



Kent Academic Repository

Lalot, Fanny, Heering, Maria S., Rullo, Marika, Travaglino, Giovanni A. and Abrams, Dominic (2020) *The dangers of distrustful complacency: Low concern and low political trust combine to undermine compliance with governmental restrictions in the emerging Covid-19 pandemic.* Group Processes & Intergroup Relations . ISSN 1368-4302.

Downloaded from

<https://kar.kent.ac.uk/83824/> The University of Kent's Academic Repository KAR

The version of record is available from

<https://doi.org/10.1177/1368430220967986>

This document version

Publisher pdf

DOI for this version

Licence for this version

CC BY (Attribution)

Additional information

Versions of research works

Versions of Record

If this version is the version of record, it is the same as the published version available on the publisher's web site. Cite as the published version.

Author Accepted Manuscripts

If this document is identified as the Author Accepted Manuscript it is the version after peer review but before type setting, copy editing or publisher branding. Cite as Surname, Initial. (Year) 'Title of article'. To be published in *Title of Journal*, Volume and issue numbers [peer-reviewed accepted version]. Available at: DOI or URL (Accessed: date).

Enquiries

If you have questions about this document contact ResearchSupport@kent.ac.uk. Please include the URL of the record in KAR. If you believe that your, or a third party's rights have been compromised through this document please see our [Take Down policy](https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies) (available from <https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies>).

The dangers of distrustful complacency: Low concern and low political trust combine to undermine compliance with governmental restrictions in the emerging Covid-19 pandemic

Group Processes & Intergroup Relations

1–16

© The Author(s) 2020



Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/1368430220967986
journals.sagepub.com/home/gpi



Fanny Lalot,¹ Maria S. Heering,¹ Marika Rullo,^{1,2}
Giovanni A. Travaglino^{1,3} and Dominic Abrams¹

Abstract

People comply with governmental restrictions for different motives, notably because they are concerned about the issue at hand or because they trust their government to enact appropriate regulations. The present study focuses on the role of concern and political trust in people's willingness to comply with governmental restrictions during the Covid-19 pandemic. We conducted a survey amongst Italian and French participants ($N = 372$) in March 2020 while both countries had imposed full lockdown. Moreover, a subsample of participants reported on their actual levels of compliance one week later ($N = 130$). We hypothesised that either concern or trust should be sufficient to sustain participants' willingness to comply and actual behaviour, but that the absence of both (distrustful complacency) would reduce compliance significantly. Results supported this hypothesis. We discuss implications of the interaction between concern and trust for public behaviour strategies as the pandemic progresses.

Keywords

aversion amplification, concern, compliance, Covid-19, distrustful complacency, political trust

Paper received 29 April 2020; revised version accepted 30 September 2020.

Introduction

At the time of writing, the world faces an unprecedented pandemic of the coronavirus disease (Covid-19). The outbreak, first identified in China in November–December 2019, rapidly spread to the rest of the world. It was officially recognised as a pandemic on March 11, 2020 (World Health Organization, 2020). While the most obvious

¹University of Kent, UK

²University of Siena, Italy

³Chinese University of Hong Kong (Shenzhen), China

Corresponding author:

Fanny Lalot, Centre for the Study of Group Processes,
School of Psychology, Keynes College, University of Kent,
Canterbury CT2 7NP, UK.
Email: f.lalot@kent.ac.uk

need for scientific research concerns the development of cures or vaccines, psychological science clearly has a role to play in facilitating behavioural changes (Ijzerman et al., 2020; van Bavel et al., 2020). An increasing number of governments have imposed severe measures suppressing several constitutional rights, the most stringent form being national quarantine (or lockdown). Such lockdowns usually imply restrictions of movement for the population, except for necessity, work, and health circumstances, as well as temporary closure of schools and nonessential shops and businesses. These so-called nonpharmaceutical interventions can be very effective in limiting the spread of the virus. However, their effectiveness in democratic countries depends strongly on whether citizens comply (see Islam et al., 2020; May, 2020; Rotondi et al., 2020; West et al., 2020).

The present research aims to investigate individual and group factors influencing the willingness of individuals under lockdown to fully comply with governmental restrictions. More specifically, drawing on previous theory and research on the roles of trust and concern as drivers of behavioural intentions (Abrams & Travaglino, 2018), we investigated the interactive effect of Covid-19 concern and political trust on willingness to comply. We hypothesise that both high levels of political trust and high levels of concern should independently be sufficient to sustain compliance, but individuals who have lower levels of both trust and concern should be demotivated to comply—a condition of distrustful complacency. We now describe these variables in turn.

Complying With Restrictions Out of (Self-)Concern

It is uncontroversial to expect that people would be more willing to change their behaviour when they are more concerned about the current situation. The general positive impact of concern on behaviour change has been identified across domains, for instance, for environmental (Rhead et al., 2015), health (Iversen & Rundmo, 2002), or organisational behaviour (Rundmo & Hale, 2003).

Citizens are more likely to comply with governmental regulations when they have higher concerns regarding the issue at stake (e.g., Chmutina et al., 2014), as well as when they perceive the measure as serving a self-interest. For example, tax compliance is greater amongst individuals who believe they personally benefit from the tax system (Wenzel, 2002). In the environmental domain, drivers are also more likely to respect proenvironmental regulations (in this case: turning off their idling engine) when presented with persuasive messages highlighting self-interests (van de Vyver et al., 2018). Importantly, behaviour can be driven both by self-concern or by concern about one's group or country broadly speaking. For example, people's willingness to get vaccinated was found to increase both when they were personally at risk (i.e., self-concern) and when they were worried about protecting vulnerable others (i.e., other-concern; Vietri et al., 2011; see also Abrams & Travaglino, 2018, for the impact of national concern about social issues). In addition, in times of global crisis such as mass tragedy or natural disaster, people can experience "identity fusion" with their group, so that the border between the personal and social self tend to fade (Segal et al., 2018), and self-concern and other-concern become highly intertwined. Hence, in the context of Covid-19, we expect that people with greater concerns about the pandemic (both for themselves and others) should be more willing to comply with governmental restrictions. Of greater consequence is that people who feel relatively less concerned about the pandemic might be less motivated to comply with restrictions, potentially endangering their own and others' lives and jeopardising the collective endeavour to control the spread of the virus.

The Role of Political Trust in Compliance With Restrictions

Even individuals who feel unconcerned about the virus may be motivated by another factor—their trust in their political leadership, which could be sufficient to mitigate any personal complacency. Political trust refers to the faith people have in

their government (Levi & Stoker, 2000) and, as such, represents a form of diffuse support for the authorities (Easton, 1975). Literature on group processes shows that stronger group identification entails a more positive perception of other group members, notably as more honest and cooperative and thus more trustworthy (Brewer & Silver, 1978). Interpersonal trust hence depends, to an extent, on shared social categorisation (Brewer, 1981). By extension, political trust also depends on the perception of a shared identity with the political authority (Tyler & Degoe, 1995). In consequence, political trust is usually higher for citizens sharing party affiliation with the leadership (Hooghe & Oser, 2017; Pew Research Center, 2010), who also express greater satisfaction with the policy alternatives provided by this leadership (Levi & Stoker, 2000).

However, political trust cannot be reduced to political partisanship. First, some authors have suggested that punctual voting decision (e.g., vote for a specific presidential candidate) was a better predictor of political trust than ongoing political partisanship, as those do not necessarily align (Citrin, 1974). Second, political partisanship cannot explain the downward trends in political trust that have been observed in several countries over the past decade despite changes in the administrations and political parties in charge (e.g., Hetherington, 2005). Other factors such as resurgence of political scandals or cynical messages about politicians in mainstream media have been identified as crucial antecedents of political trust above and beyond partisanship (Levi & Stoker, 2000). Finally, strong links between partisanship and trust were most often found in countries marked by a biparty system, leading to stronger representations of “us” versus “them” and interparty conflicts—as it occurs most of the time in the USA (see aforementioned research). However, in countries with multiparty political systems, the impact of partisanship is much less straightforward, as boundaries between parties are less marked and different parties often agree on specific issues (see e.g., Givens & Luedtke, 2005; Hix, 1999; Johansson & Raunio, 2001). Recent research showed for example that levels of

partisanship were much lower in several European countries (United Kingdom, the Netherlands, Sweden, and Italy) than in the USA (Huddy et al., 2018). In sum, political trust is related to, but distinct from, political partisanship, and differently predicts a range of political views and actions.

Indeed, political trust has been found to predict different outcomes, for example, increased institutionalised engagement (e.g., voting; Hooghe & Marien, 2013) and decreased noninstitutionalised engagement (e.g., demonstrating; Kaase, 1999), as well as perceived severity of social events (Lalot et al., in press; Short, 1984). More relevant for our present purpose, political trust increases compliance with governmental demands and regulations (see Levi & Stoker, 2000, for a review). For example, Marien and Hooghe (2011) identified a positive relationship between political trust and law-abiding attitudes, so that more (vs. less) trusting citizens are more (vs. less) supportive of different laws and regulations, and less (vs. more) permissive of law-breaking behaviour. Since people who feel more lenient towards law-breaking behaviour are more likely to engage in such behaviour (e.g., Kirchler et al., 2008), low political trust is likely to be associated with lower compliance with laws (see also Tyler, 2001, 2006). Interestingly, others have shown that the positive impact of political trust on compliance is especially apparent when laws do not align with citizens’ values or do not directly benefit their self-interest. For example, Rudolph and Evans (2005) found that political trust had a stronger positive effect on acceptance of redistributive policies amongst conservatives (who were ideologically more opposed to such measures) than amongst liberals. Hence, the role of trust is particularly important when citizens do not perceive these measures as benefiting their self-interest or relieving their concerns.

Recently, an interactive effect of trust and concern on political intentions was proposed by Abrams and Travaglini (2018) with the aversion amplification hypothesis. The principle underlying this hypothesis is that the effects of concern are amplified when political trust is low. Abrams and Travaglini (2018) applied this to a context in

which British people's willingness to vote for a political change (voting for Brexit), fuelled by high immigration concern, was amplified when political trust was low. However, in the present situation, we are interested in those who are unwilling to change, which would follow from low concern. In this case, it should be the combination of low concern and low trust that anticipates a distinctive behavioural intention. We use the terminology of distrustful complacency to represent this critical combination of low trust (distrustful) and low concern (complacency). That is to say, when people are both personally complacent and distrustful of the authority that is demanding behaviour change, they should be markedly less willing to comply.

In summary, we suggest that high political trust should be sufficient to sustain willingness to comply with pandemic-related governmental restrictions (see also Baum et al., 2009), regardless of people's personal level of concern. Similarly, having a high level of concern should be sufficient to motivate compliance even amongst those who feel distrustful of their government. However, in the absence of both concern and trust, there should be a distinctively lower level of willingness to comply, as people's distrustful complacency gives them little reason for doing so.

The Present Study

This two-part study tested the hypothesised interactive impact of concern and political trust on compliance with governmental restrictions related to the Covid-19 outbreak in two European countries: France and Italy. At Time 1 (T1), all participants (details in what follows) completed a first online survey where we measured their political trust, concern, and willingness to comply with restrictions. A subsample of participants was then recontacted approximately 1 week later to report to what extent they had complied with restrictions during that week. Hence, the study allowed us to test the effect of concern and trust on willingness to comply, and to prospectively test self-reported compliance. In addition to this

main hypothesis, we explored a second outcome at the Time 2 (T2) part of the survey, that is, how participants evaluated noncompliant individuals. We controlled for political partisanship in all analyses (see following lines) to better distinguish the role of political trust and partisanship.

Current Political Situation in France and Italy

To better understand the effects of political trust and its relation to political partisanship in this study, it is important to have in mind the current political situation in France and Italy. France is a unitary semipresidential constitutional republic, marked by a multiparty system with at least eight major parties or alliances of parties represented in the government. Current President Emmanuel Macron was elected in 2017 as the leader of the party The Republic Forward (La République en Marche). Macron founded The Republic Forward, which is considered a centrist and liberal party (Milner, 2017), when running in the 2016 presidential elections. The Republic Forward currently holds a majority of seats at the National Assembly (parliament). Other main parties include the Republicans (right), the Socialist Party (left), the National Rally (far right), La France Insoumise (far left), and Ecology Democracy Solidarity (proenvironmental/left). In France, the majority of citizens are not affiliated to a political party. Any citizen registered to vote can cast their vote for any candidate on the political spectrum.

Italy is a unitary parliamentary republic. Just as France, it has a multiparty system with at least three major blocks: a centre-right coalition formed of four parties, a centre-left coalition formed of five parties (including the Democratic Party: Partito Democratico), and the Five Star Movement (Movimento 5 Stelle). Italy has been marked by fragmentation and instability leading to ever-changing coalitions; it has seen 61 governments since the formation of its democratic republic in 1946 (Pasquino, 2009), and two governments already since the latest elections in March 2018. Current President Sergio Mattarella was elected in 2015 as an independent

supported by the centre-left coalition, although he was long affiliated with the Democratic Party (and previous variations of it). Italian politics is also marked by the prominence of the Five Star Movement, a populist, antiestablishment, and Eurosceptic party, which holds a third of the seats in the parliament (despite their candidate losing the latest presidential election; Bordignon & Ceccarini, 2015). As a result, deputies struggled to form a coalition in the two chambers of parliament (Chambers of Deputies and Senate), resulting in a hung parliament from 2015 to 2019 (“Italy’s President Thwarts,” 2018). After a dramatic motion of no-confidence against the Prime Minister Giuseppe Conte, leading to his resignation in August 2019, parties finally managed to agree on a coalition government and reappointed Giuseppe Conte as Prime Minister (BBC News, 2019). As in France, most Italian citizens are not affiliated to a specific political party.

In summary, the complex and multiparty nature of the French and Italian political systems prevents political dichotomy and clear us-versus-them perceptions. Agreement and disagreement with the president and parliament are subject to many more factors beyond partisanship and political identification.

Time 1

Data were collected between March 17 and 23, 2020, at a time when both Italy and France were effectively under lockdown (Italy since March 10, and France since March 14). Between March 17 and 23, the number of cases in Italy rose from 31,500 to 64,000 (and from 7,700 to 20,000 in France), and the number of confirmed deaths rose from 2,500 to 6,000 (and from 175 to 860 in France). Participants completed an online questionnaire. They indicated how concerned they were about the outbreak, how much they (dis)trusted their politicians, and how willing they were to comply with governmental restrictions. Finally, they reported demographics. All items are reported in Appendix A of the supplemental material, as used in French and Italian and translated in English. Data is publicly available on

the OSF repository of the project (<https://osf.io/4ugq3>).

Method

Participants. Participants were recruited on social media to complete an online survey (available in French and Italian). They were not remunerated but could enter a draw to win one of three Amazon vouchers worth €20.00. Psychology students from an Italian university also participated in exchange for course credit. The sample included 372 participants, of which 149 were French and 223 Italian (73 male, 285 female, and 14 undisclosed) of a mean age of 28.6 years ($SD = 10.9$). To approximate power, we ran a sensitivity power analysis on G*Power 3 (Faul et al., 2007), and adjusted the results to better estimate power for the hypothesised simple effect (Giner-Sorolla, 2018). This indicated that the sample size was sufficient to detect a medium-size simple effect ($d = 0.56$) at 80% power. No observation was excluded from any analysis. We initially tested for effects of age and gender included as covariates in the model. However, their inclusion did not change the findings; hence, we do not discuss these variables further.¹

Measures

Concern. Five items measured people’s concern related to the outbreak (e.g., “How worried are you about the evolution of the coronavirus pandemic in the upcoming weeks?”) and were aggregated in an average score ($\alpha = .82$). All items were measured on a 5-point scale (1 = *not at all*, 5 = *very much*), and all descriptive statistics are reported in Table 1.

Political trust. Ten items measured political trust. Five were specific to the Covid-19 outbreak (e.g., “The [French/Italian] government can be trusted to make the right decisions about how best to handle the coronavirus pandemic”) and five concerned general trust (e.g., “Most members of the parliament are honest”), including items from Abrams and Travaglino (2018). Items were aggregated into a single average score (1 = *strongly disagree*, 5 = *strongly agree*; $\alpha = .80$).

Table 1. Descriptive statistics and correlations between concern, political trust, political partisanship, and willingness to comply with governmental restrictions.

		<i>M (SD)</i>	Pearson's correlations			
			2	3	4	5
1	Concern	4.24 (0.67)	.09	.50***	.12*	-.37***
2	Political trust	3.23 (0.61)		.15**	.38***	-.11*
3	Compliance	4.70 (0.53)			.06	-.05
4	Political partisanship	5.19 (1.79)				-.28***
5	Country	-1 = IT, 1 = FR				

Note. Political partisanship represents the ranking of the current national presidential party (out of 7), a higher score represents stronger preference for the party (7-point scale). Concern, political trust, and compliance were measured on a 5-point scale. IT = Italy; FR = France.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Political partisanship. To better distinguish the role of political trust and mere partisanship, we measured and controlled for political partisanship. Participants were asked to rank the different national parties or coalitions of parties in their order of preference, from the one they identify with the most to the one they identify with the least. We used the ranking of the party currently in office as an index of affiliation with the “main party,” or partisanship (France: The Republic Forward; Italy: Democratic Party).² Overall, 20% of French and 40% of Italian respondents ranked the main party as 1 (out of seven choices; $M_{FR} = 3.44$, $SD = 1.83$; $M_{IT} = 2.40$, $SD = 1.64$). For the main analyses, we reverse-coded the ranking so that higher scores represented greater partisanship.

Willingness to comply with governmental restrictions. Three items measured how important participants felt it was to respect governmental restrictions, and how much they intended to do so themselves (e.g., “How much do you personally intend to respect any restrictions imposed by the government?”; 1 = *not at all*, 5 = *extremely*; $\alpha = .86$).

Results and Discussion

Since the dependent measure was not normally distributed but skewed to the left (skewness = -3.15,

$SE = 0.13$; kurtosis = 14.6, $SE = 0.25$), we relied on a generalised rather than least squares (LS) linear model (gamma probability distribution; log link function). To account for potential differences between the two countries, we included country as a covariate in the model while also accounting for political partisanship. We tested the model in two steps, introducing first the main predictors (concern and political trust, both standardised, and their interaction), then adding country (-1 = Italy, 1 = France) and political partisanship (standardised) as covariates. Results are reported in Table 2.

There was a main effect of country, so that Italian respondents ($M = 4.73$, $SD = 0.53$) were more willing to comply with restrictions than French respondents ($M = 4.67$, $SD = 0.54$). Main effects of concern and political trust were both significant, so that willingness to comply increased when political trust increased and when concern increased. Political partisanship, in contrast, did not affect compliance. More importantly, the expected Concern \times Political Trust interaction was significant, regardless of whether country and partisanship were included in the model (see Figure 1).

Decomposition of simple effects revealed that, amongst participants higher on concern (+1 SD), willingness to comply with restrictions was extremely high and did not depend on level of

Table 2. Summary of hierarchical regression analysis for variables predicting willingness to comply with governmental restrictions.

Variable	Step 1			Step 2				
	<i>b</i> (<i>SE</i>)	95% CI of <i>b</i>	Wald's $\chi^2(1)$	<i>p</i> value	<i>b</i> (<i>SE</i>)	95% CI of <i>b</i>	Wald's $\chi^2(1)$	<i>p</i> value
Intercept	1.55 (0.007)	[1.54, 1.56]	57,050	< .001	1.55 (0.006)	[1.54, 1.57]	58,693	< .001
Concern	0.06 (0.007)	[0.05, 0.07]	73.61	< .001	0.06 (0.007)	[0.05, 0.07]	65.15	< .001
Political trust	0.01 (0.007)	[0.001, 0.03]	4.67	.031	0.02 (0.007)	[0.003, 0.03]	6.10	.014
Concern × Trust	-0.02 (0.007)	[-0.03, -0.01]	9.65	.002	-0.02 (0.006)	[-0.04, -0.01]	11.90	.001
Political partisanship					-0.00 (0.007)	[-0.01, 0.01]	0.01	.94
Country					0.02 (0.007)	[0.004, 0.03]	6.01	.014

N = 400. Step 1: likelihood ratio $\chi^2(3) = 87.65, p < .001$.

Step 2: likelihood ratio $\chi^2(5) = 88.67, p < .001$.

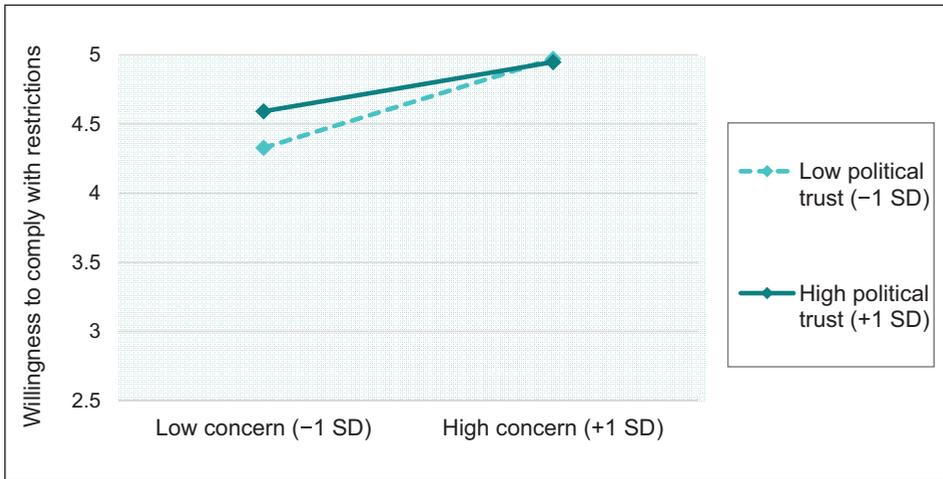
political trust, $b = -0.01, SE = 0.03, \beta = -.02, t(368) = -0.39, p = .70$, Cohen's $d = -0.04$, 95% CI [-0.25, 0.16]. In contrast, amongst participants lower on concern (-1 *SD*), willingness to comply decreased when political trust decreased, $b = 0.13, SE = 0.03, \beta = .25, t(368) = 3.90, p < .001, d = 0.41$, 95% CI [0.20, 0.61]. Put differently, amongst participants low on political trust (-1 *SD*), there was a strong positive link between concern and willingness to comply, $b = 0.32, SE = 0.03, \beta = .60, t(368) = 10.60, p < .001, d = 1.10$, 95% CI [0.89, 1.32], which halved amongst participants high on political trust (+1 *SD*), $b = 0.18, SE = 0.04, \beta = .33, t(368) = 4.78, p < .001, d = 0.50$, 95% CI [0.29, 0.71]. These results are consistent with our hypothesis that either high concern or high trust should be sufficient to induce high willingness to comply with governmental restrictions, but that willingness would be significantly reduced if both concern and trust were low.

Time 2

At Time 2 (T2), we examined the second key dependent variable to conduct a prospective test of the distrustful complacency hypothesis on self-reported behaviour. We recontacted the sample of Italian students 1 week after T1 to assess their actual (self-reported) compliance with restrictions. Data were collected between March 31 and April 3, 2020. The country was still in lockdown and went from 106,000 to 120,000 cases (and from 12,400 to 14,700 deaths). As compared to T1, the progression of the pandemic had slowed down but was still an ongoing threat. Participants completed a brief online questionnaire, reporting to what extent they had complied with governmental restrictions during the past week.

It could be argued that the measure of willingness to comply at T1 and perhaps self-reported behaviour at T2 might both be affected by social desirability bias because of their direct and explicit wording. Participants might be reluctant to admit they do not intend to fully comply with restrictions. Therefore, at T2, we introduced a measure of evaluation of noncompliant individuals in the context of the pandemic.³ We expected

Figure 1. Willingness to comply with governmental restrictions related to the Covid-19 outbreak as a function of concern and political trust (5-point scale).



Note. Scores are estimated at -1 and +1 standard deviation of each standardised variable.

that individuals who show distrustful complacency should be motivated to bolster their self-concept indirectly, which could be done by showing evaluative favourability towards others who share their own orientation (see research on the egocentric bias motive; Clement & Krueger, 2002; Robbins & Krueger, 2005). Thus, a self-protection motive would make them more lenient towards the noncompliant target (Shaver, 1970). We explored the effect of political trust and concern (measured at T1) on this evaluation at T2. After these measures, participants were also presented with different media excerpts and completed further measures which are beyond the scope of the present paper.

Method

Participants. Data from T1 and T2 were matched based on unique codes indicated by participants at both phases. There were 130 completed and usable questionnaires (nine male, 121 female; $M_{\text{age}} = 22.6$, $SD = 6.30$); 7 other responses were lost due to error in code reporting and impossibility to match pre- and postdata. A sensitivity power analysis indicated that the sample size was

sufficient to detect a small to medium interaction effect ($d = 0.50$) at 80% power.

Measures

Self-reported compliant behaviour. Participants were reminded of the current governmental restrictions (“severe restrictions on the free movement of people except for valid reasons linked to work and health”). They were then asked, “Please think about your behaviour in the last week. In all honesty, how much did you comply with the government’s restrictions?” (1 = *not at all*, 5 = *very much*; $M = 4.73$, $SD = 0.49$). Responses were positively correlated with willingness to comply with restrictions measured at T1, $r(128) = .33$, $p < .001$.

Evaluation of noncompliant individuals. Participants evaluated “citizens who do not comply with governmental restrictions” on a semantic differential scale (1 = *negatively*, 7 = *positively*; $M = 1.48$, $SD = 1.25$).

Results

Main hypothesis: Self-reported compliant behaviour. A generalised linear model (GLM) explored

Table 3. Results of the generalised linear model testing the effect of concern, political trust, and their interaction (measured at T1) on self-reported compliant behaviour and evaluation of noncompliant individuals (T2).

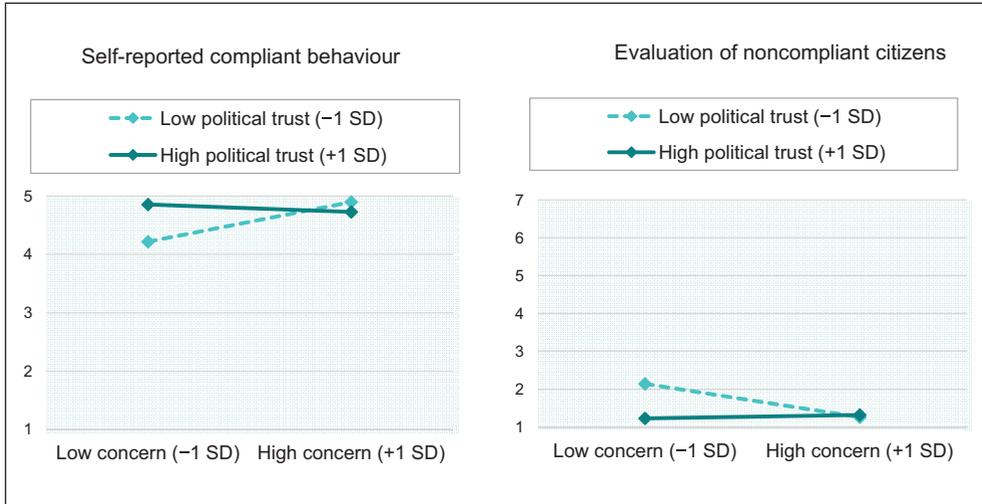
	b (SE)	95% CI of b	Wald's $\chi^2(1)$	p value
Self-reported compliant behaviour				
Intercept	1.54 (0.01)	[1.52, 1.56]	18,820	< .001
Concern	0.03 (0.02)	[0.002, 0.06]	4.26	.039
Political trust	0.03 (0.02)	[-0.01, 0.06]	2.80	.094
Concern \times Trust	-0.05 (0.02)	[-0.090, -0.003]	4.32	.038
Likelihood ratio $\chi^2(3) = 7.53, p = .057$				
Evaluation of noncompliant individuals				
Intercept	0.45 (0.06)	[0.34, 0.56]	64.80	< .001
Concern	-0.18 (0.07)	[-0.32, -0.04]	6.05	.014
Political trust	-0.23 (0.08)	[-0.38, -0.09]	9.81	.002
Concern \times Trust	0.21 (0.11)	[0.01, 0.42]	4.15	.042
Likelihood ratio $\chi^2(3) = 15.80, p = .001$				

how political concern, trust, and their interaction (measured at T1) predicted self-reported compliant behaviour 1 week later (T2).⁴ Results, reported in detail in Table 3, showed a main effect of concern as well as the expected Concern \times Trust interaction. Participants who had previously reported the lowest willingness to comply with restrictions (i.e., those showing distrustful complacency) consistently reported the lowest levels of compliant behaviour (see Figure 2). Decomposition of simple effects showed that compliant behaviour was lower amongst these participants as compared to those low on political trust but high on concern, $b = 0.34$, $SE = 0.12$, $\beta = .46$, $t(126) = 2.77$, $p = .006$, $d = 0.49$, 95% CI [0.14, 0.85], as well as compared to those low on concern but high on political trust, $b = 0.32$, $SE = 0.15$, $\beta = .53$, $t(126) = 2.08$, $p = .039$, $d = 0.37$, 95% CI [0.02, 0.72]. Participants high on concern reported high compliance regardless of their level of political trust, $b = -0.09$, $SE = 0.07$, $\beta = -.14$, $t(126) = -1.19$, $p = .24$, $d = -0.21$, 95% CI [-0.56, 0.14]. Finally, participants high on trust reported high compliance regardless of their level of concern, $b = -0.06$, $SE = 0.11$, $\beta = -.09$, $t(126) = -0.58$, $p = .56$, $d = -0.10$, 95% CI [-0.45, 0.25]. Hence, the longitudinal data supported the predicted

relationship from political trust and concern to self-reported compliant behaviour.

Evaluation of noncompliant citizens. We then explored how political trust and concern (measured at T1) predicted evaluations of noncompliant citizens (GLM analysis).⁵ Results, reported in Table 3, indicated that evaluations were a function of the hypothesised Concern \times Political Trust interaction (see Figure 2). Consistent with previous results, participants showing distrustful complacency evaluated the noncompliant individuals less negatively. Decomposition of simple effects showed that evaluations were less negative amongst these participants as compared to those low on political trust but high on concern, $b = -0.78$, $SE = 0.31$, $\beta = -.41$, $t(121) = -2.52$, $p = .013$, $d = -0.46$, 95% CI [-0.82, -0.10], as well as compared to those low on concern but high on political trust, $b = -0.91$, $SE = 0.39$, $\beta = -.60$, $t(121) = -2.35$, $p = .021$, $d = -0.43$, 95% CI [-0.78, -0.07]. Participants high on concern reported very negative evaluations regardless of their level of political trust, $b = 0.02$, $SE = 0.18$, $\beta = .01$, $t(121) = 0.11$, $p = .91$, $d = 0.02$, 95% CI [-0.34, 0.38]. Finally, participants high on trust reported very negative evaluations regardless of their level of concern, $b = 0.15$, $SE = 0.28$, $\beta = .08$, $t(121) = 0.52$, $p = .60$, $d = 0.09$, 95% CI [-0.26, 0.45].

Figure 2. Self-reported compliant behaviour (left) and evaluation of noncompliant citizens (right) measured at T2, as a function of concern and political trust measured at T1.



Note. Scores are estimated at -1 and +1 standard deviation of each standardised variable.

General Discussion

This study investigated willingness to comply with governmental restrictions in the context of the Covid-19 outbreak. Data were collected in France and Italy at a time when the population in both countries had been put under full lockdown. In line with previous findings in political and social psychology, we found that concern and political trust together predicted people's willingness to comply with governmental restrictions. Specifically, results showed that compliance was not a simple additive effect of trust and concern. Willingness to comply was markedly lower when both trust and concern were low (i.e., a distrustful complacency effect) than if either was high. Thus, people are ready to comply with strict regulations restricting some of their constitutional rights either because they are highly concerned about the issue at stake or because they trust the political institutions responsible for enacting these regulations. However, if strategies fail to engage both concern and trust, it is markedly likelier that individuals will not comply. Political partisanship, although positively related to political trust, was mostly unrelated to compliance,

which highlights that political trust—at least in complex multiparty systems like France and Italy—cannot be reduced to mere partisanship.

The present research makes several contributions. First, the data were collected at a unique time point in the course of the pandemic, when we were able to capture citizens' representations of the pandemic while they were experiencing a full national lockdown. Data gathering in two different countries is another strength. Despite differences in the overall level of political trust and concern, and a tendency for Italian respondents to be more willing to comply overall, the expected interactive effect of concern and political trust held in both countries, which effectively demonstrates the replicability of the finding and its generalisability across linguistic and cultural differences. This increases our confidence that the effects of distrustful complacency transcend national characteristics.

Consistent with our expectations, the evidence on self-reported behaviour 1 week later strengthens the findings, implying that distrustful complacency does indeed affect subsequent compliant behaviour. Moreover, participants' evaluation of noncompliant targets closely followed their own

self-reported (non)compliant behaviour, with the least compliant participants (combining low levels of concern and trust) reporting the less negative evaluation of the noncompliant target. This is consistent with our assumption that noncompliant individuals may be motivated to bolster their own self-concept by showing greater endorsement of other noncompliers. It is interesting to note that political trust produced effects even though the lockdown measures were mandatory and legally enforced, and citizens risked fines or even imprisonment for refusing to comply with it. We can speculate that the effects would be even stronger in contexts where compliance is not as strongly enforced and depends solely on citizens' cooperation, such as the cases of Japan and Sweden at the time of writing (e.g., Henley & Pilkington, 2020). In such contexts, it might also be useful to consider the impact of self-efficacy, as citizens could be reluctant to comply if they believe the efforts requested from them are futile.

Some limitations should be considered. First, the correlational design of the study limits a causal interpretation of the results. The longitudinal relation between the main predictors (measured at T1) and self-reported compliant behaviour (measured at T2 1 week later) supports the directionality of the effect, but direct observation of behaviour would have provided even stronger confirmation. Nonetheless, given that intentions and behaviour measured proximally tend to be highly correlated (Webb & Sheeran, 2006), there is some justification for confidence about the interpretation of the data. A different approach would have been to experimentally manipulate trust or concern but in the context of the pandemic, this would have breached ethical standards and might have even caused some individuals to become psychologically distressed or to behave noncompliantly. It remains for further studies to test the causal chain more extensively. Second, rates of willingness to comply and self-reported compliance were quite high, resulting in a potential ceiling effect on the measured variables. However, we believe this reflects the reality of the situation in both countries in March when compliance with lockdown

measures was very high (and legally required; see e.g., YouGov, 2020). In addition, our interest was not in who does comply but in who does not. The present data show that the combined impact of the two effects of political trust and concern increases as one gets further from the ceiling, driving the empirically observed interaction. As we enter a period of increasing mistrust (amongst some) and lack of concern (amongst some), we would anticipate increasingly dangerous ways that compliance might be inhibited. This makes the present finding both important and timely.

We believe the value of the evidence lies in the insight it provides into how individuals' subjective perception of trust and concern is likely to be implicated in their willingness to comply with governmental restrictions. In particular, we have identified that distrustful complacency might be an important reason why some individuals do not comply. Thus, two basic strategies present themselves, one is to try to ensure that even amongst those who distrust the government, concern is sufficiently high to mitigate that distrust. The other is to try to ensure that even those who feel unconcerned have sufficient trust in the motives and competence of their government that they continue to comply. A third strategy is to identify areas, communities, or groups that, for whatever reasons, may be showing distrustful complacency, in order to implement more intense efforts to secure their compliance.

How feasible are these different strategies? First, it is arguable that trying to increase the general population's level of concern in such a context is neither practical nor wise. A large body of research in health psychology indeed shows that high levels of concern or fear can produce unexpected boomerang effects and resistance to behaviour change, as people engage in fear control mechanisms in order to cope with the threat instead of trying to address its cause (see e.g., Witte & Allen, 2000). Hence, if one wanted to bolster compliance through increased concern, one would have to carefully aim for a reasonable level of concern and make sure this is accompanied with strong feelings of efficacy (Peters et al., 2013), to avoid provoking panic behaviour or

defensive reactance and denial (Witte, 1994). Second, it is generally assumed that political trust builds over time and may not be susceptible to short-term changes (Levi & Stoker, 2000). However, there is evidence that people's opinion of their leaders can change dramatically in times of crisis. Citizens "look to their leaders for actions, solutions to the crisis, and for explanations that will help them to interpret and respond to perceived threats and uncertainties" (Hasel, 2013, p. 265), and so tend to look for strong leadership in tough times. Hence, trust will likely depend, on the short term, on how adequate citizens perceive the governmental response to the crisis to be. Opinion polls suggest this has indeed been the case. For example, an opinion survey conducted in Italy during the first half of March 2020 revealed that trust in the authorities was much higher than a few months before the outbreak started, with 92% of respondents evaluating the lockdown measures as appropriate and justified, and 78% evaluating the government as competently handling the crisis (Falcone et al., 2020). It then becomes an issue of communication strategies (see Rufai & Bunce, 2020); governments are likely to inspire higher trust by communicating a clear and sensible action plan, and globally conveying an image of competence, motivation, and legitimacy (something that Italian Prime Minister Giuseppe Conte seemed to have mastered; see e.g., De Luca, 2020). In addition, evidence from focus groups suggests that "involving nonpoliticians in plan development and enforcement of response plans without undue influence from interest groups" (Baum et al., 2009, p. 10) would increase citizens' trust in the governmental decisions and increase their compliance with them.

Overall, however, a positive implication of the present research is that the threshold for compliance can be achieved through at least two routes. This threshold might well be higher in the case of less life-threatening contexts than the Covid-19 pandemic, but we imagine that similar principles will apply. More broadly, consistent with the aversion amplification hypothesis is the conclusion that it is not trust or concern alone that are

associated with extreme or potentially disruptive behaviour, but their interactive combination. The present evidence shows that a further manifestation of this, with significant implications for public health, is distrustful complacency.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iDs

Fanny Lalot  <https://orcid.org/0000-0002-1237-5585>

MariaS.Heering  <https://orcid.org/0000-0002-5755-5256>

GiovanniA.Travaglino  <https://orcid.org/0000-0003-4091-0634>

Supplemental material

Supplemental material for this article is available online.

Notes

1. A GLM analysis including concern, political trust, and their interaction, as well as country, age, and gender, revealed a main effect of age, so that younger participants were more willing to comply with restrictions, $b = -0.02$, $SE = 0.01$, 95% CI $[-0.03, -0.004]$, Wald's $\chi^2(1) = 6.72$, $p = .010$. There was no main effect of gender, $b = 0.01$, $SE = 0.01$, 95% CI $[-0.02, 0.03]$, Wald's $\chi^2(1) = 0.12$, $p = .73$. Moreover, the Concern \times Political Trust interaction remained significant with the inclusion of these covariates, $b = -0.01$, $SE = 0.01$, 95% CI $[-0.03, -0.002]$, Wald's $\chi^2(1) = 5.19$, $p = .023$.
2. Given the important role of the Five Stars Movement in the Italian Parliament, we considered using the rating of this party as an additional index of partisanship for Italian participants. There were, however, several disadvantages in doing so, since partisanship would then be considered in relation to two (quite opposite) parties in Italy versus one single party in France. In addition, zero-order correlations revealed that Five Stars Movement partisanship was not related to political trust, $r(221) = -.02$, $p = .74$, whereas Democratic Party partisanship was, $r(221) = .26$, $p < .001$, as was The Republic Forward partisanship in France, $r(147) = .49$,

$p < .001$. It seems that by its populist, antiestablishment nature, the Five Star Movement is qualitatively different from the other parties. We hence decided to focus our measure of Italian partisanship on the Democratic Party.

3. In addition to the evaluation of noncompliant citizens, we also included an item measuring evaluation of compliant citizens, defined as “citizens who comply with governmental restrictions.” Order of the two questions was counterbalanced. However, both measures were very strongly correlated, $r(125) = -.72$, $p < .001$, and actually mirrored each other. To avoid redundancy, we only present results on the evaluation of noncompliant citizens. Analyses on the evaluation of compliant citizens (yielding a symmetrical Political Trust \times Concern interaction) are reported in Appendix B of the supplemental material for information purposes.
4. When entered in the analysis as a predictor of self-reported compliant behaviour, political partisanship produced no main effect, $b = -0.003$, $SE = 0.01$, 95% CI $[-0.02, 0.02]$, Wald’s $\chi^2(1) = 0.07$, $p = .79$, nor did it impede the Concern \times Trust interaction, which remained significant, $b = -0.05$, $SE = 0.02$, 95% CI $[-0.09, -0.001]$, Wald’s $\chi^2(1) = 4.11$, $p = .043$.
5. When entered in the analysis as a predictor of the evaluation of noncompliant citizens, political partisanship produced a main effect, $b = 0.19$, $SE = 0.06$, 95% CI $[0.06, 0.31]$, Wald’s $\chi^2(1) = 8.51$, $p = .004$, showing that participants more strongly identified with the main party (Democratic Party) evaluated noncompliant citizens more positively. The Concern \times Trust interaction fell just short of significance when partisanship was included, although the direction of the effect remained the same, $b = 0.20$, $SE = 0.11$, 95% CI $[-0.02, 0.41]$, Wald’s $\chi^2(1) = 3.14$, $p = .076$.

References

- Abrams, D., & Travaglino, G. A. (2018). Immigration, political trust, and Brexit – Testing an aversion amplification hypothesis. *British Journal of Social Psychology*, *57*, 310–326. <https://doi.org/10.1111/bjso.12233>
- Baum, N. M., Jacobson, P. D., & Goold, S. D. (2009). “Listen to the people”: Public deliberation about social distancing measures in a pandemic. *The American Journal of Bioethics*, *9*, 4–14. <https://doi.org/10.1080/15265160903197531>
- BBC News. (2019). *Italy crisis: PD and Five Star agree coalition deal after talks*. https://www.bbc.co.uk/news/world-europe-49502232?intlink_from_url=https://www.bbc.co.uk/news/topics/c1m1xyl44m8t/sergio-mattarella&link_location=live-reporting-story
- Bordignon, F., & Ceccarini, L. (2015). The Five-Star Movement: A hybrid actor in the net of state institutions. *Journal of Modern Italian Studies*, *20*, 454–473. <https://doi.org/10.1080/1354571X.2015.1066112>
- Brewer, M. B. (1981). Ethnocentrism and its role in interpersonal trust. In M. B. Brewer & B. E. Collins (Eds.), *Scientific inquiry and the social sciences* (pp. 214–231). Jossey-Bass.
- Brewer, M. B., & Silver, M. (1978). Ingroup bias as a function of task characteristics. *European Journal of Social Psychology*, *8*, 393–400. <https://doi.org/10.1002/ejsp.2420080312>
- Chmutina, K., Wiersma, B., Goodier, C. I., & Devine-Wright, P. (2014). Concern or compliance? Drivers of urban decentralised energy initiatives. *Sustainable Cities and Society*, *10*, 122–129. <https://doi.org/10.1016/j.scs.2013.07.001>
- Citrin, J. (1974). Comment: The political relevance of trust in government. *American Political Science Review*, *68*, 973–988. <https://doi.org/10.2307/1959141>
- Clement, R. W., & Krueger, J. (2002). Social categorization moderates social projection. *Journal of Experimental Social Psychology*, *38*, 219–231. <https://doi.org/10.1006/jesp.2001.1503>
- De Luca, M. (2020, June 8). The Italian style: Giuseppe Conte’s “half-populist” leadership during Covid-19. *Europb Blog*. <https://blogs.lse.ac.uk/europpblog/2020/06/08/the-italian-style-giuseppe-contes-half-populist-leadership-during-covid-19/>
- Easton, D. (1975). A re-assessment of the concept of political support. *British Journal of Political Science*, *5*, 435–457. <https://doi.org/10.1017/S0007123400008309>
- Falcone, R., Castelfranchi, C., & Coli, E. (2020). *Coronavirus e fiducia – Una ricerca esplorativa*. Consiglio Nazionale delle Ricerche. https://www.cnr.it/sites/default/files/public/media/rassegna_stamp/cnr%20istc_not_a_coronavirus%20e%20fiducia_una%20ricerca%20esplorativa-2.pdf
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*, 175–191. <https://doi.org/10.3758/BF03193146>

- Giner-Sorolla, R. (2018, January 24). Powering your interaction. *Approaching Significance: A Methodology Blog for Social Psychology*. <https://approachingblog.wordpress.com/2018/01/24/powering-your-interaction-2/>
- Givens, T., & Luedtke, A. (2005). European immigration policies in comparative perspective: Issue salience, partisanship and immigrant rights. *Comparative European Politics*, 3, 1–22. <https://doi.org/10.1057/palgrave.cep.6110051>
- Hasel, M. C. (2013). A question of context: The influence of trust on leadership effectiveness during crisis. *M@n@gement*, 16, 264–293. <https://doi.org/10.3917/mana.163.0264>
- Henley, J., & Pilkington, E. (2020, April 7). Covid-19: Europe toll passes 50,000 as Japan declares emergency. *The Guardian*. <https://www.theguardian.com/world/2020/apr/07/covid-19-trump-adviser-memos-emerge-as-japan-takes-emergency-measures>
- Hetherington, M. J. (2005). *Why trust matters: Declining political trust and the demise of American liberalism*. Princeton University Press.
- Hix, S. (1999). Dimensions and alignments in European Union politics: Cognitive constraints and partisan responses. *European Journal of Political Research*, 35, 69–106. <https://doi.org/10.1111/1475-6765.00442>
- Hooghe, M., & Marien, S. (2013). A comparative analysis of the relation between political trust and forms of political participation in Europe. *European Societies*, 15, 131–152. <https://doi.org/10.1080/14616696.2012.692807>
- Hooghe, M., & Oser, J. (2017). Partisan strength, political trust and generalized trust in the United States: An analysis of the General Social Survey, 1972–2014. *Social Science Research*, 68, 132–146. <https://doi.org/10.1016/j.ssresearch.2017.08.005>
- Huddy, L., Bankert, A., & Davies, C. (2018). Expressive versus instrumental partisanship in multiparty European systems. *Political Psychology*, 39, 173–199. <https://doi.org/10.1111/pops.12482>
- Ijzerman, H., Lewis, N. A. J., Weinstein, N., DeBruine, L. M., Ritchie, S. J., Vazire, S., Forscher, P. S., Morey, R. D., Ivory, J. D., Anvari, F., & Przybylski, A. K. (2020). *Use caution when applying behavioural science to policy*. PsyArXiv. <https://doi.org/10.31234/osf.io/whds4>
- Islam, N., Sharp, S. J., Chowell, G., Shabnam, S., Kawachi, I., Lacey, B., Massaro, J. M., D’Agostino, R. B., & White, M. (2020). Physical distancing interventions and incidence of coronavirus disease 2019: Natural experiment in 149 countries. *BMJ*, 370, Article m2743. <https://doi.org/10.1136/bmj.m2743>
- Italy’s president thwarts his own country’s democracy. (2018, May 29). *The Washington Post*. https://www.washingtonpost.com/opinions/global-opinions/italys-president-thwarts-his-own-countrys-democracy/2018/05/29/16bcdca0-635b-11e8-99d2-0d678ec08c2f_story.html
- Iversen, H., & Rundmo, T. (2002). Environmental concern and environmental behaviour among the Norwegian public. *Journal of Risk Research*, 5, 265–279. <https://doi.org/10.1080/13669870110115434>
- Johansson, K. M., & Raunio, T. (2001). Partisan responses to Europe: Comparing Finnish and Swedish political parties. *European Journal of Political Research*, 39, 225–249. <https://doi.org/10.1111/1475-6765.00576>
- Kaase, M. (1999). Interpersonal trust, political trust and non-institutionalised political participation in Western Europe. *West European Politics*, 22, 1–21. <https://doi.org/10.1080/01402389908425313>
- Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The “slippery slope” framework. *Journal of Economic Psychology*, 29, 210–225. <https://doi.org/10.1016/j.joep.2007.05.004>
- Lalot, F., Abrams, D., & Travaglino, G. A. (in press). Aversion amplification in the emerging COVID-19 pandemic: The impact of political trust and subjective uncertainty on perceived threat. *Journal of Community & Applied Social Psychology*.
- Levi, M., & Stoker, L. (2000). Political trust and trustworthiness. *Annual Review of Political Science*, 3, 475–507. <https://doi.org/10.1146/annurev.polisci.3.1.475>
- Marien, S., & Hooghe, M. (2011). Does political trust matter? An empirical investigation into the relation between political trust and support for law compliance. *European Journal of Political Research*, 50, 267–291. <https://doi.org/10.1111/j.1475-6765.2010.01930.x>
- May, T. (2020). Lockdown-type measures look effective against Covid-19. *BMJ*, 370, Article m2809. <https://doi.org/10.1136/bmj.m2809>
- Milner, S. (2017, February 6). Emmanuel Macron and the building of a new liberal-centrist movement. *Europp Blog*. <https://blogs.lse.ac.uk/europpblog/2017/02/06/emmanuel-macron-liberal-centrist-movement/>

- Pasquino, G. (2009). Political history in Italy. *Journal of Policy History*, *21*, 282–297. <https://doi.org/10.1017/S0898030609090137>
- Peters, G.-J. Y., Ruiter, R. A. C., & Kok, G. (2013). Threatening communication: A critical re-analysis and a revised meta-analytic test of fear appeal theory. *Health Psychology Review*, *7*, S8–S31. <https://doi.org/10.1080/17437199.2012.703527>
- Pew Research Center. (2010). *Section 1: Trust in government 1958–2010*. <https://www.pewresearch.org/politics/2010/04/18/section-1-trust-in-government-1958-2010/>
- Rhead, R., Elliot, M., & Upham, P. (2015). Assessing the structure of UK environmental concern and its association with pro-environmental behaviour. *Journal of Environmental Psychology*, *43*, 175–183. <https://doi.org/10.1016/j.jenvp.2015.06.002>
- Robbins, J. M., & Krueger, J. I. (2005). Social projection to ingroups and outgroups: A review and meta-analysis. *Personality and Social Psychology Review*, *9*, 32–47. https://doi.org/10.1207/s15327957pspr0901_3
- Rotondi, V., Andriano, L., Dowd, J., & Mills, M. C. (2020). *Early evidence that social distancing and public health interventions flatten the COVID-19 curve in Italy*. OSF Preprints. <https://doi.org/10.31219/osf.io/wah4e>
- Rudolph, T. J., & Evans, J. (2005). Political trust, ideology, and public support for government spending. *American Journal of Political Science*, *49*, 660–671. <https://doi.org/10.1111/j.1540-5907.2005.00148.x>
- Rufai, S. R., & Bunce, C. (2020). World leaders' usage of Twitter in response to the COVID-19 pandemic: A content analysis. *Journal of Public Health*, *42*, 510–516. <https://doi.org/10.1093/pubmed/fdaa049>
- Rundmo, T., & Hale, A. R. (2003). Managers' attitudes towards safety and accident prevention. *Safety Science*, *41*, 557–574. [https://doi.org/10.1016/S0925-7535\(01\)00091-1](https://doi.org/10.1016/S0925-7535(01)00091-1)
- Segal, K., Jong, J., & Halberstadt, J. (2018). The fusing power of natural disasters: An experimental study. *Self and Identity*, *17*, 574–586. <https://doi.org/10.1080/15298868.2018.1458645>
- Shaver, K. G. (1970). Defensive attribution: Effects of severity and relevance on the responsibility assigned for an accident. *Journal of Personality and Social Psychology*, *14*, 101–113. <https://doi.org/10.1037/h0028777>
- Short, J. F. J. (1984). The social fabric at risk: Toward a social transformation of risk analysis. *American Sociological Review*, *49*, 711–725. <https://doi.org/10.2307/2095526>
- Tyler, T. R. (2001). Trust and law abidingness: A proactive model of social regulation. *Boston University Law Review*, *81*, 361–406. https://digitalcommons.law.yale.edu/fss_papers/3031/
- Tyler, T. R. (2006). *Why people obey the law* (2nd ed.). Princeton University Press.
- Tyler, T. R., & Degoey, P. (1995). Collective restraint in social dilemmas: Procedural justice and social identification effects on support for authorities. *Journal of Personality and Social Psychology*, *69*, 482–497. <https://doi.org/10.1037/0022-3514.69.3.482>
- Van Bavel, J. J., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., Crockett, M. J., Crum, A. J., Douglas, K. M., Druckman, J. N., Drury, J., Dube, O., Ellemers, N., Finkel, E. J., Fowler, J. H., Gelfand, M., Han, S., Haslam, S. A., Jetten, J., . . . Willer, R. (2020). Using social and behavioural science to support COVID-19 pandemic response. *Nature Human Behaviour*, *4*, 460–471. <https://doi.org/10.1038/s41562-020-0884-z>
- Van de Vyver, J., Abrams, D., Hothrow, T., Purewal, K., de Moura, G. R., & Meleady, R. (2018). Motivating the selfish to stop idling: Self-interest cues can improve environmentally relevant driver behaviour. *Transportation Research Part F: Traffic Psychology and Behaviour*, *54*, 79–85. <https://doi.org/10.1016/j.trf.2018.01.015>
- Vietri, J. T., Li, M., Galvani, A. P., & Chapman, G. B. (2011). Vaccinating to help ourselves and others. *Medical Decision Making*, *32*, 447–458. <https://doi.org/10.1177/0272989X11427762>
- Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin*, *132*, 249–268. <https://doi.org/10.1037/0033-2909.132.2.249>
- Wenzel, M. (2002). The impact of outcome orientation and justice concerns on tax compliance: The role of taxpayers' identity. *Journal of Applied Psychology*, *87*, 629–645. <https://doi.org/10.1037/0021-9010.87.4.629>
- West, R., Michie, S., Rubin, G. J., & Amlôt, R. (2020). Applying principles of behaviour change to reduce SARS-CoV-2 transmission. *Nature Human Behaviour*, *4*, 451–459. <https://doi.org/10.1038/s41562-020-0887-9>
- Witte, K. (1994). Fear control and danger control: A test of the extended parallel process model (EPPM). *Communication Monographs*, *61*, 113–134. <https://doi.org/10.1080/03637759409376328>

Witte, K., & Allen, M. (2000). A meta-analysis of fear appeals: Implications for effective public health campaigns. *Health Education & Behavior*, 27, 591–615. <https://doi.org/10.1177/109019810002700506>

World Health Organization. (2020). *WHO announces COVID-19 outbreak a pandemic*. [http://www.euro.](http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/who-announces-covid-19-outbreak-a-pandemic)

[who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/who-announces-covid-19-outbreak-a-pandemic](http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/news/news/2020/3/who-announces-covid-19-outbreak-a-pandemic)

YouGov. (2020). *Personal measures taken to avoid COVID-19*. <https://yougov.co.uk/topics/international/articles-reports/2020/03/17/personal-measures-taken-avoid-covid-19>