Civility and Trust in Social Media

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Abstract

Social media have been credited with the potential of reinvigorating trust by offering new opportunities for social and political participation. This view has been recently challenged by the rising phenomenon of online incivility, which has made the environment of social networking sites hostile to many users. We conduct a novel experiment in a Facebook setting to study how the effect of social media on trust varies depending on the civility or incivility of online interaction. We find that participants exposed to civil Facebook interaction are significantly more trusting. In contrast, when the use of Facebook is accompanied by the experience of online incivility, no significant changes occur in users’ behavior. These results are robust to alternative configurations of the treatments.

Keywords: social media, Facebook, online incivility, trust, social networks, cooperation, trust game.

JEL Classification: C91, D9, D91, Z1.

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1 Introduction

There is wide consensus that trust and trustworthiness are fundamental assets for economic development. In the words of Arrow (1972): “Virtually every commercial transaction has within itself an element of trust, certainly any transaction conducted over a period of time. It can be plausibly argued that much of the economic backwardness in the world can be explained by the lack of mutual confidence” (p. 357). Yet, we still have limited knowledge of where trust comes from. The social capital literature posits that trust crucially depends, whether positively or negatively, on social interactions (e.g. Banfield, 1958; Fukuyama, 1995; Putnam et al., 1993; Knack and Keefer, 1997). As documented by the Pew Research Center (PRC), social interactions now increasingly take place online, especially in the context of social networking sites (SNS) (Antoci et al., 2011; Anderson and Perrin, 2017; Greenwood et al., 2016).

Facebook studies in the fields of psychology and sociology credited the use of SNS with the potential of reinvigorating trust by offering new opportunities for social interaction, civic engagement and political participation (e.g. Hampton and Wellman, 2003; Ellison et al., 2007; Steinfield et al., 2008; Valenzuela et al., 2009). These works, however, focused on specific local communities and did not account for the rising phenomenon of online incivility that is progressively spreading across SNS (Duggan, 2017).

Online incivility is a manner of harassing behavior that can range from aggressive commenting in threads, incensed discussion and rude critiques, to outrageous claims, hate speech, and more severe forms of harassment such as purposeful embarrassment and physical treats (Anderson et al., 2014; Antoci et al., 2016a). Psychological experiments provide evidence that these behaviors are a distinctive feature of online discussions about opposing ideas because of the reduced self-awareness and self-regulation entailed by computer-mediated communication (Kiesler et al., 1984; Siegel et al., 1986; Sproull and Kiesler, 1986; Lea et al., 1992). A nationally representative PRC survey found that 41% of U.S. citizens have been personally subjected to harassing or abusive behavior on social media. 66% have witnessed others being targeted with online incivility. Anonymity is often blamed as a key enabler of cruelty and abuse in online discussions. 89% of U.S. Internet users say anonymity allows people to be cruel or harass one another and 83% think it makes it hard to trust what people share. Political views and gender

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1 Hereafter we will use the terms social media, social networking sites and online social networks as synonyms for the sake of brevity.

2 Views on anonymity, however, are conflicting, as 85% of Americans report it favors
are the most common reasons for harassment. Survey data indicate that a large majority of Americans view the tone of online political discussions as uniquely angry and uncivil, believe that social media are places where people say things while discussing politics that they would never say in person and describe their online interactions with those they disagree with as stressful and frustrating. The direct or indirect experience of incivility seems to leave an impact that weakens the positive potential of social media. Around one-quarter of Americans (27%) say they have decided not to post something online after witnessing the harassment of others, while more than one-in-ten (13%) say they have stopped using a social network after witnessing other users engage in uncivil behaviors (Duggan, 2017).

In a keynote speech at the New Media and Society conference in Toronto on July, 2017, Lee Rainie, director of internet research at PRC, highlighted how the pervasiveness of online incivility is making the social media ecosystem increasingly hostile to users. According to Rainie, PRC statistics suggest that the specific characteristics of SNS-mediated interaction incentivize disinhibition, aggressiveness, outrage, and extremism, resulting in a hyper-partisan climate that has invaded personal interactions and in the spreading of confusion and mistrust (Rainie, 2017).

Overall the evidence available so far suggests that incivility is the status quo regarding the presentation of opposing views and opinions in Internet-mediated discussions (Rainie et al., 2012; Duggan, 2014; Antoci et al., 2016a; Rost et al., 2016; Duggan, 2017).

There are reasons to suspect that the infringement of social norms for the polite expression of opinions can affect the trust and trustworthiness of SNS users. In an experimental study about televised incivility, Mutz and Reeves (2005) conclude that witnessing a civil interaction about a topic of public interest might strengthen the belief that most people respect the rules and, therefore, can be trusted. In contrast, the experience of incivility could erode trust in others. This argument is consistent with earlier findings of a negative correlation between television watching and social trust in survey data (Putnam, 2000; Glaeser et al., 2002). As television, a unidirectional mass medium, was found to significantly affect trust, it stands to reason that social media, which allow for interactive communication, might induce an even more powerful effect that could neutralize the supposedly positive impact of social media and prime distrustful attitudes in their users.

Discussion of sensitive topics and 77% think it makes people feel more private and secure. These figures are consistent with evolutionary models suggesting that the dissatisfaction with online interaction prompted by incivility may lead to a drastic decline in the use of SNS (Antoci et al., 2015; Antoci et al., 2016b).
Given the penetration of social media and the importance of trust in the economic activity, we believe that the role of SNS-mediated social interaction should be put under scrutiny by economic research. Studying the relationship between SNS-mediated interaction and trust, however, poses several methodological problems. The use of survey data entails endogenous sample selection and endogenous treatment assignment that may make it impossible to ascertain causality. Active membership of SNS, trust and trustworthiness may be codependent by unobservable personality traits. Reverse causality also is at stake, as more trusting people may have a stronger propensity for online socialization. In addition, the available surveys do not reveal the kind of interaction users actually experience in SNS. Economic studies relying on survey data basically analyze how certain behaviors correlate to binary variables measuring broadband access (Bauernschuster et al., 2014; Faleck et al., 2014; Lohmann, 2015; Campante et al., 2017) and Internet or SNS use (Pénard et al., 2013; Sabatini and Sarracino, 2016; Castellacci and Schwabe, 2017; Sabatini and Sarracino, 2017; Castellacci and Tveito, 2018).

To overcome selection issues, endogeneity problems and the lack of information about users’ activities in SNS, we design the first randomized controlled experiment aimed at studying the effect of online incivility on trust. We compare the trust and trustworthiness of three samples of participants randomly involved in two kinds of Facebook-mediated interaction. One group is exposed to four, authentic, threads of uncivil discussion. According to the survey data just reviewed, this treatment is likely to approximate the predominant style of interaction in online discussion, whenever opposing views are presented. Another group is exposed to the same threads in which uncivil discussions have been replaced with polite interactions by experimenters. As a robustness check, a subsample of each group is randomly exposed to an alternative configuration of the treatments in which the same Facebook-mediated interactions, whether uncivil or polite, occur with anonymous users. The third group was used as a control condition: participants were exposed to the same thematics used in the other treatments, but in the form of short news excerpts and without any kind of social interaction. To assess trust and trustworthiness, we use a slightly modified version of the trust game introduced by Berg et al. (1995).

The results of the experiment indicate that when the tone of discussions deviates from the “uncivil status quo” and is accompanied by civil interaction, it significantly raises participants’ trust with respect to both the uncivil treatment and the control condition, whereas it has no effect on trustworthiness. In contrast, if Facebook use is associated with the experience of online incivility in line with the status quo, we observe no significant change.
in participants’ trust and trustworthiness with respect to the control condition. These results are compatible with the view that participants feel no difference between the priming of uncivil discussions possibly associated with previous Facebook experience and the incivility-based treatment they were targeted with in the laboratory; therefore they do not manifest any significant reaction in terms of trust and trustworthiness. However, when participants are primed with civil interaction, a significant increase in their trust emerges. We also find that females are always significantly less trusting independently of the treatment. Results are robust to a different configuration of the treatments in which participants are exposed to Facebook threads among anonymous users, whose identity has been camouflaged by experimenters: thus anonymity does not seem to mediate the effects of online civility and incivility on trust attitudes. Overall, these findings suggest that, to achieve their full potential in support of trust and cohesion, social media must develop policies to favor civility in online interactions.

Our paper bridges three strands of literature. The first studies how broadband access and the use of Facebook impact various dimensions of social capital by exploiting survey data, whether collected in representative samples (e.g. Bauernschuster et al., 2014; Falck et al., 2014; Sabatini and Sarracino, 2017) or in limited groups of college students (e.g. Ellison et al., 2007; Steinfield et al., 2008) from a cross-disciplinary perspective. The second includes economic studies more broadly investigating the roots of trust using experimental (e.g. Glaeser et al., 2000; Carpenter et al., 2004; Guerra and Zizzo, 2004; Fehr et al., 2005; Ben-Ber and Putterman, 2009; Bigoni et al., 2016; Burdin et al., 2018; Gupta et al., 2018) or survey-based methods (e.g. Alesina and La Ferrara, 2002; Yamamura, 2009; Berggren and Bjornskov, 2011; Nunn and Wantchekon, 2011; Accetturo et al., 2014; Ljunge, 2014). The third comprises earlier psychological studies examining how the specific features of online communication reduce self-regulation and self-awareness, resulting in stronger disinhibition and aggressiveness in respect to face-to-face interaction (e.g. Diener, 1979; Kiesler et al., 1984; Siegel et al., 1986; Sproull and Kiesler, 1986).

We contribute to the first two strands by providing the first controlled experiment comparing the effects of civil and uncivil online interaction on trust. Our results also adds to psychological studies by showing one possible outcome of the violation of the social norms for the polite expression of opposing views.

The rest of the paper is organized as follows. Section 2 describes our experimental design and procedures. Results are presented in Section 3. Section 4 discusses our findings and their possible policy implications.
2 Experimental design

2.1 The trust game

To measure trust and trustworthiness, we use a slightly modified version of the trust game introduced by Berg et al. (1995). The trustor has an initial endowment of $X = 10$ experimental currency units (ECU), and can choose to send an amount $x$ to player B, the trustee, with $0 \leq x \leq X$. Player B receives $3x$ and chooses an amount $y$ to return to player A, with $0 \leq y \leq 3x$. The final payoff for player A is $X - x + y$ and for player B is $3x - y$. In this paper we adopt a “strategy method” version of the trust game, in which the trustee decides which amount to return for every possible transfer received from the trustor. The amount $x$ is used as a measure for the trustor’s trust in an anonymous partner. The returned amount $y$, in relation to the received amount $3x$, is considered as an indicator for a subject’s trustworthiness. The unique subgame perfect Nash equilibrium (SPNE) is for Player B to return no money (zero trustworthiness) and, thus, for Player A to send none (zero trust). This equilibrium is socially inefficient in that it is Pareto-dominated by other outcomes. Data from experiments, however, are regularly inconsistent with the predictions of zero trust and trustworthiness.

2.2 Experimental manipulations

In order to circumvent the selection and endogeneity problems that arise in the analysis of naturally occurring data, we employed a framed laboratory experiment (Harrison and List, 2004) in which we targeted two randomly selected groups of participants with two treatments of civility and incivility in a Facebook environment. A third group received a pure baseline treatment characterized by the absence of any civil or uncivil feature. Following this, we asked them to play a trust game involving an anonymous stranger. Adopting a between-subjects design, we compared the behavior of individuals exposed to civility with that of the groups that experienced the incivility priming, which represented the social network’s status quo.

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4The assumption that online incivility is the status quo is justified by current field evidence on typical interactions on social media. Social media users regularly happen to interact with unknown others. The Facebook “Pages” and the Twitter accounts of actors of public interest such as magazines and celebrities provide a typical setting for these interactions (Rost et al., 2016; Antoci et al., 2016a), in that they allow users to randomly read comments written by strangers who subscribed to the same feed (i.e. who “liked” the same page or “followed” the same account). Recent studies (e.g. Barberà et al., 2015; Barberà and Rivero, 2015; Boxell et al., 2017) showed that, even if subscribers may have specific interests in common, they are likely to be heterogeneous in terms of personal traits,
In our study, the civility and incivility primings were then administered and framed in the context of Facebook Pages. The incivility treatment was as follows. We asked a randomly selected group of participants to carefully read four *authentic* threads drawn from the Facebook pages of the news websites *Today.it*, *Leggo*, and *Ansa* and of the popular pro-conspiracy theories blog *Su la testa* (literally “Raise your head”). The first thread was about the spreading of a new form of female genital decoration called “vajazzling”. The thread was made of a series of sexist comments characterized by prejudice and stereotyping against women, mostly written by women. The second thread reported the decision of some parents to withdraw their children from school to protest against the enrollment of two six years old Roma students. Comments expressed racist beliefs, ethnocentrism, and a strong hostility against minorities. In a third thread, an op-ed article by a famous conspiracy theorist claimed that the Human Immunodeficiency Virus (HIV) did not exist and that the Acquired Immune Deficiency Syndrome (Aids) had no viral origins. The thread was filled with comments expressing hate and distrust towards researchers, considered responsible of manipulating data to favor pharmaceutical companies. The last thread regarded an accident occurred to a teenager while trespassing a fence nearby the Colosseum in Rome. Users' comments manifested delight for the incident and rudely blamed the victim for her imprudence. The four threads were collected and republished as they were originally by a specialized Facebook page monitoring hate speech on the social network.

After reading the threads, participants were required to: 1) briefly summarize the prevailing opinion in the thread; 2) state the extent to which they agree with that prevailing opinion on a 5-point Likert scale ranging from 1 (“not at all”) to 5 (“totally”); 3) assess the aggressiveness and/or offensiveness of the thread on the same five point-scale; 4) select the most aggressive and/or offensive comment in the thread; 5) write a short preferences, opinions, and modes of interaction. In this context, incivility is widespread and usually takes the form of aggressive or outrageous commenting in threads (Rainie et al. 2012; Duggan and Smith, 2016).

Roma are a traditionally nomadic ethnic group, living mostly in Europe and the Americas and originating from the northern regions of the Indian subcontinent. A 2016 Pew Research poll found that Italians, in particular, hold strong anti-Roma views, with 82% of Italians expressing negative opinions about Roma.

As anonymity is often blamed as an enabler of incivility in online discussions, we operationalize the main experimental variations under two alternative configuration. The second configuration was featured by full anonymity, in which the identity of Facebook users was camouflaged by replacing their actual names and profile pictures with clearly counterfeit ones (see the Appendix for further details).
To prime with online civility another randomly selected group, uncivil comments were replaced with polite ones created by experimenters. Finally, subjects exposed to the control condition were required to perform the same 5 tasks after having read neutral presentation of the same topics (vajazzling, withdrawing children from school due to the presence of Roma students, HIV complot theories, teenager injury after trespassing) in the form of short news excerpts, without any further comments and thus without any social interaction, civil or uncivil. A summary of the treatments is described in Table 1. The main test materials, in Italian, along with their English translation, are reported in the Appendix.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Obs.</th>
<th>Share: Male/Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>158</td>
<td>0.49/0.51</td>
</tr>
<tr>
<td>Civility</td>
<td>126</td>
<td>0.57/0.43</td>
</tr>
<tr>
<td>Incivility</td>
<td>128</td>
<td>0.48/0.52</td>
</tr>
</tbody>
</table>

Following this, subjects participated in a trust game in which we used the strategy method to maximize the data acquired from each participant. We then compared the trust and trustworthiness of participants primed with different types of Facebook interaction, i.e. civil vs. uncivil and anonymous vs. non-anonymous.

The trust game requires players to take two decisions. Trustors must choose the amount to send and trustees choose how much to return. The first choice is affected by one’s expectations on the other player (which is also the reason why it serves to measure trust), whereas the second choice is based on one’s own willingness to reciprocate the other's trusting attitude, with no strategic consideration on what the other will do, since the trustee returns the money (or not) only after having received whatever the trustor decided to transfer. Moreover, the trustor has a strategic incentive to transfer some money even in one-shot versions of the game, like the one used here, because the more it is transferred, the higher the opportunity for further gain if the trustee proves to be trustworthy. The trustee, in contrast, is strategically incentivized to return something to the trustor only in repeated versions of the game, in which such behavior may allow to establish one’s reputation as a trustworthy agent, thus eliciting higher transfers of money from the trustor. But in the one-shot version of the game used here the trustee has no strategic incentive to reciprocate, and social expectations on the other
player are irrelevant for the trustee’s choice. Based on these asymmetries in strategic incentives, as well as on the assumption that the status quo in online social interaction is incivility rather than civility, we formulate the following predictions on the effects of our experimental manipulations:

**Hypothesis 1.** Senders (trustors) primed with civility send a larger amount on average than those in both the incivility treatment and the control condition.

**Hypothesis 2.** Senders (trustors) primed with incivility send the same amount as those in the control condition, thus confirming that incivility is perceived as the status quo in online interaction.

**Hypothesis 3.** Neither civility nor incivility primes affect the behavior of receivers (trustees), with respect to the control condition.

### 2.3 Procedures

Experimental subjects were recruited via ORSEE [Greiner, 2015] among students who had previously expressed a general willingness to take part in experiments. All sessions were conducted at the Bologna Laboratory for Experiments in Social Science (BLESS). The experiment was programmed and implemented using the software z-Tree [Fischbacher, 2007].

Participants were not informed of the goal of the priming tasks, nor did any deduce it or become aware of it inadvertently. After showing up at prescheduled session times, subject were seated at individual cubicles equipped with their own computers. Seats were randomly assigned.

A total of 412 subjects participated in the experiment. We ran 13 sessions with 32 participants per session (with the exception of sessions #1 and #12 in which only 30 subjects took part due to no-shows). Treatments were randomized across sessions. The mean age of the participants was 24 years, and they were almost equally split between males (51%) and females (49%). Participants where exposed to multiple batteries of survey tasks in order not to put great emphasis on the trust game. This feature aims to prevent experimental demand effect [Zizzo, 2010].

All participants had a remarkable Facebook experience and, almost 70% of them declared to be familiar with the action of reporting offensive posts or comments, as measured through the five point-scale answers to the questions: “How familiar you are with the possibility to report offensive contents on Facebook?”, 1 meaning “not at all” and 5 meaning “very much”.

The first survey task consisted in responding to a simplified “Yamagishi test of trust”, a 6-item questionnaire that uses general statements to measure participants’ beliefs about honesty and trustworthiness of others, and that
has been validated in previous studies (Yamagishi, 1986; Yamagishi and Yamagishi, 1994).

In this questionnaire, participants are asked to value their agreement to the following statements on a five point-scale in which 0 means “strongly disagree” and 5 means “strongly agree”: “Most people are basically honest”, “Most people can be trusted”, “Most people are basically good and polite”, “Most people trust others”, “I am a trusting person”, and “Most people respond trustworthy when they are trusted by others”. Participants’ trust was further assessed through two additional questions. We used binary responses to the question: “Do you think that most people can be trusted, or that you can’t be too careful in dealing with people?” developed by Rosenberg (1956) as a measure of social trust.

Trust in other specific entities was then assessed through the so-called “wallet question”: “Imagine you lost your wallet with your money, identification or address in your city/area and it was found by someone else. How likely do you think your wallet would be returned to you if it were found by a neighbor/the police/a stranger?” Possible responses were: “Very likely”, “Fairly likely”, “Not very likely”, and “Not likely at all”. This measure of trust has been validated by experimental evidence (Knack and Keefer, 1997; Knack, 2001).

The second task was the shortened version (BFI-10) of the “Big Five test” to assess participants’ personality traits along the five dimensions of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Rammstedt and John, 2007).

A third survey evaluated participants’ familiarity with SNS and their experience of civility and incivility in the social network. Subjects were asked to report the frequency of use of a series of SNS, the amount of time they daily devote to SNS, the number of their Facebook friends, their familiarity with specific Facebook actions and functions, and the frequency of specific Facebook-mediated social interactions. Finally, they were asked to assess how their previous Facebook experience matched 12 adjectives on a five point-scale, the adjectives being friendly, dangerous, productive, unpredictable, superficial, tender, offensive, interesting, variable, aggressive, banal, and safe.

Participants were then engaged in the priming task described in Section 2.2. Immediately after the priming, we assessed their emotions through a Visual Analogue Scale (VAS), a tool that tries to measure a characteristic or attitude across a continuum of values. The final task was the modified trust game. Players of both roles (A and B) were initially endowed with 10 ECU to avoid inequality concerns. The final amount paid to each player
depended on their strategic choices in the trust game. However, a show up fee of 5€ was guaranteed to all participants regardless of their performance and of possible mishaps, such as overbooking or late come.

Subjects were randomized into the role of either the trustor or the trustee and were anonymously matched with a unique, unknown partner for a one-shot interaction. After the structure and the payoff of the game were explained to them, participants were not allowed to proceed in the experiment until they correctly answered three comprehension questions on the game. Then each trustor decided how much to transfer to the other player (from 0 to 10 ECU), while each trustee indicated how much s/he would be willing to return for each possible amount transferred by the trustor and multiplied by the experimenter (strategy method), from 3 to 30 ECU. At the end of the experiment participants were immediately paid based on their actual choices, plus the show up fee.

3 Results

Using exogenous manipulations, we find evidence that exposure to online civility can make people more optimistic about the trustworthiness of unknown others. Senders exposed to civility are, in fact, significantly more trusting.

Tables 2 reports OLS regression analyses. The first outcome of interest ($x$) is represented by the level of trust exerted by trustors (column 1). The dependent variable ranges between 0 and 10 ECU. Exploiting the between-subjects design, trust rate is regressed against the main treatment dummies for Civility and Incivility, while the baseline is included in the constant term. We further control for a conventional array of covariates including gender (=1 if female, =0 if male), age, the average score of the Yamagishi test, and a continuous variable measuring the intensity of Facebook use proxied with the self-reported number of Facebook contacts. In addition to these covariates, we control the configuration of treatments in which users were anonymous through a flag variable:

$$x = \beta_0 + \beta_1 \text{Civility} + \beta_2 \text{Incivility} + \beta_n[\text{controls}] + \varepsilon \text{ (column 1)}$$

Under the baseline treatment, the estimated trust rate is about 4 ECU (out of 10). While under the Civility experimental condition the estimated trust rate increased by about 1.4 ECU (+27% in relative terms), the coefficient associated to Incivility turned out to be small in its magnitude and not statistically significant at any conventional level. Following the same line,
also the configuration featured by anonymity turned out to be neutral to the outcome. Females exhibit a significantly lower level of trust. All the other controls do not have any systematical effect on the individual trust rate.

The second outcome of interest is represented by the level of trustworthiness (column 2). Individual trustworthiness is elicited by strategy method. The outcome is represented by the individual mean amount returned ($\bar{y}$) by the trustee to the trustor. The dependent variable is computed at the individual level averaging the multiple trustworthy responses under the different trust profiles. This elaboration allows targeting independent observational units at individual level. This second outcome of interest, by construction, ranges between 0 and 16.5 ECU. As for the analysis of trust rate, treatment effects are addressed exploiting between-subjects design adopting an identical econometrical model:

$$\bar{y} = \beta_0 + \beta_1 \text{Civility} + \beta_2 \text{Incivility} + \beta_n [\text{controls}] + \varepsilon$$ (column 2)

As far as it concerns trustworthiness, there is no evidence for differential treatment effects. Both the coefficients for Civility and Incivility result to be small in their magnitudes and not statistically significant at any conventional level. The neutral effect of the anonymity-based configuration on trust rates is confirmed also for trustworthiness. The same holds true for the other controls. No one turns out to be relevant in explaining the individual levels of trustworthiness with the only exception of age.
### Table 2: Outcomes and treatments’ effects: OLS regression

<table>
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<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
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<tbody>
<tr>
<td></td>
<td>$\bar{y}$</td>
<td>$\bar{y}$</td>
</tr>
<tr>
<td>trust (A)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civility</td>
<td>1.403**</td>
<td>0.215</td>
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<tr>
<td></td>
<td>(0.61)</td>
<td>(0.72)</td>
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<tr>
<td>Incivility</td>
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<tr>
<td></td>
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<td>(0.72)</td>
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<td>Anonymity</td>
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<tr>
<td></td>
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<td>(0.66)</td>
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<td></td>
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<td>Age (ctr)</td>
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<tr>
<td>$R^2$</td>
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<td>0.049</td>
</tr>
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</table>

Significance levels: * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

### 4 Discussion

This study provides the first experimental evidence of a positive effect of online civility on social trust. As predicted, what induced a significant change in people’s trust was exposure to civil online interaction, whereas the opposite condition, i.e. online incivility, seemed to be considered “business as usual” and thus did not produce any effect on trust, with respect to the control treatment. This lack of effect of online incivility is striking, whether it is interpreted as a form of expectation matching (incivility is what people routinely expect online, thus being exposed to it does not change their expectations on others’ behaviors) or as a sort of immunization effect (people are used to such a high level of online incivility that the experimental ma-
nipulation failed to elicit a response): in either case, incivility seems to be perceived as the norm of online interaction, rather than the exception. This is a rather depressing finding, but also one in full accordance with the survey data reviewed at the onset of this paper.

What is much less depressing, and indeed encouraging, is the positive effect on trust of even a brief exposure to online civility: contrary to intuition, according to which a quarrel is much more salient than a polite discussion, a simple lack of aggression in expressing a difference of opinions online acts as a powerful determinant of higher levels of trust towards other people. This result was not only significant, but also robust to a further manipulation in terms of anonymous vs. non-anonymous users: this suggests that what matters for social trust is the nature (civil vs. uncivil) of the online interaction, and not the degree of identity disclosure of the people taking part in the debate. As long as the interaction remains civil, the anonymity of our online interlocutors does not undermine our trust in them.

The second relevant finding was the lack of effect of our manipulation on trustworthiness level. This was in line with our hypotheses, based on the fact that exposure to online civility or incivility affects one’s expectations on the behavior of other people, thus modulating trust attitudes: but trustworthiness, or lack thereof, is a feature of our own behavior, thus there is no reason why it should be affected by the civil or uncivil behavior we witness in others. This is especially true with respect to the one-shot trust game we used in this study: whereas the trustor has a strategic incentive to increase the amount transferred, under the assumption that the other is trustworthy, the trustee has no reason to increase the amount returned based on her expectations about the other player, especially since the effect of that choice will happen *ex post*, based on how much the trustor actually transferred in the first place. The strategy method does not mitigate this asymmetry, since it simply forces the trustee to indicate how much would be returned under all possible allocations of resources chosen by the first player: a trustee with positive expectations on the trustor may consider certain allocations more likely to occur than others, but there is no reason to expect an effect on how she will respond to such allocations. In fact, strategic considerations are likely to affect the behavior of the trustee, and thus trustworthiness levels, only when the trust game is repeated among players, due to reputation concerns.

Finally, we observed a gender effect on trust, with female participants trusting significantly less than male participants across all conditions. This is in line with previous findings of gender effects in the trust game (Snijders and Keren [1999], Chauduri and Gangadharan [2003], Buchan et al. [2008]).
Dittrich, 2015), although we did not find a complementary effect on trustworthiness levels, whereas some other studies observed female participants to be more trustworthy than male ones (Croson and Buchan, 1999; Buchan et al., 2008). Most notably, this was the first study in which gender differences in trust attitudes were observed after priming participants with online contents (civil, uncivil, neutral). Since past studies have shown that “the measure of trust and trustworthiness used and the context in which it is measured may influence gender results” (Buchan et al., 2008, p. 467), it is particularly important to gather further data on gender differences in trust attitudes after exposure to online discussion, also considering that women are often the target of extreme forms of online incivility such as hate speech and harassment (Duggan and Smith, 2016; Duggan, 2017).

The fact that women exhibited lower trust levels in all conditions, including the civil treatment and the control condition, suggests that they do not feel themselves as preferential targets of uncivil comments, but neither are especially affected by the civil nature of online debate – that is, they did increase their trust in the civil condition, yet it remained at a lower level with respect to male participants. A possible explanation of this pattern of results is that the topic of discussion, rather than the style of the debate, is what makes women less willing to trust than men after exposure to online contents.

Our experimental design does not allow us to draw any conclusion on this point, since all conditions shared the same thematic contents: however, it is worth noting that these topics were taken from actual online debates on SNS, and one of them featured severe criticism of a uniquely female lifestyle choice (vajazzling), which may have indeed triggered different responses in women and men. On the other hand, as noted, similar gender differences in trust attitudes have been reported also in trust game experiments were no prior manipulation with online material was present, thus it may very well be the case that the roots of these differences are to be found outside of the context of online interaction: for instance, it has been noted that discriminated groups (e.g., minorities and women) are, not surprisingly, less inclined to express a trusting attitude towards others, after controlling for demographic characteristics (Glaeser et al., 2000; Alesina and La Ferrara, 2002).
5 Conclusions

SNS are facing increasing criticism and scrutiny, since recent analyses of key political events (such as the 2016 US presidential election and the Brexit referendum) have suggested a link between the extreme polarization of public opinion and the relatively small number of platforms that monopolize online discourse – most notably, Facebook and Twitter. Public discussion on such platforms has also been shown to create and maintain so called “echo chambers” [Del Vicario et al., 2016; Quattrociocchi et al., 2016], thus leading to increased polarization and partisanship. Therefore it is not entirely surprising to find confirmation, in our data, of a rather bleak outlook on public discourse on SNS, where uncivil debate seems to be considered as normal.

However, the striking result of our study is that even minimal exposure to the opposite trend, i.e. civil online interaction, has a significant effect on social trust, even (or maybe especially) when it takes place on the same SNS where incivility is considered to be the standard. This suggests that what is at stake in moderating online discussion is not simply the prevention of negative phenomena (hate speech, cyberbullying, digital harassment, etc.), but also the achievement of significant social benefits, most notably a measurable increase in social capital. The take-home message for policy makers is rather straightforward: instead of only focusing on fighting against noxious online behavior, we should also (and perhaps mostly) create the preconditions to promote civil discussion on online platforms. Obviously, this goal cannot be effectively pursued via strict regulations, but rather needs to be fostered by carefully designing (or tweaking) the platforms themselves, bringing a wide variety of competences to bear on such a task: most notably, psychological insight on users’ attitudes and profiles, interaction design principles from ergonomics, nudging strategies and incentives planning from economics.

Existing online platforms could and should be used as valuable case studies, leveraging both negative and positive aspects. For instance, whereas violent confrontation seems rather standard in many SNS (which is why we used Facebook threads as our primes), Wikipedia represents a platform where a high number of users, the editors, freely interact in a more constructive fashion and with a higher degree of mutual respect and even solidarity: in fact, so called “edit wars” are relatively rare phenomena on Wikipedia, typically perceived as malicious attempts to thwart the legitimate mission of the platform [Yasseri et al., 2012]. Moreover, Wikipedia provides a positive climate for civil interaction not by obsessively policing users’ behavior, but rather by building a shared ethos of respect and collaboration in view of a collective mission, that is, to create a universal encyclopedia that anyone can access.
and modify. Indeed, an appeal to mutual respect and civility is part and parcel of the core of the Wikipedia philosophy, and the fourth of their “Five Pillars” is the recommendation that “Wikipedia's editors should treat each other with respect and civility”, which is further specified as follows: “Respect your fellow Wikipedians, even when you disagree. Apply Wikipedia etiquette, and don’t engage in personal attacks. Seek consensus, avoid edit wars, and never disrupt Wikipedia to illustrate a point. Act in good faith, and assume good faith on the part of others. Be open and welcoming to newcomers. Should conflicts arise, discuss them calmly on the appropriate talk pages, follow dispute resolution procedures, and consider that there are 5,524,387 other articles on the English Wikipedia to improve and discuss”. The success of Wikipedia in spreading a climate of mutual respect and trust among its users is proof that similar platforms can prosper online: the key challenge thus is to find ways of adapting this success story to different contexts of online interaction, such as SNS.

References


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**Appendix: Test materials**

**Incivility priming: original threads**

Original threads drawn from the Facebook page “Raccolta statistica di commenti ridondanti”.

24
Figure 2: Roma kids

Due rom in prima elementare, i genitori di 4 bimbi italiani portano via i figli dalla scuola

Due bambini di età rom si iscrivono al primo anno delle elementari ma i genitori di quattro bimbi italiani protestano e fanno trasferire i propri figli in una altra...
## Figure 3: Conspiracy theories

"L'HIV NON ESISTE": DENUNCIA UN PREMIO NOBEL PER LA CHIMICA E ILLUSTRI SCIENZIATI L'UNICEF È UN PERICOLO PER I BAMBINI
di Gianni Lannes

<table>
<thead>
<tr>
<th>User</th>
<th>Comment</th>
<th>Date/Timestamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gianna Giovanna</td>
<td>Sono anni che cerco di spiegarlo ai parenti...mi guardano male...</td>
<td>11 - 21 novembre alle ore 12:00 tramite cellulare</td>
</tr>
<tr>
<td>Sofia Angeli</td>
<td>... come ti capisco, anch'io vengo liquidata malevolmente...</td>
<td>1 - 21 novembre alle ore 12:27</td>
</tr>
<tr>
<td>Luca Di Gaia</td>
<td>successo anche a me... tranquilli, quelli dentro Matrix sono i primi a lottare fino alla morte per ciò in cui hanno detto di credere...</td>
<td>5 - 21 novembre alle ore 13:24</td>
</tr>
<tr>
<td>Sabato Genco</td>
<td>aborre tutte le forme di vaccino, questa è la TERTAPIA più EFFICACE CONTRO TUTTI I MALI DEL SECOLO!!!!!!!</td>
<td>8 - 21 novembre alle ore 14:18</td>
</tr>
<tr>
<td>Claudia Di Paola</td>
<td>Non esiste, non esiste, tutti devono sapere. La gente non muore dopo le false diagnosi a causa delle assurde cure elargite</td>
<td>4 - 21 novembre alle ore 13:29</td>
</tr>
<tr>
<td>Giustina Farinato</td>
<td>In pratica, sta genitale ci fa credere tutto ciò che noi fa venire i sensi di colpa, e loro&quot;, intanto lasciano su tutti e tutti?</td>
<td>2 - 21 novembre alle ore 12:17 tramite cellulare</td>
</tr>
<tr>
<td>Simone Rapazzetti</td>
<td>ecco sì tutte le volte che mi fanno le analisi dicono che il virus nel sangue è negativo a scusato o da come dicono i medici dovremmo essere hiv a caso il sé mi ammalo a rado le mie difese sono abbastanza alte quindi è tutta na bufala</td>
<td>21 novembre alle ore 14:50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>User</th>
<th>Comment</th>
<th>Date/Timestamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luciana Udini</td>
<td>Io so ca una vta, me lo spiegò tanti anni fa un amico virologo</td>
<td>21 novembre alle ore 20:30</td>
</tr>
<tr>
<td>Laura Maria La Ele</td>
<td>Un gro di miliardi stratosferikollll</td>
<td>21 novembre alle ore 13:12 tramite cellulare</td>
</tr>
<tr>
<td>Maury Onoff</td>
<td>Andrebbro denunciati i Veronesi e tutti a approfittazioni come lui.</td>
<td>21 novembre alle ore 18:34 tramite cellulare</td>
</tr>
<tr>
<td>Gianluigi Von Grafthultz Soldera</td>
<td>l'unicef è un'altro modo per far incassare soldi a bigpharm lari alle 14.13</td>
<td></td>
</tr>
<tr>
<td>Davide</td>
<td>Scusate ho dei parenti ammalati di hiv, rimovete questa troletta o vi denuncio e non sto scherzando</td>
<td>4 - 21 novembre alle ore 12:48 tramite cellulare</td>
</tr>
<tr>
<td>Manolo Calafato</td>
<td>prima di denunciare cose che non ti porterebbe a nulla... vale a chiedere agli ospedali alla famiglia rockefeller e alle istituzioni ch perché hanno messo d oltre 30 anni la malattia in giro dell'sids e hiv... solo per far soldi sugli ammalati che prenderanno a passaggio a vita duran durante solo a scopo di lucro....... quindi se vuoi denunciare qualcuno denuncia le istituzioni che ci fanno ammalare... in questo caso hanno fatto ammalare i tuoi cari.......</td>
<td>6 - 21 novembre alle ore 13:01</td>
</tr>
<tr>
<td>Loriano Grullini</td>
<td>Peter Duesberg ne parlò già ne primi anni 90 della non-relazione AIDS-Lo hanno messo alla gogna ed era molto accreditato.Nel tempo molti, tra cui il Nobel Kary Mullis, pensano la stessa cosa.Ma siamo in mano a chi propone l'AZT per curare i malati AIDS col risultato di farti crepare tra 1000 sofferenze.</td>
<td>21 novembre alle ore 14:50</td>
</tr>
</tbody>
</table>
Figure 4: 18 years old in severe conditions

Incivility priming: translated threads

Topic 1: Vajazzling

“It’s called vajazzling and it’s the latest, wacky trend. Look at what girls do to their vaginas! (source: today.it).

ALESSANDRA MODUGNO: And they even whine they get raped, they get their crotches all jazzed up like that! Don’t complain then, you’re the hoes.

EMILIA BUONOCORE: It’s this crappy society that ruined our youths, if it had been back in the day these guys would have got slapped real good, but today if you hit a child you even go to jail and look at this shit we are living in today, it sucks.

PATRIZIA PATALANO: This is why all men became fags and real women no longer exist.

ENZA RIESI: Whaaaaaat it’s the end of the woooooorld

ANNA CICIARELLO: Whoever does this is a whore.
NICOLETTA AMOROSO: There is no world to live any longer!!! Women go themselves in search of violence, in this case they’re themselves provoking men to rape them, I think they’re all whor**.

PAOLA DI STEFANO: There’s no shame anymore! Then they whine about getting raped!

SIMONE FAVETTA: I would do that to their assholes, them dirty little idiots.

TIZIANA MARAZZI: The youth we got back in the day no longer exists... meh.

MARZIA DISOTILLI: I’m disgusted, common sense is lost, and don’t they whine if they get raped! NADIA FALIVA: You suck, shitty women.

ROSARIO PIAZZOLLA: and then they even say IT’S ALL MEN’S FAULT, GO FUCK YOURSELVES YOU BITCHES!

EGLE NICOLUSSI: Go fuck yourselves you little hoes, maybe you don’t have parents, or maybe they’re worse than you.

MARIA MONTALBANO: I don’t understand why they wear this stupid stuff, why don’t they think of acting serious, no, we suck otherwise.

ANTONIO TROVATO: We are at the peak of depravation, it sucks!

LAURA PICA: These stupid sucklings!!! Who do they think they are? Poor idiots!!! Grow up with your brain, that’s a real woman!

ANTONIO DI DOMENICO: Ugly bitches

MARIELLA LANFRANCHI: And then it’s men’s fault, isn’t it

**Topic 2: Roma kids**

“Two Roma kids in fourth grade, parents unsubscribe four Italian children from school. Two children of ROMA ethnicity start attending first grade, but the parents of four Italian kids start a protest and move their children to another...” (source: Leggo.it).

GIANLUCA TANZI: they did right........... and now all puritans and occasional moralists can go fuck themselves

ALESSIO ANGELINI: they did right!!

FRANCESCA ABD EL CANALE: without even thinking about lice and all those other sicknesses they transmit... wanna call me racist? Indeed I am one because I know what it means, I used to help them but now they disgust me!

ENZA MARINO: Puritans... until they kidnap your children! Go fuck yourselves...

ALESSANDRO PALMIERI: What’s the point in providing education to these kids? To beg for money in the streets pushed by their parents? They
did so right

CRISTINA GODIO: Now they even send them to steal pencils, rubbers, backpacks, snacks... be sure to let them socially integrate well... now that we are close to be the ones who will have to live in caravans!!!

ROSANNA LA MALFA: They did right. My daughter would never be in the same classroom with gypsies for sure

GERALDO DALFINO: Little ROMA kids will become adult criminals. The fruit falls near the tree! [LIT: “bad blood never lies”]

ALESSIO BRAVI: I am fine with mass genocides.

MASSIMO DUCA: In one month they would see all their chairs stolen.

RAFFAELLA PETRASSI: They not only did right, they did super right!!! If it was possible I wouldn’t let them in any place!!! Stop it with this moralism... I would love to see if your children were at stake

STEFANO FERRARINI SIMONETTI BAGGIO: Get these suckers out!!!

SONIA IEZZA: Wanna talk about lice?

GIULIANA DI BARBORA: Those are good parents... get the ROMA’s out of Italy!!!

ALESSIA RED: They did right... they go to school all dirty... filthy!!! If only President Marino took them all home with him!!!

ETTORE MUTI: I find that right. Before sending them to school, ROMA’s should be sent to “the showers”...

GIORGIO COLLETTI: ROMA’S ARE ALL BASTARDS, THEY DID VERY RIGHT

OSVALDO BILABINI: They did right! I wouldn’t question that! I wouldn’t send my children to class with those parasites even if they paid me.

CHIARA ILARIA PERUGIN DEBERNARDI: They shouldn’t have left school... this is our country, our schools... they’re the ones who should go away.

**Topic 3: HIV**

“HIV does not exist: they reported a Nobel prize in chemistry and famous scientists. Unicef is a threat for children”. By Gianni Lannes.

PAOLA D’ARCANGELO: I’ve been trying to explain this to my relatives for years... they give me the stink eye

SOFIA ANGELI (in reply to Paola): ... I hear you... I also get badly dismissed...

LUCA DI GAIA (in reply to Paola): it has happened to me too... don’t worry, those inside the Matrix are the first to fight until they die for what
they’ve been told to believe...

SABATO GENCO: remove all vaccinations, THIS IS THE MOST EFFICIENT THERAPY AGAINST ALL THE DISEASES OF OUR CENTURY!!!

CLAUDIA DI PAOLA: it doesn’t exist, it doesn’t exist, everybody has to know this. Healthy people die after fake diagnoses due to the absurd therapies they receive.

GIUSTINA FARINATO: Basically, this riffraff makes us believe in everything that makes us feel guilty while they profit from everything and everyone?

SIMONE RAPAZZETTI: Here’s why every time I take the test they tell me the HIV virus is negative, excuse me but from how physicians say it I should be HIV-ed, well I very seldom get sick and my immune system is strong, so it’s all fake news.

LUCIANA UDINI: I’ve known this forever, a friend of mine who’s a virologist explained this to me many years ago.

LAURA GIULIA MORELLI: It’s a huge multi-million business!!!

IVANO STERI: Physicians such as Veronesi should be reported, as well as all the abusers like him.

GIANLUIGI SOLDERA: ......... UNICEF is just another method to let Bigpharma earn cash.

DAVIDE MANCINI: Excuse me, I have relatives who suffer from HIV, remove this bullshit or else I’ll file a report, no jokes.

MANOLO CALAFATO (in reply to Davide Mancini): before filing a report (which would take you nowhere)... go ask to the hospitals about the Rockefeller family and ask the institutions who started the fuss over AIDS and HIV 30 years ago and why... just to profit from sick people who will have to take pills for the rest of their lives only for their business........ so if you want to report someone, do it with the institutions that make us sick...... in this case they made your dear ones sick....

LORIANO GRULLINI: Peter Duesberg talked about the non-relation between AIDS and HIV already in the early Nineties. They had him put in the stocks, and he was very well renowned. Over time many others, including the Nobel prize Kary Mullis, have thought about the same thing. But we rely on those who proposed AZT to cure AIDS patients with the result to let them die with atrocious suffering.
Topic 4: 18 years old in severe conditions

“He overrides the fence and falls, 18 years old in severe conditions. He was in Rome to celebrate his birthday with his friends. The accident happened at 5:00 AM...” (source: Ansa.it)

FEDERICO CASALUCI: Do we even have to cure these people with free health insurance?

ANTONIO RANESI SIEDLER (in reply to Federico): Natural selection, next time he won’t do that again, or maybe he will finally die.

MAURIZIO ZANABONI: Perhaps we didn’t talk about this stuff back in the day, but I can’t recall a new generation of worse idiots than this!

LUIGI FIORINO: We wait for protests against the Colosseum like they do in Naples

CLAUDIO ALVISE PASCOLI: MOROOOOOOOOOOOON...

GIORGIO ANDREOTTI: Next time he won’t override it

MASSIMO BINDOCCI: Natural selection

ALESSANDRO PALMA: Natural selection: the most idiot die.

LORENZO ZANNONI: Well deserved Darwin award! Natural selection!

MASSIMO CECCHIN: Natural selection. Less of an idiot to provide for.

FULVIO CALDERONE: A moron less...


MAURIZIO MAGNI: Winner of the Darwin Award of the day

LORELLA CHIAVACCI: Everyone against the fence!!! Why do they even put them there??? Ppppeople can get hurt!!!! Always the same idiots... make sure you even defend him!!!

PAOLO I RMICI: Some people deserve disgraces, it seems they bring them on themselves

HELEN BAROZZI: I.Q. level of a goat

LORENZO PALMUCCI: Dumbass

ANGELA MANNI RASO: At 5 AM you sleep, you don’t override fences if you’re normal

FRANCESCO TOZZI: So he’ll learn how to live.
Civility priming

To prime participants with online civility, the original comments were replaced with civil ones, i.e. comments containing no offense or prejudice, fabricated by experimenters.

Topic 1: Vajazzling

“It’s called vajazzling and it’s the latest, wacky trend. Look at what girls do to their vaginas! (source: today.it).

ALESSANDRA MODUGNO: Interesting... but isn’t all that glue going to hurt their skin? It’s solvents on delicate parts, after all...

EMILIA BUONOCORE: Oh well, you see much worse stuff around. But it is also true that these trends can have a serious impact on physical health. Solvents can cause severe allergic reactions... Not to mention when the hair grows back! How about that, huh?

PATRIZIA PATALANO: Meh, I don’t think I’m into it. I’m not that young any longer... these trends are definitely not for everyone...

ENZA RIESI: Hahaha, girls nowadays come up with the wackiest ideas!

ANNA CICIARELLO: I’ve seen worse things than that...

NICOLETTA AMOROSO: Ok, trends come and go... The only thing that scares me is this continuous urge to festoon women’s bodies... Aren’t heavy glues used there? Weren’t all the chemicals we absorb through cosmetics just enough?

PAOLA DI STEFANO: Oh well, these are temporary trends... There’s much worse in life, am I right?

SIMONE FAVETTA: Wouldn’t that glue hurt their skin?

TIZIANA MARAZZI: Their skin doesn’t breathe under that glitter, if you ask me.

MARZIA DISOTILLI: LOL, trends are so fun to me... But in the end I guess there’s more important stuff to care about in life, right?!

NADIA FALIVA: What about hair regrowth?

ROSARIO PIAZZOLLA: I don’t know girls... I find it pretty, but to be honest I think that glue is not really the best choice... but I’m a man, so I’m no expert...

EGLE NICOLUSSI: My two cents: either they instantly fall off, or you have to use such a powerful glue that you end up risking bad skin rashes... And I also wonder how that might cost... Hmmm.

MARIA MONTALBANO: LOL, I’ve seen some of them at the beach! But to be honest I’ve also seen much worse than that...
ANTONIO TROVATO: Wouldn’t that glue on your pubes hurt, ladies?  
LAURA PICA: I guess they fall off immediately... or else they have to use a super glue... I wonder if that would irritate their skin?  
ANTONIO DI DOMENICO: Come on, there’s much worse stuff around...  
MARIELLA LANFRANCHI: Meh, it’s a trend like many others.

Topic 2: Roma kids

“Two Roma kids in fourth grade, parents unsubscribe four Italian children from school. Two children of ROMA ethnicity start attending first grade, but the parents of four Italian kids start a protest and move their children to another...” (source: Leggo.it).

GIANLUCA TANZI: Everyone has their opinion... but I think it’s a missed opportunity to let these people better fit in our society. If we go on like this, we will always struggle.

ALESSIO ANGELINI: they did right!!
FRANCESCA ABD EL CANALE: It’s a touchy topic, but that’s a pity, let’s admit it.

ENZA MARINO: It’s not easy for me to comment on this, my political stance is of a certain kind – I won’t talk about it here – but anyway: we need better social integration in this country, whether we like it or not.

ALESSANDRO PALMIERI: I voted for Lega Nord, no need to comment... If I had been in these parents’ shoes I would also have struggled with my decision.

CRISTINA GODIO: Let’s not be so moralist, come on... In such a situation I would have reacted like them.

ROSANNA LA MALFA: Hard choice, but perhaps I would have tried to let my kids stay in that class. After all, it’s not these children’s fault if they don’t belong to our culture.

GERALDO DALFINO: I don’t know what to think, I have a little daughter. This is a pretty hard situation... Perhaps I would have acted like those parents.

ALESSIO BRAVI: I would have let my children stay in that school. After all, cultural integration in Italy must begin from somewhere.

MASSIMO DUCA: I’m sorry, but I agree with those parents.
RAFFAELLA PETRASSI: Such a hard choice... but cultural integration is important, heck...!

STEFANO FERRARINI SIMONETTI BAGGIO: I would have acted exactly like those parents and here’s why: I don’t trust ROMA’s, from what I witness in the streets and from the type of stories media push. But you’re free
to think of this however you’d like... SONIA IEZZA: They’re minorities... they shouldn’t get ghettoized.

GIULIANA DI BARBORA: It’s hard to admit it, but perhaps I would have acted like them.

ALESSIA RED: If they admitted these kids in school there’s a reason: they’re humans and they’re the right age. I’m sorry about those parents’ choice, seriously. ETTORE MUTI: I see a little moralism in these comments... it’s so easy to talk about cultural integration on Facebook with all the fear we have toward this ethnicity in real life.

GIORGIO COLLETTI: I agree... let’s face it, there’s so much moralism in these comments.

OSVALDO BILABINI: No moralism there, it’s rather ethical I guess. ROMA’s are there and we are there too, but we can’t really exterminate them.

CHIARA ILARIA PERUGIN DEBERNARDI: I know it’s bad to say it, but I would have done the same. I can’t blame those parents, at least appreciate my honesty.

Topic 3: HIV

“HIV does not exist: they reported a Nobel prize in chemistry and famous scientists. Unicef is a threat for children”. By Gianni Lannes.

PAOLA D’ARCANGELO: Science may make mistakes, but for sure it’s always better to stay well informed.

SOFIA ANGELI (in reply to Paola): I completely agree with you...

LUCA DI GAIA (in reply to Paola): sorry to pop up like this in your thread, but I would like to add this: who declares that HIV doesn’t exist MUST have a valid reason to do so.

SABATO GENCO: my most heartfelt gratitude goes to the journalists, in the end. I mean, look at what they have to write...!

CLAUDIA DI PAOLA: Yeah, we have to be thankful to them... Otherwise we would have so many more boring days.

GIUSTINA FARINATO: I don’t know whether to agree with you or not, but in doubt – as the Americans say – better safe than sorry!

SIMONE RAPAZZETTI: It’s not up to us to judge this. These news are hard to digest, but I guess I’d share them. We get all so fuzzed about freedom of expression, but then reacting cowardly is so spontaneous...

LUCIANA UDINI: “UNICEF is a threat for children” is a bold statement... Let’s read this...
Laurar Giulia Morelli: Cocaine used to be seen as therapeutic. Science changes...

Ivan Steri: Okay, I wouldn’t suggest using iron condoms, but this carelessness is a bit excessive!

Gianluigi Soldera: I guess I’d share it. I have coworkers who are physicians and I would like to know what they think about this.

David Mancini: Sounds like a fairy tale, to me... [LIT: “and then there were the groundhogs who packed the chocolate...”]: quote from a popular Milka commercial as to convey incredulity.

Manolo Calafato (in reply to Davide Mancini): I understand it’s hard to believe, but such a discovery is so hard to hide. What if this was true? People have the right to read and form their opinion. I read the article and it didn’t convince me at all. I’m not a physician, but I just don’t buy it. Other people may think of this differently, it’s okay. That’s why I understand who shares this post. And anyway, if the chocolate doesn’t get packed by the groundhogs, who does it?

Loriano Grullini: My wife is a medical doctor and I would like to share this with her. Physicians don’t always carry the truth in their pockets, but we should all be very cautious about this. If someone believes in this and it is not even true, consequences are bad... Freedom of expression is fine for me, as long as it doesn’t damage others! There are always consequences that need to be considered...

**Topic 4: 18 years old in severe conditions**

“He overrides the fence and falls, 18 years old in severe conditions. He was in Rome to celebrate his birthday with his friends. The accident happened at 5:00 AM...” (source: Ansa.it)

Federico Casaluci: Couldn’t he be more careful?!

Antonio Ranesi Siedler (in reply to Federico): I was about to write the same comment... it must’ve been really scary!

Maurizio Zanaboni: I don’t want to start a fuss, but... where was the security then?

Luigi Fiorino: Yes indeed, safety first, shouldn’t this be obvious?

Claudio Alvise Pascoli: It must’ve been so scary for him!

Giorgio Andreotti: He probably wanted to impress some girls... MASSIMO BINDOCCI: Meh... it’s so weird no one was there to keep an eye on the situation...

Alessandro Palma: No cops around to prevent this?

Lorenzo Zannoni: What a shock... I wonder how he is now
MASSIMO CECCHIN: Well, he got to that point by himself!
FULVIO CALDERONE: Maybe he brought it by himself, but what about the security?
FEDERICO MAMÌ: Poor guy, it must have been so scary for him... Couldn’t he just stay home to play with the Wii like all other boys? And they even say that 18 year olds nowadays are all “home and Facebook”...
DANIELE PASBREL: I think it’s quite concerning that no security was there
CARLO CARILLI: I see that lack of security and proper safety is always a nice little problem here in Italy...
MARCO SOLFRINI: These news make me so anxious... Disasters always seem to be round the corner... He could have stayed home, but no, PUFF! His parents must not be in a good moment now, I guess...
MAURIZIO MAGNI: The real shock is what this guy’s parents must be experiencing.
LORELLA CHIAVACCI: Well, the safety measures we have here in Italy are always food for thought...
PAOLO IRMICI: Reading about this really let me down. But then I think of this guy’s parents and I’m sure they’re feeling worse than me, now.
HELEN BAROZZI: What a fight...
LORENZO PALMUCCI: This could have happened to anyone
ANGELA MANNI RASO: For everyone who says “couldn’t he stay home and play with the computer”... isn’t sleeping cool anymore at 5:00 AM?
FRANCESCO TOZZI: With better safety measures, this wouldn’t have happened.

Incivility priming with anonymous users

In the incivility and civility priming with anonymous users, the actual names and profile pictures of commenters were replaced with clearly counterfeit ones by experimenters. Counterfeit profiles were the same in both the incivility and civility primings. We only report the incivility priming below for the sake of brevity.

Topic 1: Vajazzling

“It’s called vajazzling and it’s the latest, wacky trend. Look at what girls do to their vaginas! (source: today.it).
ROMA ROSSO LIMONE: And they even whine they get raped, they get their crotches all jazzed up like that! Don’t complain then, you’re the hoes.
EMIL L’ANNINA XD: It’s this crappy society that ruined our youths, if it had been back in the day these guys would have got slapped real good, but today if you hit a child you even go to jail and look at this shit we are living in today, it sucks.

SUPERSIC RAVIOLA: This is why all men became fags and real women no longer exist.

LILLI SALAMI: Whaaaaaaaat it’s the end of the wooooorld
ANNA CICIARELLO: Whoever does this is a whore.
HO LE MESTRUAZIONI: There is no world to live any longer!!! Women go themselves in search of violence, in this case they’re themselves provoking men to rape them, I think they’re all whor**.

P. HOLLY GRAHAM: There’s no shame anymore! Then they whine about getting raped!

CALPURNIA DICE: I would do that to their assholes, them dirty little idiots.

M’BROZ MARAZZI: The youth we got back in the day no longer exists... meh.

LA STREGATTA: I’m disgusted, common sense is lost, and don’t they whine if they get raped!

IL PÈ È MORTO: You suck, shitty women.

ROSARIO PIAZZOLLA: and then they even say IT’S ALL MEN’S FAULT, GO FUCK YOURSELVES YOU BITCHES!

ZHAKU BALLIU: Go fuck yourselves you little hoes, maybe you don’t have parents, or maybe they’re worse than you.

STINA MAMMALUPA: I don’t understand why they wear this stupid stuff, why don’t they think of acting serious, no, we suck otherwise.

ANTONIO TROVATO: We are at the peak of depravation, it sucks!
RADU DUTA: These stupid sucklings!!! Who do they think they are? Poor idiots!!! Grow up with your brain, that’s a real woman!

ANTONIO PUÓ BASTARE: Ugly bitches
NON PAROLE A CASO: And then it’s men’s fault, isn’t it

**Topic 2: Roma kids**

“Two Roma kids in fourth grade, parents unsubscribe four Italian children from school. Two children of ROMA ethnicity start attending first grade, but the parents of four Italian kids start a protest and move their children to another...” (source: Leggo.it).

PICCOLO LORD: they did right......... and now all puritans and occasional moralists can go fuck themselves
SCARLET ENDIVE: they did right!!

SEMPLICEMENTE LELLISSIMA: without even thinking about lice and all those other sicknesses they transmit... wanna call me racist? Indeed I am one because I know what it means, I used to help them but now they disgust me!

CORRAO: Puritans... until they kidnap your children! Go fuck yourselves...

PRUDENCE JAGGER: What’s the point in providing education to these kids? To beg for money in the streets pushed by their parents? They did so right

WOODSTOCK DIO: Now they even send them to steal pencils, rubbers, backpacks, snacks... be sure to let them socially integrate well... now that we are close to be the ones who will have to live in caravans!!!

MOMY AS TRUE LOVE: They did right. My daughter would never be in the same classroom with gypsies for sure

ARLETTINE HARPY: Little ROMA kids will become adult criminals.
The fruit falls near the tree! [LIT: “bad blood never lies”].

E POI BOH: I am fine with mass genocides.

ZUZZU RELLEONA: In one month they would see all their chairs stolen.

OCCOR OCCOR ASSI: They not only did right, they did super right!!! If it was possible I wouldn’t let them in any place!!! Stop it with this moralism... I would love to see if your children were at stake

STE TAYLOR AUTO HOUSE-DISCO AGGIO: Get these suckers out!!!

J. SEGRETO: Wanna talk about lice?

SOVRANITÀ SCALIGERA: Those are good parents... get the ROMA’s out of Italy!!!

CORNISH RED: They did right... they go to school all dirty... filthy!!! If only President Marino took them all home with him!!!

MUSCARELLA: I find that right. Before sending them to school, ROMA’s should be sent to “the showers”...

CICCO CICCONE: ROMA’S ARE ALL BASTARDS, THEY DID VERY RIGHT

FRAU VIOLETTINA: They did right! I wouldn’t question that! I wouldn’t send my children to class with those parasites even if they paid me.

POLLY CIUFINOMICIONENEWTOTOBLOOM: They shouldn’t have left school... this is our country, our schools... they’re the ones who should go away.
Topic 3: HIV

“HIV does not exist: they reported a Nobel prize in chemistry and famous scientists. Unicef is a threat for children”. By Gianni Lannes.

GIANNA GIOVANNA: I’ve been trying to explain this to my relatives for years... they give me the stink eye

SANJEET SINGH (in reply to Gianna): ... I hear you... I also get badly dismissed...

TRIP TRIPALDI (in reply to Gianna): it has happened to me too... don’t worry, those inside the Matrix are the first to fight until they die for what they’ve been told to believe...

SABATO GENCO: remove all vaccinations, THIS IS THE MOST EFFICIENT THERAPY AGAINST ALL THE DISEASES OF OUR CENTURY!!!

CLAUDIA DI PAOLA: it doesn’t exist, it doesn’t exist, everybody has to know this. Healthy people die after fake diagnoses due to the absurd therapies they receive

SANDOR VON MALLASZ: Basically, this riffraff makes us believe in everything that makes us feel guilty while they profit from everything and everyone?

THEODORE MATRIXLIKE: Here’s why every time I take the test they tell me the HIV virus is negative, excuse me but from how physicians say it I should be HIV-ed, well I very seldom get sick and my immune system is strong, so it’s all fake news.

KAOUTAR DADI: I’ve known this forever, a friend of mine who’s a virologist explained this to me many years ago

ANDREA HAAI ORTENZI: It’s a huge multi-million business!!!

MAURY ONOFF: Physicians such as Veronesi should be reported, as well as all the abusers like him.

GIANLUIGI VON GRAFTHUYTZ SOLDERA: ......... UNICEF is just another method to let Bigpharm earn cash

IL PUMA PERONI: Excuse me, I have relatives who suffer from HIV, remove this bullshit or else I’ll file a report, no jokes

MANO ANIXI ANIXI (in reply to Il Puma Peroni): before filing a report (which would take you nowhere)... go ask to the hospitals about the Rockefeller family and ask the institutions who started the fuss over AIDS and HIV 30 years ago and why... just to profit from sick people who will have to take pills for the rest of their lives only for their business.... so if you want to report someone, do it with the institutions that make us sick...... in this case they made your dear ones sick....
Peter Duesberg talked about the non-relation between AIDS and HIV already in the early Nineties. They had him put in the stocks, and he was very well renowned. Over time many others, including the Nobel prize Kary Mullis, have thought about the same thing. But we rely on those who proposed AZT to cure AIDS patients with the result to let them die with atrocious suffering.

**Topic 4: 18 years old in severe conditions**

“He overrides the fence and falls, 18 years old in severe conditions. He was in Rome to celebrate his birthday with his friends. The accident happened at 5:00 AM…” (source: Ansa.it)

PLUTIDROME IPLUTI: Do we even have to cure these people with free health insurance?

GIUSEPPE VON SIEDLER (in reply to Plutidrome): Natural selection, next time he won’t do that again, or maybe he will finally die.

M BLOND ESPOSITO: Perhaps we didn’t talk about this stuff back in the day, but I can’t recall a new generation of worse idiots than this!

ALEX TRADING: We wait for protests against the Colosseum like they do in Naples

WANDA JEST TURCHETTA: MOROOOOOOOOOOOON...

GIORGIO A RE LAX: Next time he won’t override it

THARUSHIA BATAGODA: Natural selection

GIUPPI GIÒ PALMA: Natural selection: the most idiot die.

LORE LORA PH: Well deserved Darwin award! Natural selection! MASSI LA BERNI: Natural selection. Less of an idiot to provide for.

FULVIO CALDERONE: A moron less... ANEMONE JEM: Darwin docet. Pure natural selection. It’s all good.

FRAU VIOLETTINA: Let him die, it’s called natural selection NILDE JUDE: If he dies I won’t have any pity, there are way too many scumbags around

DVA EDABAKA: Who told him to override it, he brought it on himself the douchebag, serves him right, I hope the EMT’s laughed at his face when they reached him, he deserves that!!!

MINA VAGANTE: Winner of the Darwin Award of the day

LORELLA CHIAVACCI: Everyone against the fence!!! Why do they even put them there??? Ppppeople can get hurt!!!! Always the same idiots... make sure you even defend him!!!

WIKTORIA WIK: Some people deserve disgraces, it seems they bring them on themselves
In the civility priming with anonymous users

Control condition

In the control condition, participants were exposed to the same thematics used in the other treatments, but in the form of short news excerpts and without any kind of social interaction. The excerpts were as follow.

**Topic 1: vajazzling**

“The latest trend in body arts is more than just bizarre. Forget about piercings and tattoos, they’re so yesterday. The ultimate hype, if you’re girls, is Vajazzling, or the decoration of the mons pubis. Wikipedia has even dedicated a page to it. You can go Vajazzling by sticking adhesive glitter and fake diamonds on your pubes in different shapes and figures. And there is a Vajazzling for every occasion, even for your wedding night (with a “Yes, I do”) and for Christmas (with Christmas tree shapes). Truth be told, if you want to start Vajazzling your way into fashion, you first might need to opt for a painful total wax down there. But we all know how suffering for beauty is a pleasure for many”.

**Topic 2: Roma kids**

“Two children of ROMA ethnicity start attending first grade, but the parents of four Italian kids start a protest and move their children to another school. It happens in Trani (BT), in public elementary school Beltrani. Maria Mingrone, vice-dean and teacher of the class that hosts the two ROMA children, reports the facts to the news agency ANSA: “These parents wanted me to expel the ROMA kids from school because of the filth and sicknesses they may bring” – she explains – “and even if I showed them all of their regular health certificates and reassured them, they decided to unsubscribe their children from school anyway and left furiously”.

**Topic 3: HIV**  “According to UNICEF “Mozambico is facing a health crisis due to the contagion of the HIV virus”. What’s wrong this apparently innocent statement? Simple as it is: HIV is a misleading invention. Is it
actually true that the HIV retrovirus is responsible for the AIDS condition? Some experts are sure of it. However, other experts from the U.S. and from Italy challenge this unproven theorem with solid ground. “HIV is not responsible for AIDS”. This unsettling claim belongs to a renowned scientist, Peter Duesberg, professor of molecular biology at the University of Berkeley, California. And he is not alone. In the U.S. a group of scientists argues that HIV is “the scam of our century”.

**Topic 4: 18 years old in severe conditions**

“ Barely 18 years old, a trip to Rome with friends. A night that should have been pleasantly unforgettable but turned into a tragedy. A boy from Padua this morning at dawn, around 5:00 AM, overrode the fence along the Colosseum and instantly fell on the ground, five meters below him. He is now in severe conditions at the San Giovanni hospital, where he has been taken by 911 with a red code. The causes of the accident are still unknown. The boy was in Rome with a few friends, approximately other ten young adults: some of them was a local, other arrived with him from Padua. They spent the night together in town to celebrate his birthday”. 