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MAPPING EMOTIONAL RESPONSES ACROSS THE INDIVIDUAL MORAL SYSTEM IN SOCIAL NETWORK ETHICAL PUBLIC COMMUNICATION: A QUASI-EXPERIMENTAL STUDY

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ABSTRACT

Social networks are meant to be environments of interconnection, but nowadays are emotionally charged and fuelled by polarizing dynamics, particularly on ethical issues. What appear to be overlooked are the moral motivational systems that can moderate emotional responses prompted by the communicative online content. Based on the individual Moral Foundations, namely Care, Fairness, Loyalty, Authority, and Purity (Graham et al., 2008), this quasi-experimental study aims to understand how certain online public messages structured through different moral framings affect distinct emotions. We explored with a sample of adult participants (N=306, F=58.5%) the different emotional responses after the presentation of posts on immigrants' reception in Italy, simulating interactions in an online context through three different framings: the first focused on the safety, the second on the relevance of help, and a neutral message. The results confirm distinct emotional responses according to different frames and within individual moral systems and political orientation. Keywords: Toxic emotions, prosocial emotions, Moral Frame, Social Networks, Ethical Communication, Moral Foundations

Keywords: Toxic emotions ▪ prosocial emotions ▪ Moral Frame ▪ Social Networks ▪ Ethical Communication ▪ Moral Foundations

1.   INTRODUCTION: SOCIAL NETWORKS AND POLARIZED STRUCTURES

With information technology, polarization seems to have spread the mass public opinion even in online contexts (Jacobson, 2006; Bennett & Iyengar, 2008). Several studies on public interactions on Social Networks (SNs) show that online contexts are highly polarized virtual environments (Cinelli et al., 2020; Bail et al., 2018). The radicalization phenomena may be due to the specific algorithms of SNs that 'learn

from the users' choices' (Bruns, 2019, p. 2) and act by collecting user-consistent information reinforcing selective exposure (Iyengar & Hahn, 2009; Lawrence et al., 2010; Mutz, 2006). These mechanisms can often lead to a consolidation of one's own belief system through heuristics or fuel the process of seeking self-consistent information (homophily) to the extent of the formation of echo-chambers (Cinelli et al., 2021; Brugnoli et al., 2019; Del Vicario et al., 2016), closed network structures within specific online groups that may, in turn, variably affect the formation of information and communication filter bubbles (Bruns, 2017). It is often hard to assess whether echo chambers cause filter bubbles or vice versa; what does seem clear is that both phenomena can variably lead to many polarized and radicalized online discussions as a cascade effect (Brugnoli et al., 2019; Cinelli et al., 2020), but online discussions between users could make a difference if interactions were constructive and participatory.

Nowadays the effect of polarizing structures is reflected in online dynamics, especially in relation to ethical issues (interactions in which one or more victims, often women are assaulted or defended; e.g., in Italian contest, Carola Rachete, Liliana Segre, Silvia Romano), migrant landings in Italy or Europe, or more recently broader issues related to vaccines (Germani & Biller-Andorno, 2021; Kim & Kim, 2021; Kim et al., 2021). Increasingly, these dynamics may evolve into the escalation of verbal violence, hate speech, verbal aggression or uncivilised online communication (Anderson et al., 2014) marked by an 'unnecessary disrespectful tone' (Coe et al., 2014, p. 660). For instance, only in 2018, it was reported that 84% of Americans have experienced episodes of incivility online, with a frequency of about 11 times per week (KRC Research, 2018). Online incivility can lead users away from democratic discussions and fuel a general sense of dissatisfaction towards political-public discussions (Anderson et al., 2014). Uncivil online interactions may fuel the online radicalization phenomena, affecting users' perceptions and increasing risk perceptions (Anderson et al., 2014) generating anger, anxiety, and mental distress or fuelling other kinds of aggressive communication (Gervais, 2015).

Studies of online interactions have strongly stressed the mass effects of online public discussions, the polarized dynamics within SNs. However, the aspects that seem less investigated in online public interactions are those that explore the role of the frame used by the source on SNs and specific emotional citizens' responses, according to their individual moral system. Examining individual moral antecedents, in relation to the emotional effects elicited by the specific types of communication can be a strategy in order to clarify the dynamics of online interaction on ethical issues and what may elicit certain emotional responses. Indeed, specific emotions may represent a relevant indicator for understanding the effects of online institutional communication on citizens (e.g., Brady et al., 2017).

The aim is therefore to explore with a psycho-social approach, the role of the source's frame (Feinberg & Willer, 2015) on users' emotional responses (Graham et

al., 2009) within the functioning of the individual moral system in online public discussions on ethical issues (Paciello et al., 2021; D'Errico & Paciello, 2018; 2019).

1.1. Toxic and prosocial emotion

According to the psycho-social literature emotional activations can be predictors of enacted behaviour or affect the individuals' motivational states (Haidt, 2001). Extensive research in relation to stimuli presentation has adopted the General Aggression Model (GAM), whereby aggressive priming may elicit aggressive thoughts, emotional responses and behaviour, increasing the accessibility of these triggers (Anderson & Bushman, 2002; 2001; Anderson & Huesmann, 2007). Anderson and colleagues provide evidence of possible factors for the emergence of aggressive behaviour, including the emotional arousal that may occur after the interpretation of a given event or stimulus (Anderson et al., 2010). As well as repeated exposure to certain aggressive stimuli may fuel the accessibility of hostile opinions, beliefs or emotional reactions (e.g., increase in hostile emotions: Burnay et al., 2022; Anderson & Bushman, 2002; 2018), the same could happen when it concerns communicative online stimuli. This is even more so when we reflect on the pervasiveness of interactions in virtual environments.

Particularly in relation to specific emotions such as anger or contempt (Anderson et al., 2010), it has been argued that these emotions might fulfil a dual function: antisocial, aggression-related or prosocial one (Anderson et al., 2010; Horberg et al., 2011; Rozin et al., 1999). Despite the evidence, prosocial and antisocial behaviours are not systematically opposing behavioural tendencies. An example is the possibility of being aggressive or hostile but doing so in order to defend someone in a difficult state (e.g., empathetic anger; Kam & Bond, 2009; Hoffman, 2008).

Other studies similarly show that emotions functional for aggression can also act in a prosocial function. In fact, it has been argued that the triad anger-disgust-contempt may fulfil a function in response to a perceived violation (CAD or third party anger), configuring a type of reaction akin to the empathic anger felt at a perceived injustice perpetrated against someone in a state of need (Hoffman, 2008; Rozin et al., 1999). Other researchers, adopting the same theoretical perspective (GAM, Anderson & Bushman, 2002), further show that the presentation of prosocial cues as games were positively related to helping behavior (Greitemeyer & Mügge, 2014; Gentile et al., 2009).

Different kinds of emotions such as empathy, compassion and sadness are instead directly associated with prosocial behaviour evoking help or comfort to someone (Eisenberg et al., 1989). These emotions in particular are often defined as prosocial emotions, related to care and protection, linked to actions aimed at reducing the victims' state of suffering (Haidt, 2003; Batson, 1987; Dovidio, 1984; Hoffman, 1982).

Current researches dealing with emotions in online contexts have adopted strategies to map users' emotional reactions, as well as specific social media metrics using

also reactions (i.e., categorical representations of emotional states) comparing these with sentiment analysis (Poecze et al., 2018) or specific comment markers (Herring & Dainas, 2017).

Other studies by quali-quantitative methods have investigated online discussions on ethical issues based on social-cognitive approach, including analyses of the emotions conveyed by users through their comments (D'Errico & Paciello, 2019; Paciello et al., 2021). Similarly, other recent studies have addressed moral emotions related to online phenomenon (e.g., online shaming; Blitvich, 2022).

Nevertheless, few studies jointly examine institutional communications on ethical issues and the emotional responses of citizens. Emotions may represent an important factor for understanding the effectiveness and persuasiveness of certain types of messages conveyed in online contexts (Feinberg & Willer, 2013). Taking into account the institution's responsibility in online communication processes, especially when it involves ethical issues (Ibrahim et al., 2018), it may be interesting examining users' emotions.

It can be likewise useful to explore citizens' emotional responses towards communications in relation to each individual moral system in order to understand how and whether these individual systems could interact with different types of communications eliciting distinct emotional activations.

1.2.   Moral frame and moral motivational system

Although studies on online interactions capture trends in users' mass opinions, citizens' political engagement or election-related support, the aspects concerning the emotional citizens' effects of online moral communication styles are less investigated, especially about one of the most discussed moral issues on social networks: immigration (Chung & Zeng, 2016).

Language, especially linked to moral rhetoric, can be used creatively to persuade and change people's beliefs (Pizarro et al., 2006; D'Errico et al., 2022). Moral framings are defined as a technique in which an issue is framed consistent with the moral values of those who receive such content (Feinberg & Willer, 2013). Such as morality may play an influential role in training attitudes and behaviors, it is not surprising that the moral frame can be a strong persuasive tool, especially in the perspective of enhancing moral emotions (Feinberg & Willer, 2019).

Even though some studies have demonstrated the varying effectiveness of moral reframing, potential moderating factors that strengthen or weaken the frame effect can be traced, such as individual moral foundations. Indeed, from the perspective of the presentation of moral activating stimuli, some authors have investigated the effect related to the presentation of different framed messages according to Moral Foundation Theory (MFT: Graham et al., 2009; Feinberg & Willer, 2015; Clifford et al., 2015; Clifford, 2019). MFT initially identified five moral domains: care, fairness, loyalty, authority, purity (Graham et al., 2008). The moral domains explain different

moral evaluations regarding various cultures and political orientations (Haidt & Joseph, 2007; Graham et al., 2013). The moral foundation of care is related to promoting care and sensitivity for others suffering; the moral foundation of fairness focuses on ensuring the fair treatment of others and justice. The other foundations (authority, loyalty, and purity) emphasize aspects related to community: the moral foundation of ingroup-loyalty is centred on promoting the interests of the group; the moral foundation authority-respect emphasises following authority, tradition, and support toward a hierarchical social structure; the moral foundation of purity-sanctity is focused on adherence to standards of decency, particularly influenced and rooted in different cultural contexts (Feldman, 2021; Schwartz, 2017). The five Moral Foundations are typically mapped on two different dimensions, with harm-care and fairness-reciprocity defined as individualizing foundations, while loyalty to the group, respect for authority and purity-sanctity as binding foundations (Graham et al., 2009; 2011; 2012; Weber & Federico, 2013). The first ones are often transversal to individuals, the second ones may vary across cultures and contexts.

Moral rhetoric can be a strategy through which foster persuasion, but likewise a certain frame that is consistent with someone's moral values can exacerbate hostility in those who have a different moral orientation (Feinberg & Willer, 2013). In terms of the emotional effects elicited by a given frame, forms of communication related to caring for other or to communication styles that emphasize the sense of "we" are more effective in promoting moral emotions associated with caring and suffering (D'Errico et al., 2022; D'Errico, 2020; Miller & Cushman, 2013, Haidt & Joseph, 2004; Haidt, 2001) or empathic anger towards those in a state of need (Gutierrez & Giner-Sorolla, 2007; Kam & Bond, 2009; Rozin et al., 1999). At the same time, communications that highlight moral violations or the perceived violation of rights that are inconsistent with one's moral domain may induce other-condemning emotions such as anger, contempt, disgust (Horberg et al., 2011; Hoffman, 2008; Haidt, 2012; Rozin et al., 1999).

1.3. Moral frame and political orientation

Other researches, stressing the importance of the construction of the moral frame, argue its effects on the possible influences of the individual moral system and political orientation. Some authors have specifically addressed the MFT (Graham et al., 2008) according to individual political orientation and have shown that individual moral domains may also reflect personal political orientation (Graham et al., 2009; 2011; 2012). Liberals have been shown to more strongly support the foundations of caring and fairness, and based many of their political attitudes on compassion and social justice (Haidt, 2012). Conservatives, on the other hand, more strongly support the foundations of loyalty, authority, and sanctity, founding many of their political positions on patriotism, traditionalism, and purity (Caprara et al., 2006; Haidt & Joseph, 2007).

Embedding this perspective within moral frames, a message that employs certain moral rhetoric such as Care or Fairness is more persuasive for liberals, conversely a frame that reflects moral values such as Authority, Loyalty or Purity is more persuasive for conservatives (Feinberg & Willer, 2013; Clifford & Jerit, 2013). In addition to the persuasive effect, this link is also evident in the use of arguments consistent with one's political orientation (Care & Fairness- liberals; Authority, Loyalty & Purity - conservatives; Feinberg & Willer, 2015). It has also been shown that the effectiveness of moral framing depends on the fit and consistency of the values conveyed by the message with those held by the target audience (Day et al., 2014). It has been found from the perspective of moral framing that constructing an appeal in support of something (seemingly far from the recipient's political orientation) that includes a consistent value to the audience is more persuasive (e.g., support for same-sex marriage framed on the value of patriotism will be more persuasive on conservatives than one focused on fairness; Feinberg & Willer, 2015). In order to sort the literature presented that has addressed moral emotions, moral frames, and moral motivations, we present a table of the work mapped in this paper (Table 1).

Table 1. Cited works about emotions, moral frame, and moral system

	Author	Methodology
Moral emotion	Haidt, 2001	Review
	Anderson & Bushman, 2002; 2001	Review
	Anderson & Huesmann, 2007	Review
	Anderson et al., 2010	Meta-analysis
	Burnay et al., 2022	Review
	Horberg et al., 2011	Dissertation
	Rozin et al., 1999	Quasi-experiment
	Kam & Bond, 2009	Questionnaire
	Hoffman, 2008	Review
	Current work aim	
Online emotion	Poecze et al., 2018;	Content analysis
	Herring & Dainas, 2017	Sentiment analysis
	D'Errico & Paciello, 2019	Content analysis
	Paciello et al., 2021	Content analysis
	Blitvich, 2022	Content analysis
	Current work aim	

	Author	Methodology
Moral Motivation	Feinberg & Willer, 2013; 2015; 2019	Quasi experiment
	Graham et al., 2008; 2009	Questionnaire
	Graham et al., 2011; 2012, 2013	Questionnaire; Questionnaire; Review
	Feldman, 2021	Review
	Horberg et al., 2011	Dissertation
	Weber & Federico, 2013	Questionnaire
	Caprara et al., 2006	Questionnaire
	Haidt & Joseph, 2007	Dissertation
	Rozin et al., 1999	Quasi-experiment
	Schwartz, 2017	Review
	Clifford et al., 2015	Quasi-experiment
	Haidt, 2012	Review
	Current work aim	
Moral frame	Feinberg & Willer, 2013; 2015; 2019	Content analysis
	Clifford & Jerif, 2013	Quasi-experiment
	Clifford et al., 2015	Quasi-experiment
	Clifford, 2019	Quasi experiment
	Current work aim	
Political orientation	Feinberg & Willer, 2013; 2015; 2019	Quasi experiment
	Caprara et al., 2006	Questionnaire
	Graham et al., 2012	Questionnaire
	Haidt & Joseph, 2007	Dissertation
	Clifford et al., 2015	Quasi-experiment
	Haidt, 2012	Review
	Clifford, 2019	Quasi-experiment
	Current work aim	

2.   AIM AND HYPOTHESIS

On the basis of these theoretical assumptions through a psycho-social approach, the aim of the work is to explore firstly the emotional effect linked to different communicative frames that convey ethical issues (on the theme of immigration); the second aim is to understand whether and if some specific emotional effects can also be explained in the light of more strictly individual dimensions such as MFT and political orientation in a context that simulates the online dynamics of SNs in an ecological way. Consistent with some studies dealing with moral frames (Caprara et al., 2006; Feldman, 2021; Schwartz et al., 2010; Schwartz, 2007; 2017), we will use:

- Helping frame for content that conveys issues related to helping and accepting migrants, often associated with the moral domains of care and fairness (individualizing foundation);

- Safety frame for content dealing with issues of safety, security, and law enforcement, which may draw on the moral domains of authority, loyalty, and purity (binding foundation).

The hypothesis underlying the work:

HP1: The Helping frame message elicits other-suffering emotions (empathy, compassion, and sadness), while the Safety frame message elicits other-condemning emotions (contempt, anger, disgust, outrage, and annoyance);

HP2: The second hypothesis is related to the analysis of the emotional responses triggered by the message types. Considering individual moral motivations and possible relationships with political orientation, the hypothesis is that the individual moral dimension could help to better understand the users' emotional responses according to the specific moral frame presented.

3.   METHODS

3.1.   Sample

The sample was invited to fill-in two online surveys in two different phases (10 days later). The overall convenience sample consisted of 329 adult subjects who completed the first online survey. The first sample is composed by students and external participants; students in turn recruited a non-student participant of the opposite gender to their own, through snowball sampling. The sample of the first phase (Mage=37.3 years, DSage= 12.3) consists of 57.1 % women and 42.5 % men. 55.3 % of the subjects has a high school diploma or less, 37.1 % of the initial sample has a bachelor degree or a master degree, and 7.6 % has continued with post-graduate studies. During the second phase the participants were 306 (attrition= 23 subjects). Gender descriptive statistics are presented below (Table 2).

Table 2. Sample Descriptive statistics

	Phase 1		Phase 2	
Sample	**N**	**%**	**N**	**%**
Male	139	42.5%	126	41.2%
Female	188	57.1%	179	58.5%
Other	1	0.3%	1	0.3%
Total	329	100%	306	100%

Concerning the geographical origin of the sample, this was divided into the five areas, according to ISTAT parameters (Northwest, Northeast, Centre, South, Islands,

outside Italy). The descriptive statistics on geographical location are presented below (Table 3).

Table 3. Sample geographical origin

	Phase 1		Phase 2	
Sample	**N**	**%**	**N**	**%**
Northwest	99	30.1%	92	30.1%
Northeast	55	16.7%	49	16%
Centre	98	29.8%	92	30.1%
South	39	11.9%	36	11.8
Island	35	10.6%	34	11.1%
Outside Italy	3	0.9	3	0.9%
Total	329	100%	306	100%

3.2. Procedure

Participants first viewed and sent their informed consent to take part in the research. Each person who agreed to participate to the research was invited to recruit another participant of the opposite sex, in order to balance gender sample. In the pre-assessment phase, each participant received an online survey and entered an anonymous code, their gender, year of birth, political orientation and filled-in the Moral Foundation Questionnaire scale (Bobbio et al., 2011).

After ten days from the first questionnaire, the participants have filled-in a second online survey, where the quasi-experiment is developed.

Quasi-experiment is an ecological procedure in which researchers do not have the same degree of control as in a real experiment. In this way, an effort was made to find a robust alternative as similar as possible to a real experiment through random assignment of conditions.

This quasi-experiment is a between-subjects design and it is structured into three conditions. Each condition has been included in three different links, containing three distinct frames that have been drawn up in order to create and to simulate an online interaction in an ecological way. Those who received a specific link containing the communication scenario forwarded it to the external participant who was introduced to the research. The sample was further balanced by communicative scenarios. After reading the post, each participant entered reactions, possible comments, and intentions to share. Then each participant added the emotions felt after reading the post.

3.3. Measures

During the first online survey, participants included personal information (age, gender, and political orientation).

Independent variables: Moral Foundation Questionnaire (MFQ). Then they completed the MFQ, (Bobbio et al., 2011: α=.71). The scale is divided into two different dimensions: the first one aims to investigate the relevance of the moral domain, consisting of 15 items and one control item (Q. When you have to decide whether something is right or wrong, how relevant are the following considerations for you?; e.g. item. 'Whether someone has suffered emotionally or not') on a Likert scale from 1 (Not at all relevant) to 5 (Totally relevant).

The second is based on 15 items and a control item and it provides the degree of agreement with certain statements (Q. Please read the following statements and indicate your degree of agreement or disagreement; e.g., item 'Compassion for those who suffer is the most important virtue') on a Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). The Cronbach's alpha of the scale used is good, α=.86.

Online frame. The stimuli were formulated starting from the real online experience; the posts were first extrapolated from the original sources (institutional actors of the Italian context) and then redefined in order to reflect their content. One is related to an institutional-governmental communication, calling for a sense of responsibility of European States and justice, starting from an Italian political conservative source (Safety frame, Figure 1); the second refers to the victims of the topic, migrants; it focuses on inclusion, help and taking a perspective of those who are in a state of difficulty, representing a more liberal perspective (Helping frame, Figure 2). In addition to these two messages, a control message was added; this was inspired by a super-partisan journalistic source (Figure 3).

The messages were stylistically composed in order to make them credible and reliable, by graphically replicating the posts of an online context. For all posts the source was kept identical, and as general and broad as possible to avoid distortions due to a specific source.
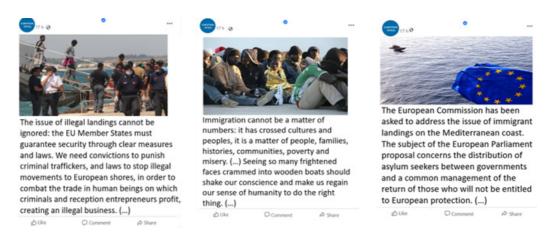

Figure 1. Safety Frame

Figure 2. Helping Frame

Figure 3. Control message

Political orientation. The users' political orientation was divided into three subgroups: liberal, conservative and other/not specified (none or apolitical; e.i., open answer: "I do not identify myself in any party").

Dependent variable. The general emotions felt after reading the message (Q. After reading the message, what emotion did you feel?), rated on a Likert scale from 1 (Not at all) to 5 (Completely).

The emotions investigated were: empathy, compassion, sadness, anger, indignation, disgust, contempt, annoyance. These emotions on the basis of Haidt's (2001) model of moral emotions were grouped as follows:

- Other-suffering emotions (empathy, sadness, and compassion; α: .77)
- Other-condemning emotions (anger, disgust, contempt, outrage, and annoyance; α: .82).

3.4.   Analysis Plan

As a preliminary analysis, a control on the normality of distribution of moral domains was performed. Subsequently, the distribution of the overall sample on political orientation was explored.

Afterwards, gender differences between the different emotional activations and the Moral Domains were assessed through correlations. Finally, it was performed the manipulation check conveyed by the messages.

In order to verify the first hypothesis concerning the emotions elicited by the different frames, we proceeded with a multivariate analysis of variance; the three communicative frames were included as independent variables and the different emotional activations other-suffering (empathy, compassion, and sadness) and other-condemning (contempt, anger, disgust, outrage, and annoyance) were explored as dependent variables.

For the second hypothesis, regarding the role of moral domains (Graham et al., 2008), several linear regressions were run, each subdivided by frame type and political orientation (liberal, conservative, and other). The five moral domains (Care, Fairness, Loyalty, Authority, and Purity) were included as independent variables and the other-suffering and other-condemning emotions as dependent variables.

4.   RESULTS

Preliminary Analysis

The analyses were performed with the statistical software IBM-SPSS 27. As a preliminary analysis, the normality distribution of the moral domains was tested for Skewness and Kurtosis (Table 4).

Table 4. Descriptive statistics for Moral Domains

Moral Domain	M	DS	SK	K
Care	4.88	.65	- 1.25	2.24
Fairness	4.85	.58	-.734	1.15
Loyalty	3.97	.82	-.202	-.130
Authority	3.30	.95	-.026	-.324.
Purity	3.19	.99	.179	-.229

The distributions of the moral domains are generally good, only the domain of Care shows a kurtosis slightly higher than 2. The descriptive statistics according to political orientation show that the sample is mainly liberal (Table 5). It is arguable that the slightly higher kurtosis of Care's moral domain can also be explained in terms of the prevalent liberal political orientation (Graham et al., 2009)

Table 5. Descriptive statistics for political orientation

	Phase 1		Phase 2	
Political orientation	N	%	N	%
Liberal	165	50.2%	150	49 %
Conservative	62	18.8%	59	19.3 %
Other	102	31 %	97	31.7 %
Total	329	100%	306	100%

To explore effects due to the subjects' geographic origin, an Anova was performed, including as independent variables the moral frames and the five Italian geographic areas, and as dependent variables the two sets of moral emotions. Results showed no main effect of geographic origin of the sample nor interaction with moral messages. In order to understand the type of relationship between moral domains and emotions, correlations were performed according to gender (Table 6).

Table 6. Correlation between Moral Domains and emotions by gender

	Moral Domain				
Emotions gender difference	Care	Fairness	Ingroup	Authority	Purity
MALE					
Other-suffering emotions	.246**	.224*	.024	-.192*	-.055
Other-condemning emotions	.173	.167	.010	-.120	-.058
FEMALE					
Other-suffering emotions	.337**	.239**	.062	.030	.038
Other-condemning emotions	.225**	.235**	.130	.121	.145

NOTES: **p<.01; *p<.05.
*Other Suffering Emotions: empathy, compassion, sadness.
**Other Condemning Emotions: anger, contempt, disgust, outrage and annoyance.

Manipulation check

Afterwards, the three messages were tested by the manipulation check, in relation to the theme (Security and Help; Table 7). The participants believe that the message of Safety conveys the theme of Security (M= 3.00; $F_{(2,306)}$=15.16; p<.000), while the message related to the helping conveys Help (M= 3.84; $F_{(2,306)}$=60.23 ;p<.000), as well as the control message was confirmed to be informative (M= 3.35; $F_{(2,306)}$=28.01; p<.000) as supported by the post hoc (Tukey's-b).

Table 7. Manipulation check about beliefs of messages

	Online frame	M	SD
Security	Safety	3.00	1.17
	Helping	2.16	1.07
	Control	2.61	.99
Help	Safety	2.18	1.13
	Helping	3.84	1,03
	Control	3.14	1.08
Information	Safety	2.29	1.05
	Helping	3.10	1.15
	Control	3.35	.95

Emotions elicited by the messages

The MANOVA shows a significant difference in the other-suffering emotions for the Helping frame and the Safety frame compared to the control ($F_{(2,306)}$= 6.14; p<.002). Furthermore, the Safety message exhibits a principal effect on other-condemning emotions ($F_{(2,306)}$= 19.36; p<.000; Table 8).

Table 8. Descriptive statistics of emotions towards frame

Frame message	N	Other-Suffering emotions		Other-Condemning emotions	
		M	SD	M	SD
Safety	102	2.90	.90	2.32	.92
Helping	100	3.15	.93	1.94	.68
Control	104	2.69	.99	1.62	.78

Based on the MANOVA, HP1 appears to be partially confirmed. It is possible to confirm that Safety framing elicits other-condemning emotions, while there are no significant differences between the Help and the Safety frame on other-suffering emotions.

How moral domain impact differently on emotional responses

To test HP2, several linear regressions were performed in order to understand the

impact of Moral Foundation on the emotional responses according to the specific frame and the individual political orientation (liberal, conservative, and other/not specified). Each regression was split for different frames and political orientation. The first contains the moral domain of care and fairness (Individualizing Moral Foundation) as independent variable and other-suffering emotions as dependent variable; the second was performed with Moral Foundations of ingroup, authority, and purity (Binding Moral Foundations) on other-suffering emotions. The next regressions were performed in the same way but inserting as dependent variable other-condemning emotions (Table 9).

Table 9. Relation between individualizing and binding Moral Foundations with emotions

Message / Moral Foundation		Helping-frame				Safety-frame			
political orientation		Liberal		Conservative		Liberal		Conservative	
		β std	R² adj	β std	R² adj	β std	R² adj	β std	R² adj
Individualizing	Care/Harm								
	Other Suffering*	.556	.234			.364+	.090		
	Fairness/ Reciprocity								
	Other Suffering								
Binding	Ingroup /Loyalty								
	Other Suffering*			.656	.147				
	Authority/ Respect								
	Other Suffering*								
	Purity/Sanctity								
	Other Suffering*					.425	.037		

NOTES:
*__Other Suffering Emotions__: empathy, compassion, sadness. + These emotions show a positive correlation with a subset of Other Condemning emotions (anger and outrage) within the Security frame and liberal political orientation ($p < .002$). Even anger together with outrage are activated in relation to Care moral domain.
**__Other Condemning Emotions__: anger, contempt, disgust, outrage and annoyance. All models are significant ($p<.05$).
In the table we show only the significant regressions, related to the other-suffering emotions.

The results show that the activation of care and fairness is associated with higher other-suffering emotions for subjects who have a liberal political orientation and read the Helping frame. R^2 explains 23.4 % of the model. The same pattern occurs for the Safety message, but the effect is reduced, R^2 explains 9% for this model.

Instead concerning conservative political orientation and the message of Security, the ingroup domain affects other-suffering emotions; the model explains 14.7%.

Regarding other-condemning emotions and moral domains, no significant link emerged. Assuming that there may be a specific relationship between individual moral domains and other-condemning emotions (Graham et al., 2012; 2009) and in

order to explore these particular types of emotions, we performed other simple linear regressions, inserting only one domain at time as the independent variable for other-condemning emotions (Table 10).

Table 10. Relation between other-condemning emotions and singular Moral Foundation

Message / Moral Foundation	Helping-frame				Safety-frame			
political orientation	Liberal		Conservative		Liberal		Conservative	
	β std	R² adj	β std	R² adj	β std	R² adj	β std	R² adj
Fairness/Reciprocity								
Other condemning**					.282	.061		
Purity/Sanctity								
Other condemning**							.579	.275

The second set of regressions show that other-condemning emotions are instead activated regarding the moral domains of fairness, when those with a liberal orientation read the Safety-frame.

The moral domain of purity affects the emotional other-condemning responses in those who have a conservative political orientation and read the Safety-frame. The last model related to the other-condemning emotions and purity explains 27.5 %. Finally, with regard to the authority and ingroup domains, no significant   emerged. The same also occurred with the political orientation other/unspecified and for the control condition.

5.   DISCUSSION

When we discuss about moral communication, there are two orders of issues to be addressed: the first concerns the construction and semantic characteristics of communication; the second involves the influence of recipients' individual moral system and the emotional effects of moral communications.

Although the results are partially consistent with the literature (Feinberg & Willer, 2019; Graham et al., 2012; 2013), the study further helps to clarify how emotions elicited by reading different moral frames, can be influenced by individuals' distinct moral activations.

The Safety and the Helping messages were reformulated by real-world political actors, starting from actual online posts. Despite this, it was not expected that the Safety frame would elicit emotions related to condemnation, especially in those with a conservative political orientation. On the contrary, it could be assumed that this message would elicit other-suffering emotions especially in reference to moral domains typically closer to conservatives (Graham et al., 2009; Haidt et al., 2009; Feinberg & Willer, 2019).

In addition, a positive correlation of the other-suffering emotions (Care domain

and liberal orientation) with a subset of other-condemning, such as anger and outrage, emerged on both the Helping and the Safety frame. This can lead to the assumption that anger and outrage (included within the group of other-condemning emotions), experienced after reading the two different frames by those with a liberal political orientation, may be emotions with an empathic function (Hoffman, 2008; Rozin et al., 1999).

The Helping-frame and the Security-frame resonate differently with different individual moral activations. It was assumed that other-condemning emotions might be activated in a liberal audience when reading a Safety frame, or in a conservative audience when reading the same frame (Feinberg & Willer, 2019). Surprisingly, Purity alone affected other-condemning emotions when reading a message such as Safety, this confirmed that participants with higher levels in Purity tend to activate negative emotions in relation to a Safety frame, not in relation to a helping or neutral one. How the same set of emotions is elicited differently depending on the narrative construction of the message and individual moral motivations?

A first result that is not exactly in line with the literature concerns the functioning of other-suffering emotions on the Safety message. In fact, in this scenario citizens with a liberal political orientation experience these emotions, but it is further possible to note an impact of the moral domain of purity (Feinberg & Willer., 2019; Day et al., 2014; Graham et al., 2009; 2012).

What can be also discussed is that the safety message elicits the same type of emotions in citizens, but the emotional responses can be explained differently based on the individual moral system. Conservative political orientation and strong activations of the purity domain elicit other-condemning emotions; similarly and differently, liberal political orientation and the fairness domain elicit the same emotions, both acting for the safety message. Also this second result is not exactly consistent with the literature (Feinberg & Willer, 2019; 2015): given that the safety message was structured according to a conservative political actor, one might have expected that this type of message would not elicit emotions of condemnation by conservative citizens.

It is noteworthy to appreciate why certain emotions are felt in public online discussions on ethical issues. Possible explanations for many online phenomena have been attributed to contagion or filter bubble (Bruns, 2017). Underlying emotional responses, what moral motivations are involved? This study attempts to take a first step in addressing this question, recognizing that the best approaches would be those that employ quantitative as well as qualitative methods directly on public discussions.

Emotional activations may affect the behaviours that are enacted (Anderson & Huesmann, 2007; Anderson & Bushman, 2001) or these may have an impact on individual moral judgments (Horberg et al., 2011), particularly in terms of online interactions in which communication dynamics may also negatively affect emotional contagion (Brady et al., 2017; Kramer et al., 2014; Fowler & Christakis, 2008).

We may often consider the effects of online polarizations, tracking possible under-lying causes. It is therefore essential to consider complementary approaches taking into account different causes, visible effects of these phenomena but also what may feed these from inside, such as the sender's choice of communication frame within possible recipients' individual factors.

The strategies through which relevant issues such as reception themes are conveyed are key to establish a constructive dialogue with citizens and to bring into civil online discussions. A message about immigration referring to safer laws and boundaries can trigger hostile emotional reactions, which can lead to unjustified hostile, aggressive discussions, and ideological radicalization (Paciello et al., 2021).

The fostering of constructive interactions on ethical issues should start from appropriate communications that do not encourage negative emotional activation but rather promote trust and civil interactions (Antoci et al., 2018). The use of certain linguistic constructions and meanings is crucial, since these messages have an impact on the individual motivational system in those who receive them, especially, but not only- when the source plays a public role and conveys the protection of someone in difficulty (D'Errico et al., 2022). These results also highlight the communicative responsibility of institutional leaders towards citizens in online contexts in promoting cooperation or moderating citizens' negative emotions.

5.1. Limits and next step

It is therefore necessary to consider the limitations of the present study. First of all, the sample appears to have mainly a left-handed political orientation. Despite this, even among conservatives, some emotional effects are evident with respect to a specific moral domain such as purity.

Furthermore, regarding the third political orientation of the participants (other/unspecified), no significant findings emerged. This arguably suggests that those who do not identify with any political orientation may find the Helping frame and Security one not emotionally activating simply because these moral rhetorics would reflect the two political orientations (conservative and liberal, tout court) towards which they are not reflected. It would be interesting in future studies to offset the sample also by political orientation.

Another possible limitation of the work is that it gathers the emotions felt after reading the message (and in addition mapping also the reactions) through online surveys (Brody & Hall, 2008). Future studies could consider combining these techniques with other methods of investigating emotions.

In addition, it is possible that the participants were able in some way to dissimulate the emotions felt and not only that, for social desirability reasons (Bobbio & Manganelli, 2011). Especially about the chosen topic, this could be a very important aspect not to be overlooked.

Moreover, it is important to underline that the question regarding emotions felt

is likely to be a generic question. This choice was made to specifically understand the emotions felt as a function of the message read, without further specification. In future studies, it will also be useful to clarify towards whom or what the question is directed. For example, the emotions felt either toward the source speaking, or toward the object of the discourse, i.e., refugees.

It might be useful to map the qualitative-responses, i.e., the comments of the users, in order to map possible correspondences between the writing, the moral functioning, and the emotions.

It should be noted that the sample is Italian; this may have affected the emotional reactions aroused by the different messages, based on real online speeches of Italian institutional sources. Consistent with what was discussed, it would be useful to extend this study in a cross-cultural perspective or to distinguish the sample by country, in order to understand if the emotional effects of the messages can be generalized or whether they reflect the sample's geographic origin or if the effects depend on implicit identification with the rhetoric used by Italian institutions. The Italian sample could be morally activated differently.

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European Racial Hoaxes and Sterheotypes' recently founded by 'Challenge for Europe'
call for Project, Compagnia San Paolo (CUP: B99C20000640007)
https://www.irit.fr/sterheotypes/people/.

REFERENCES

Anderson, A. A., Brossard, D., Scheufele, D. A., Xenos, M. A., & Ladwig, P.
(2014). The "nasty effect:" Online incivility and risk perceptions of emerging
technologies. *Journal of Computer-Mediated Communication, 19*(3), 373-387.
https://doi.org/10.1111/jcc4.12009

Anderson, C. A., & Bushman, B. J. (2001). Effects of violent video games on
aggressive behavior, aggressive cognition, aggressive affect, physiological
arousal, and prosocial behavior: A meta-analytic review of the scientific
literature. *Psychological science, 12*(5), 353-359.
https://doi.org/10.1111/1467-9280.00366

Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of
Psychology, 53*, 27–51. https://doi.org/10.1146/annurev. psych.53.100901.135231

Anderson, C. A., & Huesmann, L. R. (2007). Human aggression: A social-cognitive
view. The Sage handbook of social psychology, 259-287.

Anderson C. A., Shibuya A., Ihori N., Swing E. L., Bushman B. J., Sakamoto A.,
Rothstein H. R., Saleem M. (2010). Violent video game effects on aggression,
empathy, and prosocial behavior in Eastern and Western countries: A meta-
analytic review. *Psychological Bulletin, 136*(2), 151–173.
https://doi.org/10.1037/a0018251

Anderson, C. A., & Bushman, B. J. (2018). Media violence and the General
Aggression Model. *Journal of Social Issues, 74*, 386–413.
https://doi. org/10.1111/josi.12275

Antoci, A., Bonelli, L., Paglieri, F., Reggiani, T., & Sabatini, F. (2019). Civility and
trust in social media. *Journal of Economic Behavior & Organization, 160*, 83-99.
https://doi.org/10.1016/j.jebo.2019.02.026

Bail, C. A., Argyle, L. P., Brown, T. W., Bumpus, J. P., Chen, H., Hunzaker, M. F., ...
& Volfovsky, A. (2018). Exposure to opposing views on social media can increase
political polarization. *Proceedings of the National Academy of Sciences, 115*(37), 9216-
9221. https://doi.org/10.1073/pnas.1804840115

Batson, C. D. (1987). Prosocial motivation: Is it ever truly altruistic?. In *Advances in
experimental social psychology* (Vol. 20, pp. 65-122). Academic Press.
https://doi.org/10.1016/S0065-2601(08)60412-8

Bennett, W. L., & Iyengar, S. (2008). A new era of minimal effects? The changing
foundations of political communication. *Journal of communication, 58*(4), 707-731.
https://doi.org/10.1111/j.1460-2466.2008.00410.x

Blitvich, P. G. C. (2022). Moral emotions, good moral panics, social regulation, and online public shaming. *Language & Communication, 84*, 61-75. https://doi.org/10.1016/j.langcom.2022.02.002

Bobbio, A., Nencini, A., & Sarrica, M. (2011). Il Moral Foundation Questionnaire: Analisi della struttura fattoriale della versione italiana. *Giornale di Psicologia, 5*(1), 7-18.

Bobbio, A., & Manganelli, A. M. (2011). Measuring social desirability responding. A short version of Paulhus' BIDR 6. *Testing, Psychometrics Methodology in Applied Psychology, 18*(2), 117-135.

Brody, L. R., & Hall, J. A. (2008). Gender and emotion in context. *Handbook of emotions, 3*, 395-408. https://doi.org.10.4135/9781483346274.n122

Brady, W. J., Wills, J. A., Jost, J. T., Tucker, J. A., & Van Bavel, J. J. (2017). Emotion shapes the diffusion of moralized content in social networks. *Proceedings of the National Academy of Sciences, 114*(28), 7313-7318. https://doi.org/10.1073/pnas.1618923114

Brugnoli, E., Cinelli, M., Quattrociocchi, W., & Scala, A. (2019). Recursive patterns in online echo chambers. *Scientific reports, 9*(1), 1-18. https://doi.org/10.1038/s41598-019-56191-7

Bruns, A. (2017, September). Echo chamber? What echo chamber? Reviewing the evidence. In *6th Biennial Future of Journalism Conference* (FOJ17).

Bruns, A. (2019). It's not the technology, stupid: How the 'Echo Chamber'and 'Filter Bubble'metaphors have failed us. *International Association for Media and Communication Research.*

Burnay, J., Kepes, S., & Bushman, B. J. (2022). Effects of violent and nonviolent sexualized media on aggression-related thoughts, feelings, attitudes, and behaviors: A meta-analytic review. *Aggressive behavior, 48*(1), 111-136. https://doi.org/10.1002/ab.21998

Caprara, G. V., Schwartz, S., Capanna, C., Vecchione, M., & Barbaranelli, C. (2006). Personality and politics: Values, traits, and political choice. *Political psychology, 27*(1), 1-28. https://doi.org/10.1111/j.1467-9221.2006.00447.x

Coe K., Kenski K., Rains S. A. (2014). Online and uncivil? Patterns and determinants of incivility in newspaper website comments. *Journal of Communication, 64*(4), 658–679. http://doi.org/10.1111/jcom.12104

Cinelli, M., Brugnoli, E., Schmidt, A. L., Zollo, F., Quattrociocchi, W., & Scala, A. (2020). Selective exposure shapes the Facebook news diet. *PloS one, 15*(3), e0229129. https://doi.org/10.1371/journal.pone.0229129

Cinelli, M., Morales, G. D. F., Galeazzi, A., Quattrociocchi, W., & Starnini, M. (2021). The echo chamber effect on social media. *Proceedings of the National Academy of Sciences, 118*(9). https://doi.org/10.1073/pnas.2023301118

Chung, W., Zeng, D. (2016). Social-media-based public policy informatics: Sentiment and network analyses of U.S. immigration and border security.

Journal of the Association for Information Science and Technology, 67(7), 1588–1606. https://doi.org/10.1002/asi.23449

Clifford, S., & Jerit, J. (2013). How words do the work of politics: Moral foundations theory and the debate over stem cell research. *The Journal of Politics, 75*(3), 659-671. https://doi.org/10.1017/S0022381613000492

Clifford, S., Iyengar, V., Cabeza, R., & Sinnott-Armstrong, W. (2015). Moral foundations vignettes: A standardized stimulus database of scenarios based on moral foundations theory. *Behavior Research Methods, 47*, 1178-1198. https://doi.org.10.3758/s13428-014-0551-2

Clifford, S. (2019). How emotional frames moralize and polarize political attitudes. *Political psychology, 40*(1), 75-91.

Del Vicario, M., Vivaldo, G., Bessi, A., Zollo, F., Scala, A., Caldarelli, G., & Quattrociocchi, W. (2016). Echo chambers: Emotional contagion and group polarization on facebook. *Scientific reports, 6*(1), 1-12. https://www.nature.com/articles/srep37825

D'Errico, F., & Paciello, M. (2018). Online moral disengagement and hostile emotions in discussions on hosting immigrants. *Internet Research*. https://doi.org.10.1108/IntR-03-2017-0119

D'Errico, F., & Paciello, M. (2019). Online moral struggles in hosting immigrant's discourses: The underlying role of expressed anger and socio-cognitive processes. *Journal of language aggression and conflict, 7*(2), 182-209. https://doi.org/10.1075/jlac.00024.der

D'Errico, F. (2020). Humility-Based Persuasion: Individual Differences in Elicited Emotions and Politician Evaluation. *International Journal of Communication (19328036)*, 14

D'Errico, F., Bull, P., Lamponi, E., & Leone, G. (2022). Humility Expression and its Effects on Moral Suasion: An Empirical Study of Ocasio-Cortez's Communication. *Human Affairs, 32*(1), 101-117.

Day, M. V., Fiske, S. T., Downing, E. L., & Trail, T. E. (2014). Shifting liberal and conservative attitudes using moral foundations theory. *Personality and Social Psychology Bulletin, 40*(12), 1559-1573. https://doi.org/10.1177/0146167214551152

Dovidio, J. F. (1984). Helping behavior and altruism: An empirical and conceptual overview. *Advances in experimental social psychology, 17*, 361-427. https://doi.org/10.1016/S0065-2601(08)60123-9

Eisenberg, N., Fabes, R. A., Miller, P. A., Fultz, J., Shell, R., Mathy, R. M., & Reno, R. R. (1989). Relation of sympathy and personal distress to prosocial behavior: a multimethod study. *Journal of personality and social psychology, 57*(1), 55. https://doi.org/10.1037/0022-3514.57.1.55

Feinberg, M., & Willer, R. (2013). The moral roots of environmental attitudes. *Psychological Science, 24*, 56-62. https://doi.org/10.1177/0956797612449177

Feinberg, M., & Willer, R. (2015). From gulf to bridge: When do moral arguments facilitate political influence?. *Personality and Social Psychology Bulletin, 41*(12), 1665-1681. https://doi.org/10.1177/0146167215607842

Feinberg, M., & Willer, R. (2019). Moral reframing: A technique for effective and persuasive communication across political divides. *Social and Personality Psychology Compass, 13*(12), e12501. https://doi.org/10.1111/spc3.12501

Feldman, G. (2021). Personal values and moral foundations: Examining relations and joint prediction of moral variables. *Social Psychological and Personality Science, 12*(5), 676-686. https://doi.org/10.1177/1948550620933434

Fowler, J. H., & Christakis, N. A. (2008). Dynamic spread of happiness in a large social network: longitudinal analysis over 20 years in the Framingham Heart Study. *Bmj, 337*. https://doi.org/10.1136/bmj.a2338

Gentile, D. A., Anderson, C. A., Yukawa, S., Ihori, N., Saleem, M., Ming, L. K., … & Sakamoto, A. (2009). The effects of prosocial video games on prosocial behaviors: International evidence from correlational, longitudinal, and experimental studies. *Personality and Social Psychology Bulletin, 35*(6), 752-763. https://doi.org/10.1177/0146167209333045

Germani, F., & Biller-Andorno, N. (2021). The anti-vaccination infodemic on social media: A behavioral analysis. *PloS one, 16*(3), e0247642.ù https://doi.org/10.1371/journal.pone.0247642

Gervais, B. T. (2015). Incivility Online: Affective and Behavioral Reactions to Uncivil Political Posts in a Web-Based experiment. J. *Inf. Techn. Polit.* 12 (2), 167–185. https://doi.org.10.1080/19331681.2014.997416

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Spassena, K., & Ditto, P. H. (2008). Moral foundations questionnaire. *Journal of Personality and Social Psychology*. https://doi.org/10.1037/a0021847

Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of personality and social psychology, 96*(5), 1029. https://doi.org/10.1037/a0015141

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology, 101*(2), 366–385. https://doi.org/10.1037/a0021847

Graham, J., Nosek, B. A., & Haidt, J. (2012). The moral stereotypes of liberals and conservatives: Exaggeration of differences across the political spectrum. *PLoS ONE, 7*(12), e50092. https://doi.org/10.1371/journal.pone.0050092

Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013). Moral foundations theory: The pragmatic validity of moral pluralism. In *Advances in experimental social psychology* (Vol. 47, pp. 55-130). Academic Press. https://doi.org/10.1016/B978-0-12-407236-7.00002-4

Greitemeyer, T., & Mügge, D. O. (2014). Video games do affect social outcomes: A meta-analytic review of the effects of violent and prosocial video game play.

Personality and social psychology bulletin, 40(5), 578-589.
https://doi.org/10.1177/0146167213520459

Gutierrez, R., & Giner-Sorolla, R. (2007). Anger, disgust, and presumption of harm as reactions to taboo-breaking behaviors. *Emotion, 7*(4), 853.
https://doi.org/10.1037/1528-3542.7.4.853

Haidt, J. (2001). The emotional dog and its rational tail: a social intuitionist approach to moral judgment. *Psychological review, 108*(4), 814.
https://doi.org/10.1037/0033-295X.108.4.814

Haidt, J. (2003). The moral emotions.

Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus, 133*(4), 55-66.
https://doi.org/10.1162/0011526042365555

Haidt, J., & Joseph, C. (2007). The moral mind: How five sets of innate intuitions guide the development of many culture-specific virtues, and perhaps even modules. *The innate mind, 3*, 367-391.

Haidt, J., Graham, J., & Joseph, C. (2009). Above and below left–right: Ideological narratives and moral foundations. *Psychological Inquiry, 20*(2-3), 110-119.
https://doi.org/10.1080/10478400903028573

Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion.* New York: Vintage.

Horberg, E. J., Oveis, C., & Keltner, D. (2011). Emotions as moral amplifiers: An appraisal tendency approach to the influences of distinct emotions upon moral judgment. *Emotion Review, 3*(3), 237-244.
https://doi.org/10.1177/1754073911402384

Herring, S., & Dainas, A. (2017, January). "Nice picture comment!" Graphicons in Facebook comment threads. In *Proceedings of the 50th Hawaii International Conference on System Sciences*. https://doi.org.10.24251/HICSS.2017.264

Hoffman, M. L. (1982). Development of prosocial motivation: Empathy and guilt. In N. Eisenberg (Ed.), *The developmeni of prosocial behavior* (pp. 281-313). New York: Academic Press. https://doi.org/10.1016/B978-0-12-234980-5.50016-X

Hoffman, M. L. (2008). Empathy and prosocial behavior. *Handbook of emotions, 3*, 440-455.

Hoover, J., Johnson, K., Boghrati, R., Graham, J., Dehghani, M., & Donnellan, M. B. (2018). Moral framing and charitable donation: Integrating exploratory social media analyses and confirmatory experimentation. *Collabra: Psychology, 4*(1).
https://doi.org/10.1525/collabra.129

Ibrahim, E. N. M., & Ang, C. S. (2018). Communicating empathy: Can technology intervention promote pro-social behavior?—review and perspectives. *Advanced Science Letters, 24*(3), 1643-1646. https://doi.org/10.1166/asl.2018.11127

Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. *Journal of communication, 59*(1), 19-39.
https://doi.org/10.1111/j.1460-2466.2008.01402.x

Jacobson, G. C. (2006). *A divider, not a uniter*. New York: Pearson.

Kam, C. C. S., & Bond, M. H. (2009). Emotional reactions of anger and shame to the norm violation characterizing episodes of interpersonal harm. *British Journal of Social Psychology, 48*(2), 203-219. https://doi.org/10.1348/014466608X324367

Kim, S., & Kim, K. (2021). The Information Ecosystem of Online Groups with Anti- and Pro-vaccine Views on Facebook. arXiv preprint arXiv:2108.06641. https://doi.org/10.48550/arXiv.2108.06641

Kim, J. W., Guess, A., Nyhan, B., & Reifler, J. (2021). The distorting prism of social media: How self-selection and exposure to incivility fuel online comment toxicity. *Journal of Communication, 71*(6), 922-946. https://doi.org/10.1093/joc/jqab034

Kramer, A. D., Guillory, J. E., & Hancock, J. T. (2014). Experimental evidence of massive-scale emotional contagion through social networks. *Proceedings of the National Academy of Sciences, 111*(24), 8788-8790. https://doi.org/10.1073/pnas.1320040111

KRC Research (2018). *Civility in America 2018: Civility at Work and in Our Public Squares*. Available at: https://www.webershandwick.com/wp-content/uploads/2018/06/Civility-in-America-VII-FINAL.pdf (Accessed December 14, 2020).

Lawrence, E., Sides, J., & Farrell, H. (2010). Self-segregation or deliberation? Blog readership, participation, and polarization in American politics. *Perspectives on Politics, 8*(1), 141-157. https://doi.org/10.1017/S1537592709992714

Miller, R., & Cushman, F. (2013). Aversive for me, wrong for you: First-person behavioral aversions underlie the moral condemnation of harm. *Social and Personality Psychology Compass, 7*(10), 707-718. https://doi.org/10.1111/spc3.12066

Mutz, D. C. (2006). *Hearing the other side: Deliberative vs. participatory democracy*. New York: Cambridge University Press.

Paciello, M., D'Errico, F., Saleri, G., & Lamponi, E. (2021). Online sexist meme and its effects on moral and emotional processes in social media. *Computers in human behavior, 116*, 106655. https://doi.org/10.1016/j.chb.2020.106655

Pizarro, D. A., Detweiler-Bedell, B., & Bloom, P. (2006). The creativity of everyday moral reasoning. *Creativity and reason in cognitive development*, 81-98. https://doi.org/10.1017/CBO9780511606915.006

Poecze, F., Ebster, C., & Strauss, C. (2018). Social media metrics and sentiment analysis to evaluate the effectiveness of social media posts. *Procedia computer science, 130*, 660-666. https://doi.org/10.1016/j.procs.2018.04.117

Rozin, P., Lowery, L., Imada, S., & Haidt, J. (1999). The CAD triad hypothesis: a mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal of personality and social psychology, 76*(4), 574. https://doi.org/10.1037/0022-3514.76.4.574

Schwartz, S. H. (2007). Basic human values: Theory, measurement, and applications. *Revue Française de Sociologie, 47*, 249–288.

Schwartz, S. H., Caprara, G. V., & Vecchione, M. (2010). Basic personal values, core political values, and voting: A longitudinal analysis. *Political psychology, 31*(3), 421-452. https://doi.org/10.1111/j.1467-9221.2010.00764.x

Schwartz, S. H. (2017). *Individual values across cultures*.

Weber, C. R., & Federico, C. M. (2013). Moral foundations and heterogeneity in ideological preferences. *Political Psychology, 34*(1), 107-126. https://doi.org/10.1111/j.1467-9221.2012.00922.x