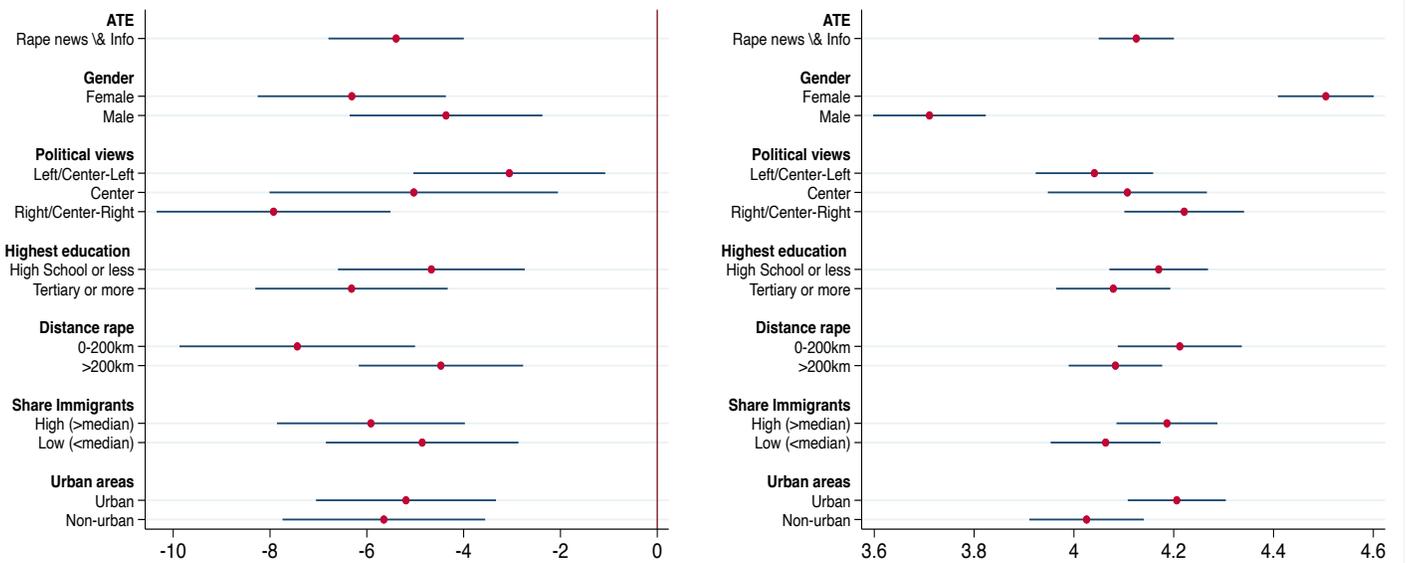
Figure A.13: Heterogeneous effects of Info & Rape news

(a) Attitudes



(b) Beliefs: sh.immigrants among criminals

(c) Negative emotions



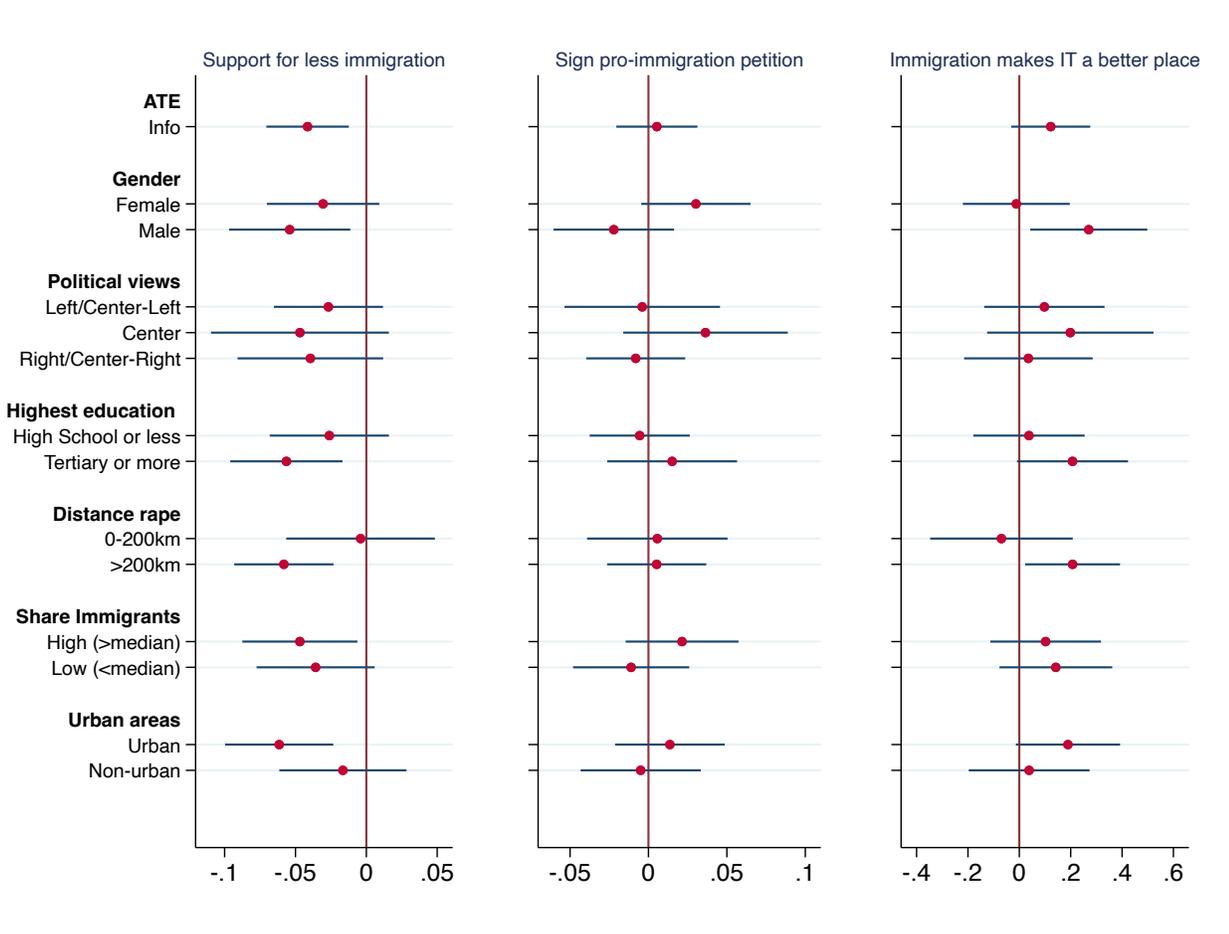
Notes. The figure displays the estimates and 90% confidence intervals of the treatment effect (Info & Rape news) interacted with different variables Z_i : sex, political orientation, highest education, distance to the rape news, share of immigrants in the respondent's municipality, and whether the municipality is urban or not. For each categorical variable $Z_i \in \{1, 2, \dots, K\}$, a separate regression is estimated, including the full interaction between Z_i and the four treatments:

$$Y_i = \alpha + \sum_{k=1}^K \sum_{j=1}^4 \gamma_{jk} T_i^j * \mathbb{1}\{Z_i = k\} + \sum_{k=1}^K \lambda_k \mathbb{1}\{Z_i = k\} + X_i' \beta + \varepsilon_i.$$

The figure displays the γ_{jk} coefficients of the interaction between Z_i and the treatment.

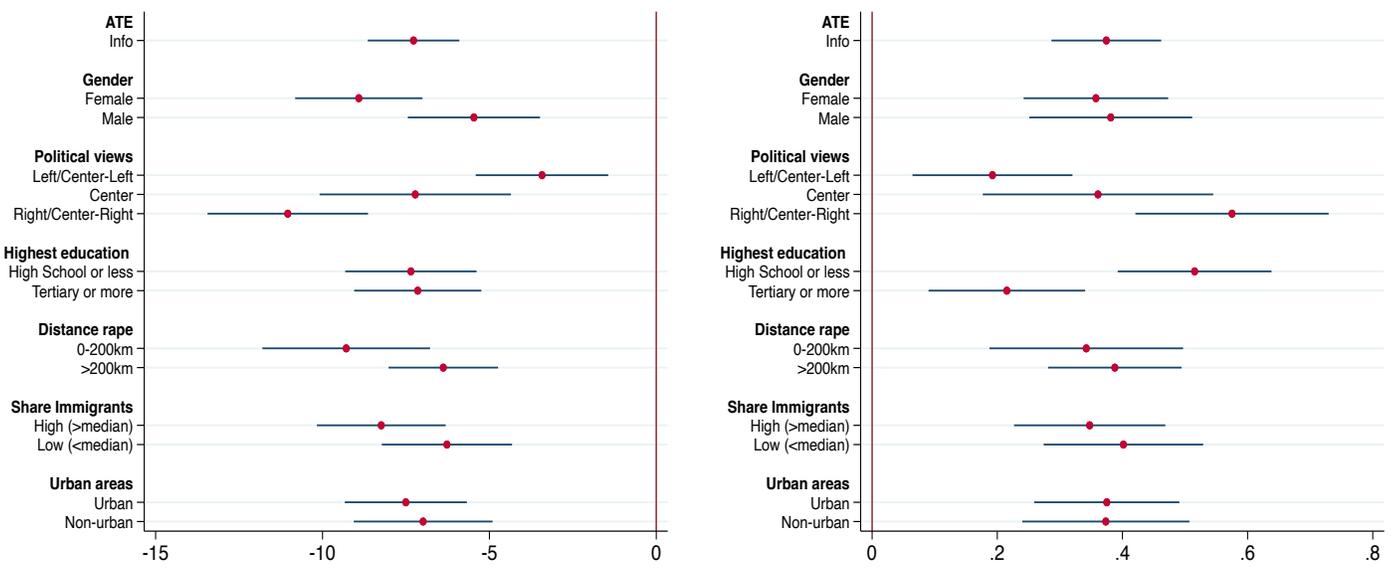
Figure A.14: Heterogeneous effects of Info

(a) Attitudes



(b) Beliefs: sh.immigrants among criminals

(c) Negative emotions



Notes. The figure displays the estimates and 90% confidence intervals of the treatment effect (Info) interacted with different variables Z_i : sex, political orientation, highest education, distance to the rape news, share of immigrants in the respondent's municipality, and whether the municipality is urban or not. For each categorical variable $Z_i \in \{1, 2, \dots, K\}$, a separate regression is estimated, including the full interaction between Z_i and the four treatments:

$$Y_i = \alpha + \sum_{k=1}^K \sum_{j=1}^4 \gamma_{jk} T_i^j * \mathbb{1}\{Z_i = k\} + \sum_{k=1}^K \lambda_k \mathbb{1}\{Z_i = k\} + X_i' \beta + \varepsilon_i.$$

The figure displays the γ_{jk} coefficients of the interaction between Z_i and the treatment.

B Survey

This appendix contains the English translation of the survey experiment, and its original version (in Italian). To help the reader we divided the questions in the same parts of Figure 2. Note that: (i) everything that appears in bold was not shown to participants; (ii) the third part (*Statistics*) is only shown to participants assigned to info treatments; (iii) in the fourth part (*News article*) we report four news articles, but each participant only saw the one associated with their treatment.

B.1 English translation

Welcome screen

Welcome!

This research project is conducted by a group of researchers from the University of Verona (Italy), the University of Bergamo (Italy), and the University of Alicante (Spain) and concerns some aspects of the migration phenomenon in Italy. We thank you very much for your contribution to our research. The questionnaire is entirely in Italian. Therefore, if you do not have a command of Italian, we kindly ask you to leave the page.

It is very important for our research that you respond honestly and read the questions carefully before answering. If you are unsure about the answer to a question, simply provide the answer that convinces you the most. However, please make sure to take enough time to read and understand the question. This survey takes approximately 10 minutes.

Initial sociodemographics

- Gender: *male/ female/ other*.
- Age. (**open-ended**)
- On political matters your attitude could be described as: *left/ center-left/ center/ center-right/ right*.

Informed consent

Sensitive content

In the following pages, we will ask you to read a text that may be of a sensitive nature to some participants. You are free to close the window at any time and exit the research permanently.

By selecting ‘Accept,’ you can choose to continue with the research. (*Accept/Don't accept*)

Statistics (only in info treatments)

Every year, the National Institute of Statistics (ISTAT) provides statistics on immigration and crime. We recommend you take note of this data as it may be useful in the continuation of the survey.

1. Among the people residing in Italy, what was the percentage of foreigners (individuals who do not have Italian citizenship) in 2020?

According to ISTAT, foreigners represented 8.7% of the population living in Italy.

2. Among all those reported to the judicial authorities for a crime committed in Italy in 2020, what is the percentage of foreigners?

According to ISTAT, foreigners accounted for 30.1% of those reported to the judicial authorities in 2020.

3. Among all foreigners residing in Italy, what is the percentage of those reported to the judicial authorities for a crime committed in Italy in 2020?

According to ISTAT, this percentage is 4.2% for foreigners and 0.9% for Italians.

4. Of the total crimes committed by foreigners in Italy in 2020, what is the percentage of sexual violence?

According to ISTAT, 0.8% of crimes were sexual violence. Among Italian citizens, this percentage was 0.5%.

5. Of the total crimes committed by foreigners in Italy in 2020, what is the percentage of thefts?

According to ISTAT, 14.6% of crimes were thefts. Among Italian citizens, this percentage was 8.5%.

News articles

On the next page, we will ask you to read a text based on a real article from an Italian newspaper that was published some time ago. We kindly request you to read the article carefully, paying attention to the details. Once you have finished reading, we will ask you to answer some questions regarding the article.

Rape News: *Sexual assault on a woman on her way to work at the hospital, a man arrested thanks to DNA evidence.*

The rape occurred on the morning of August 9th in a construction area near San Raffaele. The victim filed a complaint, leading to an investigation by the Police Scientific Division, which eventually reconstructed the identity of the assailant, thanks in part to surveillance cameras.

The assault on the young woman took place on the street near the Cascina Gobba area, not far from the hospital. The arrested individual is a 31-year-old man. The rape occurred at 6 in the morning in a construction area located between the subway station and the hospital, which some employees use as a shortcut to arrive earlier. The man approached the woman from behind and dragged her into an internal ditch within the construction site, where he sexually assaulted her. The woman sought help from her colleagues in a state of shock, and the following day she went to Mangiagalli, where the assault was confirmed. [...] The arrested individual is a 31-year-old Egyptian who arrived in Lampedusa on a boat a few weeks ago. He was living with others in an apartment in the Dergano area.

Theft News: *Theft in Piazzale della Pace, a foreigner reported (to the police)*

On Monday evening in Piazzale della Pace, during a karaoke show, a woman was at risk of being robbed. Taking advantage of the confusion, a Moroccan boy born in 1987 approached a fifty-nine-year-old woman who was watching the show and had placed her bag on the grass not far from her. The young man grabbed the bag and fled, under the eyes of the victim and some onlookers who tried to chase him. In the meantime, a report was made to the emergency number 113, which triggered the alarm. The foreigner, wearing dark jeans and a gray cap, had escaped into the alley that runs alongside the Chamber of Commerce to climb over the fence wall. He ventured into a poorly lit area where he was tracked down by patrol officers. The bag was returned to its rightful owner, while the young man was taken to the police headquarters.

Control 1: *Food, culture, and shopping: this is why Generation Z dreams of a vacation in Italy.*

In Milan, the Bit, the international tourism industry fair, has opened its doors in person after the digital edition in 2021.

Space travel, journeys in the metaverse, culinary adventures, blending vacation and work. The tourism of the present and the future converge at Bit, the International Tourism Exchange, which opened this morning in Milan and will run until Tuesday, April 12th. This edition marks the return of visitors, exhibitors, and buyers in person after the 2021 version, which was entirely digital due to Covid. “This is the year of recovery,” emphasized Tourism Minister Massimo Garavaglia during the inauguration. “This in-person fair shows that we can look to the future with confidence. The most important thing now is to send a message of reassurance; operators are ready to welcome tourists to our country.”

Control 2: *Organic food even during happy hours: Sana 2022, the International Organic Fair, teaches us how it's done.*

From September 8th to 11th in Bologna, the event dedicated to natural eating.

Six pavilions and three areas reserved for good food. There are also expert nutritionists to provide essential advice. Choosing organic for breakfast and during happy hours. In the first case, to make what is already considered an important meal for health even healthier, and in the second case, to positively enrich a habit often labeled as unhealthy. The proposal comes from the International Organic and Natural Exhibition, Sana 2022, organized by BolognaFiere in collaboration with AssoBio, FederBio, and Cosmetica Italia, scheduled at the Bologna exhibition center from September 8th to 11th, 2022.

Emotions

In the table below, you will see a list of emotions. We ask you to rate the intensity with which you experienced each emotion while reading the article. Please make your assessment on a scale from 1 to 7, where 1 indicates very low intensity and 7 indicates very high intensity.

	1	2	3	4	5	6	7
Anger	<input type="radio"/>						
Contempt	<input type="radio"/>						
Disgust	<input type="radio"/>						
Joy	<input type="radio"/>						
Fear	<input type="radio"/>						
Sadness	<input type="radio"/>						
Surprise	<input type="radio"/>						

Attention Checks

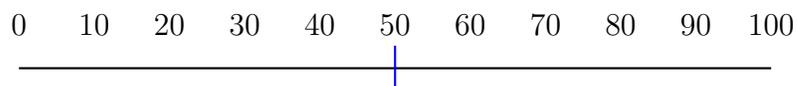
Below we ask you some questions about the article

- What was the article about? *Tourism/Rape/Theft/Food/None of the above.*
- At what time of day did the event described in the article occur? *Dawn (5am-8am)/Morning (8am-noon)/Afternoon (noon-6pm)/Evening (6pm-10pm)/Night (10pm-5am)/Not mentioned in the text of the article.*
- In what part of Italy did the event described in the article occur? *North (Emilia-Romagna, Friuli Venezia Giulia, Liguria, Lombardia, Piemonte, Trentino Alto Adige, Valle d'Aosta, Veneto)/Center (Lazio, Marche, Toscana, Umbria)/South and Islands (Abruzzo, Basilicata, Calabria, Campania, Molise, Puglia, Sardegna, Sicilia)*

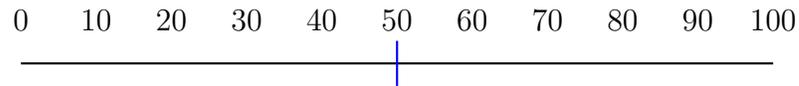
Beliefs

Below we ask you some questions about the migration phenomenon in Italy. In the following questions by foreigners we mean people who do not have Italian citizenship. By Italians, we mean people with Italian citizenship. The questions refer to 2020.

- In your opinion, among the people living in Italy, what is the percentage of foreigners? Move the slider to indicate this percentage.



- In your opinion, among all those reported to the judicial authorities for a crime committed in Italy in 2020, what is the percentage of foreigners? Move the slider to indicate this percentage.



- In your opinion, among all foreigners residing in Italy, what is the percentage reported to the judicial authorities for a crime committed in Italy in 2020?

To have a point of reference consider that this percentage for Italians residing in Italy in 2020 was 0.9%. **(open-ended)**

- In your opinion, what is the percentage of sexual violence crimes out of the total crimes committed by foreigners in Italy in 2020. The corresponding figure for Italians is 0.5%. **(open-ended)**
- In your opinion, what is the percentage of thefts out of the total crimes committed by foreigners in Italy in 2020. The corresponding figure for Italians is 8.5%. **(open-ended)**

Attitudes and final demographics

- Are you born in Italy? *Yes/No.*
- What part of Italy do you live in? *North (Emilia-Romagna, Friuli Venezia Giulia, Liguria, Lombardia, Piemonte, Trentino Alto Adige, Valle d'Aosta, Veneto)/Center (Lazio, Marche, Toscana, Umbria)/South and Islands (Abruzzo, Basilicata, Calabria, Campania, Molise, Puglia, Sardegna, Sicilia)*
- How much was, on a monthly basis, the average income of your household, after taxes, in the past year? *less than 500€/ 500-1000€/ 1000-1500€/ 1500-2000€/ 2000-3000€/ 3000-4000€/ 4000-5000€/ 5000-6000€/ 6000-8000€/ 8000-10000€/ 10000-12000€/ more than 12000€.*
- How many people over the age of 18 are in your household? (Include only members over the age of 18).

- How many persons under the age of 18 are in your household? (Include only members under the age of 18)
- Marital status: *Single/ Married/ Legally separated or divorced/ Widow/ In a civil partnership.*
- How many children do you have? *None/ 1/ 2/ 3/ 4/ 5 or more.*
- Were both your parents born in Italy? *Yes/No*
- What is your region of residence? *Abruzzo/.../ Veneto.*
- What is the most appropriate category to describe your level of education? *Junior high school (or lower level)/ High school attended but did not graduate/ High school diploma/Undergraduate attended but did not graduate/ Bachelor's degree/ Master's degree/ PhD or further education.*
- What is your employment status? *Full-time employee/ Part-time employee/ Self-employed/ Unemployed and looking for a job/ Student/ I currently do not have a job and am not looking for one/ Retired.*
- According to you, the number of immigrants arriving in Italy each year should be: *reduced a lot/ reduced a little/ left at the current level/ increased a little/ increased a lot.*
- Has the arrival of people from other countries made Italy a worse or better place to live?

A worse place - 1 2 3 4 5 6 7 8 9 10 - A better place

 ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

- In general, are you a person willing to take risks or do you try to avoid them? Answer on a scale of 0 to 10 where 0 indicates “Not at all willing to take risks” and 10 “Very willing to take risks.”
- Below we ask if you would like to sign a petition to the Italian Parliament to change the legislation regarding residence permits issued to foreign nationals. *I would sign a petition in favor of increasing the number of residence permits issued to foreign*

nationals/ I would sign a petition in favor of decreasing the number of residence permits issued to foreign nationals/ I would not sign any petition.

- When you read the word ‘foreigner’ in the previous questions what nationality did you think of? (**open-ended**)
- As you answered the questions, did you think about what the research goals were? *Yes/No.*
- (**if previous answer Yes only**) Did these goals in any way influence your responses? *Yes/No.*
- What do you think were the goals? (You may answer “I don’t know” in case you don’t have a clear idea of the goals). (**open-ended**)
- Did you vote in the last general election (September 2022)? *Yes/No.*
- (**if previous answer Yes only**) In the last general election (September 2022) you voted for: *Partito Democratico/ Impegno Civico - Centro Democratico / +Europa/ Alleanza Verdi e Sinistra/ Other center-left party/ Forza Italia/ Fratelli d’Italia/ Lega/ Noi moderati/ Other center-right party/ Azione/ Movimento 5 Stelle/ Prefer not to answer.*

B.2 Italian (original) version

Welcome screen

Benvenuto*!

Questo progetto di ricerca è condotto da un gruppo di ricercatori dell’Università di Verona (Italia), l’Università di Bergamo (Italia), e l’Università di Alicante (Spagna) e riguarda alcuni aspetti del fenomeno migratorio in Italia. La ringraziamo molto per il contributo alla nostra ricerca. Il questionario è interamente in italiano. Quindi se non padroneggia l’italiano la preghiamo di abbandonare la pagina.

È molto importante per la nostra ricerca che lei risponda onestamente e legga le domande con molta attenzione prima di rispondere. Se non fosse sicuro della risposta a una domanda, dia

semplicemente la risposta che la convince di più. Si accerti tuttavia di impiegare un tempo sufficiente per leggere e capire la domanda. Questo sondaggio richiede circa 10 minuti.

Initial sociodemographics

- Sesso: maschio/ femmina/ altro.
- Età. (**open-ended**)
- Su temi di politica, il suo orientamento potrebbe essere descritto: di sinistra/ di centro-sinistra/ di centro/ di centro destra/ di destra.

Informed consent

Contenuti sensibili

Nelle prossime pagine le chiederemo di leggere un testo che potrebbe essere di natura sensibile per alcuni partecipanti. E' libero di chiudere la finestra in qualsiasi momento e uscire dalla ricerca permanentemente.

Selezionando 'Accetto' può decidere di proseguire con la ricerca. *Accetto/ Non accetto.*

Statistics (only in info treatments)

Ogni anno Istituto nazionale di statistica (ISTAT) fornisce statistiche sull'immigrazione e sulla criminalità. Le consigliamo di prendere nota di questi dati perchè potranno essere utili nel proseguo dell'indagine.

1. Tra le persone residenti in Italia, qual è la percentuale di stranieri (persone che non hanno cittadinanza italiana) nel 2020?

Secondo ISTAT, gli stranieri rappresentano l'8,7% della popolazione che vive in Italia.

2. Tra tutti coloro denunciati all'autorità giudiziaria per un crimine commesso in Italia nel 2020, qual è la percentuale di stranieri?

Secondo ISTAT, gli stranieri rappresentano 30,1% dei denunciati all'autorità giudiziaria nel 2020.

3. Tra tutti gli stranieri residenti in Italia, qual è la percentuale di denunciati all'autorità giudiziaria per un crimine commesso in Italia nel 2020?

Secondo ISTAT, questa percentuale è 4,2% per gli stranieri e 0,9% per gli italiani.

4. Sul totale dei crimini commessi da stranieri in Italia nel 2020, qual è la percentuale di violenze sessuali?

Secondo ISTAT, 0,8% dei crimini sono violenze sessuali. Tra i cittadini italiani, questa percentuale era di 0,5%.

5. Sul totale dei crimini commessi da stranieri in Italia nel 2020, qual è la percentuale di furti?

Secondo ISTAT, 14,6% dei crimini sono furti. Tra i cittadini italiani, questa percentuale era di 8,5%.

News articles

Nella prossima pagina le chiederemo di leggere un testo basato su un reale articolo di un quotidiano italiano uscito qualche tempo fa. Le chiediamo di leggere attentamente l'articolo prestando attenzione ai dettagli. Quando avrà finito di leggere le chiederemo di rispondere ad alcune domande riguardo all'articolo.

Rape News: *Violenza sessuale su una donna che andava al lavoro in ospedale, fermato un uomo grazie all'incrocio del Dna.*

Lo stupro la mattina del 9 agosto in un'area di cantiere vicino al San Raffaele. La vittima ha presentato denuncia, da lì le indagini della Scientifica della Questura e che hanno portato a ricostruire l'identità del violentatore anche grazie alle telecamere.

La violenza ai danni della giovane donna è avvenuta in strada nei pressi della zona di Cascina Gobba, non lontano dall'ospedale. Il fermato è un uomo di 31 anni. Lo stupro è avvenuto alle 6 del mattino in un'area di cantiere che si trova tra la fermata della metropolitana e l'ospedale: alcuni dipendenti la usano come scorciatoia per arrivare prima. L'uomo ha preso alle spalle la donna e l'ha trascinato in un canaletto interno al cantiere. Lì l'ha violentata. La donna si è rivolta alle colleghe in stato di choc e il giorno dopo è andata alla Mangiagalli, dove è stata riscontrata la violenza. [...] Si tratta di un egiziano di 31 anni, arrivato a

Lampedusa con un barcone qualche settimana fa. Viveva con altri in un appartamento in zona Dergano.

Theft News: Furto in piazzale della Pace denunciato uno straniero

Lunedì sera in Piazzale della Pace, durante uno spettacolo di karaoke, una donna ha rischiato di essere derubata. Approfittando della confusione, un ragazzo marocchino dell'87 si è avvicinato a una cinquantanovenne che assisteva allo spettacolo e aveva appoggiato la borsa sull'erba, poco distante da lei. Il giovane ha afferrato la borsa e si è dato alla fuga, sotto gli occhi della derubata e di alcuni presenti, che hanno cercato di inseguirlo. Nel frattempo, è giunta la segnalazione al 113 che ha fatto scattare l'allarme. Lo straniero, che indossava jeans scuri e un berretto grigio, era scappato nello stradello che costeggia la Camera di commercio per scavalcare il muro di recinzione. Si è addentrato così in un'area poco illuminata dove è stato rintracciato dagli agenti delle volanti. La borsa è stata riconsegnata alla legittima proprietaria, mentre il ragazzo è stato portato in Questura.

Control 1: Cibo, cultura e shopping: ecco perché la Generazione Z sogna una vacanza in Italia

A Milano si è aperta, in presenza dopo l'edizione digitale nel 2021, la Bit, la fiera internazionale del settore turistico.

Viaggi nello spazio, nel metaverso, enogastronomici, a metà tra vacanza e lavoro. Il turismo del presente e quello del futuro si incontrano alla Bit, la Borsa internazionale del turismo, che si è aperta questa mattina a Milano e si chiuderà martedì 12 aprile. Un'edizione che segna il ritorno in presenza di visitatori, espositori e compratori dopo una versione, quella del 2021, solo digitale a causa del Covid. "Questo è l'anno della ripartenza - sottolinea durante l'inaugurazione il ministro del Turismo Massimo Garavaglia -, questa fiera in presenza dimostra che si può guardare al futuro con serenità. La cosa più importante ora è mandare un messaggio di serenità, gli operatori sono pronti ad accogliere i turisti nel nostro Paese."

Control 2: Cibo biologico anche all'aperitivo: Sana 2022, la Fiera internazionale del bio, ci insegna come si fa

Dall'8 all'11 settembre a Bologna, il Salone dedicato al mangiare naturale.

Sei padiglioni e tre aree riservate alla buona tavola. Ci sono anche gli esperti nutrizionisti

per avere i consigli fondamentali. Scegliere il bio a colazione e nel momento dell'aperitivo. Nel primo caso per rendere ancora più sano quello che è già considerato un pasto importante per la salute, nel secondo per arricchire positivamente un'abitudine spesso bollata come insalubre. La proposta arriva dal Salone internazionale del biologico e del naturale, Sana 2022, organizzato da BolognaFiere in collaborazione con AssoBio, FederBio e Cosmetica Italia e in programma al quartiere fieristico di Bologna dall'8 all'11 settembre 2022.

Emotions

Nella tabella qui sotto vede una lista di emozioni. Le chiediamo per ogni emozione di valutare l'intensità con la quale l'ha provato mentre leggeva l'articolo. Faccia la sua valutazione su una scala da 1 a 7 dove 1 significa intensità molto bassa e 7 significa intensità molto alta.

	1	2	3	4	5	6	7
Rabbia	<input type="radio"/>						
Disprezzo	<input type="radio"/>						
Disgusto	<input type="radio"/>						
Felicità	<input type="radio"/>						
Paura	<input type="radio"/>						
Tristezza	<input type="radio"/>						
Sorpresa	<input type="radio"/>						

Attention Checks

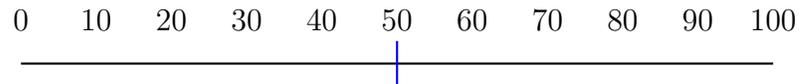
Di seguito le chiediamo alcune domande sull'articolo

- Di cosa parlava l'articolo? *Tourismo/ Stupro/ Furto/ Cibo/ Nessuna delle precedenti.*
- In quale momento della giornata è avvenuto il fatto descritto nell'articolo? *Alba (5am-8am)/ Mattino (8am-noon)/ Pomeriggio (noon-6pm)/ Sera (6pm-10pm)/ Notte (10pm-5am)/ Non è menzionato nel testo dell'articolo.*
- In quale parte d'Italia è avvenuto il fatto descritto nell'articolo *Nord (Emilia-Romagna, Friuli Venezia Giulia, Liguria, Lombardia, Piemonte, Trentino Alto Adige, Valle d'Aosta, Veneto)/ Centro (Lazio, Marche, Toscana, Umbria)/ Sud e Isole (Abruzzo, Basilicata, Calabria, Campania, Molise, Puglia, Sardegna, Sicilia)*

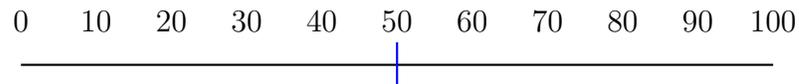
Beliefs

Di seguito le chiediamo alcune domande sul fenomeno migratorio in Italia. Nelle domande che seguono per stranieri intendiamo le persone che non hanno cittadinanza italiana. Per italiani, intendiamo le persone con cittadinanza italiana. Le domande si riferiscono al 2020.

- Secondo lei, tra le persone residenti in Italia, qual'è la percentuale di stranieri? Muova lo slider per indicare questa percentuale.



- Secondo lei, tra tutti coloro denunciati all'autorità giudiziaria per un crimine commesso in Italia nel 2020, qual è la percentuale di stranieri? Muova lo slider per indicare questa percentuale.



- Secondo lei, tra tutti gli stranieri residenti in Italia, qual è la percentuale di denunciati all'autorità giudiziaria per un crimine commesso in Italia nel 2020?

Per avere un punto di riferimento consideri che questa percentuale per gli italiani residenti in Italia nel 2020 era lo 0,9%. **(open-ended)**

- Secondo lei, qual è la percentuale di violenze sessuali sul totale dei crimini commessi da stranieri in Italia nel 2020? Il corrispondente dato per gli italiani è 0,5%. **(open-ended)**
- Secondo lei, qual è la percentuale di furti sul totale dei crimini commessi da stranieri in Italia nel 2020? Il corrispondente dato per gli italiani è 8,5%. **(open-ended)**

Attitudes and final demographics

- È nato/a in Italia? *Sì/No*.

- In che zona d'Italia vive? *Nord (Emilia-Romagna, Friuli Venezia Giulia, Liguria, Lombardia, Piemonte, Trentino Alto Adige, Valle d'Aosta, Veneto)/ Centro (Lazio, Marche, Toscana, Umbria)/Sud e Isole (Abruzzo, Basilicata, Calabria, Campania, Molise, Puglia, Sardegna, Sicilia)*
- Quanto era, su base mensile, il reddito medio del suo nucleo familiare, al netto delle tasse, nello scorso anno? *meno di 500€/ 500-1000€/ 1000-1500€/ 1500-2000€/ 2000-3000€/ 3000-4000€/ 4000-5000€/ 5000-6000€/ 6000-8000€/ 8000-10000€/ 10000-12000€/ più di 12000€.*
- Da quante persone maggiorenni è composto il suo nucleo familiare? (Includa solo i componenti di età maggiore di 18).
- Da quante persone minorenni è composto il suo nucleo familiare? (Includa solo i componenti di età minore di 18).
- Stato civile *Single/ Sposato/a / Legalmente separato/a o divorziato/a / Vedovo/a / Convivenza di fatto.*
- Quanti figli ha? *Non ho figli/ 1/ 2/ 3/ 4/ 5 o più.*
- I suoi genitori sono entrambi nati in Italia? *Sì/No*
- Qual è la sua regione di residenza? *Abruzzo/.../Veneto.*
- Qual è la categoria più adatta a descrivere il suo livello di istruzione? *Licenza media inferiore (o livello inferiore)/ Scuola superiore frequentata ma senza conseguire il diploma/ Diploma di scuola superiore/ Corso di laurea frequentato ma senza conseguire la laurea / Laurea triennale/ Laurea magistrale/ Dottorato o master post-laurea.*
- Qual è il suo stato occupazionale? *Lavoratore dipendente a tempo pieno/ Lavoratore dipendente part-time/ Lavoratore autonomo o libero professionista/ Disoccupato/a e alla ricerca di un lavoro/ Studente/ Attualmente non ho un lavoro e non ne sto cercando uno/ Pensionato/a*
- Secondo lei, il numero di immigrati che arriva in Italia ogni anno dovrebbe essere: *ridotto molto/ ridotto un po'/ lasciato al livello attuale/ aumentato un po' /aumentato molto*

