



## Bringing Us Closer Together: The Influence of National Identity and Political Orientation on COVID-19-Related Behavioral Intentions

Andrej Simić<sup>1</sup>, Simona Sacchi<sup>1\*</sup>, Stefano Pagliaro<sup>2</sup>, Maria Giuseppina Pacilli<sup>3</sup> and Marco Brambilla<sup>1</sup>

<sup>1</sup> Department of Psychology, University of Milano-Bicocca, Milan, Italy, <sup>2</sup> Department of Neuroscience, Imaging and Clinical Science, University of Chieti-Pescara, Chieti, Italy, <sup>3</sup> Department of Political Sciences, University of Perugia, Perugia, Italy

A growing body of work has highlighted the importance of political beliefs and attitudes in predicting endorsement and engagement in prosocial behavior. Individuals with right-wing political orientation are less likely to behave prosocially than their left-wing counterparts due to high levels of Right-wing authoritarianism (RWA). Here, we aimed to extend prior work by testing how political values relate to COVID-19 discretionary behavioral intentions (i.e., prosocial and non-mandatory behaviors aimed at controlling the spread of the pandemic). Furthermore, we tested whether identification with the national group would influence the relationship between RWA and prosocial behavior. A cross-sectional study conducted on 350 Italian participants showed that rightwing political orientation had a negative effect on COVID-19 discretionary behavioral intentions via RWA. Furthermore, a moderated mediation model revealed that this effect was only significant for participants who are lowly identified with the national group. The results suggest that highlighting group belongingness might effectively motivate more conservative individuals to engage in prosocial behavior.

Keywords: political orientation, Right-wing authoritarianism, national identity, COVID-19 discretionary behaviors, COVID-19 mandatory behaviors

## INTRODUCTION

Since the first human infection in December 2019, coronavirus (COVID-19) has caused a worldwide pandemic. Based on the most recent data, at the time of writing this paper (October 2021), there have been approximately 237 million confirmed cases of COVID-19, with more than 4,5 million people losing their lives due to the infection (World Health Organization, 2021). At the start of the pandemic, individual behavior was identified as the main factor in mitigating the spread of the virus (Anderson et al., 2020; Jetten et al., 2020). Recently, several effective COVID-19 vaccines have been developed and mass-produced, with most countries taking major steps in acquiring them. However, there are still major concerns regarding the availability of vaccines (Paltiel et al., 2021) and the ever-present vaccination hesitancy displayed by the citizens (Su et al., 2020, 2021; Wang et al., 2020; Dodd et al., 2021). For these reasons, governments still rely on a prescribed set of safety measures to combat the growing virus incidence. These mandatory behaviors include, among the

### OPEN ACCESS

#### Edited by:

Francesca D'Errico, University of Bari Aldo Moro, Italy

#### Reviewed by:

Rosa Scardigno, University of Bari Aldo Moro, Italy Marco Tullio Liuzza, University of Magna Graecia, Italy

> \*Correspondence: Simona Sacchi simona.sacchi@unimib.it

#### Specialty section:

This article was submitted to Personality and Social Psychology, a section of the journal Frontiers in Psychology

> Received: 15 October 2021 Accepted: 03 January 2022 Published: 27 January 2022

#### Citation:

Simić A, Sacchi S, Pagliaro S, Pacilli MG and Brambilla M (2022) Bringing Us Closer Together: The Influence of National Identity and Political Orientation on COVID-19-Related Behavioral Intentions. Front. Psychol. 13:795654. doi: 10.3389/fpsyg.2022.795654

1

others: avoiding gathering in public places and traveling, physical distancing, mask-wearing, and in extreme cases, quarantine.

While the prescribed measures have shown moderate success in combating the dangers of the disease (Bruinen de Bruin et al., 2020), behavioral sciences have emphasized the importance of behaviors with an underlying prosocial and cooperative component (Solnit, 2010; Levine and Manning, 2013; Jetten et al., 2020, 2021). Discretionary behaviors rise above prescribed behaviors mandated by law and highlight a strong motivation for the well-being of the community during a crisis event (e.g., buying groceries for people who are currently quarantined). More specifically, taking part in such actions is not mandatory but might control COVID-19 incidence (Jetten et al., 2020). Because discretionary behaviors are voluntary, there should be an interest in identifying factors that might increase citizens' appeal to act more prosocially during the COVID-19 pandemic and other crisis events. This paper considers the interplay of different group-level variables, namely political orientation, authoritarianism, ingroup identification, and their relationship with COVID-19 discretionary behaviors.

## POLITICAL ORIENTATION AND PROSOCIAL BEHAVIOR

There exists a consensus in political and social psychology about the relation between political orientation and ideological attitudes. A good deal of work suggests that a rigid and conservative belief system might hinder the motivation to behave prosocially (for a review see, Jost et al., 2003). Previous organizational studies implied that rigid systems restrict positive discretionary behaviors in the workplace (Staw et al., 1981; Benner and Tushman, 2003). Additionally, more right-wing political orientation has been linked to less endorsement and engagement in prosocial behavior (Van Lange et al., 2012). It seems that left-wing-oriented individuals are more likely to exhibit values and concerns related to prosociality. For example, expressing humanistic concerns is more characteristic for leftwingers (Braithwaite, 1998), while values such as appreciation, tolerance, understanding, and a general concern for other people increase the likelihood of a left-wing vote (Caprara et al., 2006). Furthermore, a more prosocial-oriented moral reasoning is linked to more liberal political views (Berg and Mussen, 1976) and concerns about social equality issues (Jost et al., 2003).

Why are left-wing-oriented individuals more concerned about others than their more conservative counterparts? A potential explanation may be due to the higher levels of Rightwing authoritarianism (RWA) among right-wingers. Specifically, RWA is a set of beliefs and attitudes characteristic of individuals who are submissive to their authority figures, act aggressively when defending their authorities, and in general display conservative opinions (Altemeyer, 1988). Empirical studies have shown that right-wing-oriented individuals endorse RWA more than left-wingers (Jost et al., 2003; Wilson and Sibley, 2013; Grünhage and Reuter, 2020).

Prior research has shown that RWA mediates the relationship between right-wing political orientation and proself-motivational

tendencies (Chirumbolo et al., 2016). RWA might also contribute to the suppression of prosocial intentions toward outgroup members (Crawford and Pilanski, 2014; Perry et al., 2015). Thus, right-winged individuals appear to be less prone to behave prosocially because they perceive the world as a dangerous place where their authorities and ingroup are constantly threatened (Duckitt and Sibley, 2010). In light of this reasoning, a rightwing-oriented individual might be less reliant on supporting decisions to give COVID-19 treatment to foreign citizens because they believe that foreign countries would not install the same policies later. This general mistrust of others might contribute to a small interest of right-wingers in helping others in times of crisis and go beyond the selfish interest. In that regard, it would seem relevant to understand how one might appeal to individuals with more conservative attitudes to engage or at least support discretionary behaviors.

# BUFFERING EFFECT OF NATIONAL IDENTIFICATION

National identification—that is the individual and collective selfconcept referred to national memberships (Tajfel and Turner, 1979)—is often conceived as nationalism, blind patriotism, and feeling of own nation superiority. This conceptualization justifies the frequent association between national identification and detrimental attitudes and behaviors, including outgroup derogation and xenophobia. However, in line with the two modes of identification (Roccas et al., 2006; Kende et al., 2019), national identification might also foster positive patriotism based on the need to increase one's own self-esteem from the membership in a commendable group. Therefore, national identification could imply feelings of responsibility, pride, search for compatriots' benefit, and positive attitudes toward the outgroup (Brewer, 1999; Mummendey et al., 2001).

In the same vein, one of the most effective ways to motivate individuals for collective actions and prosocial behavior would be to enhance their belongingness to the community. This seems relevant for crisis events. Indeed, when appeal messages are construed in a way that implies a need to be suspicious of all community members (family, friends, neighbors, and colleagues), they can reduce the feeling of group membership (Greenaway et al., 2015, 2019) and result in deindividuation from the group (Spears et al., 1997). The development of a general mistrust in the community and a lack of identification with ingroup members might dampen the perceived obligation to provide help in dire situations. Studies have also shown that the promotion of social identification increases commitment to the ingroup (Ellemers et al., 1997; Castano et al., 2002; Obst and White, 2007), leads to greater cooperative behavior (Wit and Wilke, 1992; de Cremer, 2002; La Barbera, 2012), and trust that other group members will also cooperate (de Cremer and Vugt, 1999; La Barbera, 2012). This line of research revealed that the social identity and sense of "we-ness" increase people's capacity of coping with crises and the level of trust in other individuals and authorities (e.g., Drury, 2018; Cruwys et al., 2020; Jetten et al., 2020). As a case in point, recent research has shown

that national and European identification are key to handle the negative psychological impact of the pandemic and maintain positive views of the future (Moscatelli et al., 2021; see also Scardigno et al., 2021).

The feeling of trust in fellow citizens was shown to be particularly relevant in the COVID-19 pandemic when understanding why some individuals go beyond prescribed rules to help others in need (Pagliaro et al., 2021). These findings suggest that a strong group identity might buffer the general lack of trust displayed by right-wing-oriented individuals. By highlighting that every individual is part of the community and that they belong, one might motivate even the distrusting people to act for and with the community.

## THE PRESENT STUDY

In this study, we aim to build on the literature about political orientation, collective and prosocial behavioral intentions by exploring how individual differences in political and social beliefs are related to COVID-19 discretionary behaviors. Furthermore, we also considered national identity as a moderator of the relationship between political orientation and discretionary behavioral intentions.

Based on previous work highlighting the negative relationship between the right-wing political orientation and prosocial behavior (Berg and Mussen, 1976; Braithwaite, 1998; Jost et al., 2003; Caprara et al., 2006; Van Lange et al., 2012), we expect that higher levels of right-wing preferences would be related to lower intentions to engage in COVID-19 prosocial discretionary behaviors. By assuming that right-wing-oriented individuals have a more conservative and mistrustful mindset (Altemeyer, 1988; Duckitt and Sibley, 2010; Perry et al., 2015), RWA should mediate the effect of political orientation on COVID-19 discretionary behavioral intentions. Specifically, we expect that right-wing preferences would be linked to low levels of COVID-19 discretionary behavioral intentions through higher levels of RWA. Finally, national identification would be a significant moderator of this effect. When taking into account that national identification may increase cooperation and social action (Wit and Wilke, 1992; Ellemers et al., 1997; de Cremer and Vugt, 1999; Castano et al., 2002; de Cremer, 2002; Obst and White, 2007; La Barbera, 2012), we assume that the indirect effect of RWA is

significant only for low levels of national identification. However, high levels of group belongingness should attenuate the negative effect of RWA on discretionary behavioral intentions and thus reduce the gap between left-wing and right-wing individuals when considering their intentions to engage in prosocial actions (**Figure 1**).

This study contributes to the existing literature in two ways. First, we aim to extend previous work on political orientation and prosocial behavior to the COVID-19 pandemic. To our knowledge, previous studies did not attempt to tackle the relationship between political beliefs and values with intentions to help others during the pandemic. More specifically, we aim to explore such a relation considering not only mandatory behaviors which are prescribed by authorities and institutions but also discretionary behaviors that go beyond mandates and involve a voluntary effort to help the community and the outgroup (Pagliaro et al., 2021). Although not all the potential discretionary behaviors are prosocial and cooperative per se, given the aim of the work, the study exclusively focused on prosocial nonmandatory behaviors that fuel cooperation with the citizenry in order to decrease the negative social impact of the pandemic. Second, the study conceives national identification not only as a phenomenon strictly related to the individual's authoritarianism and political orientation but also as an independent process and a possible way to reduce the antagonistic relation between right-wing values and prosociality.

## MATERIALS AND METHODS

## **Participants**

All Italian participants over the age of 18 were eligible for participation. Our total sample size consisted of 350 participants (N<sub>male</sub> = 124) with an average age of 29 years (M = 29.37, SD = 9.78). All participants were recruited online by sharing the survey on social media networks and Prolific. A sensitivity power analysis using the software G\*Power 3.1 (Faul et al., 2009) revealed that we had the power to detect a moderation effect of  $f^2 = 0.033$  when assuming power = 0.80,  $\alpha = 0.05$ , and three parameters (a predictor, an outcome, and an interaction variable). Additionally, by following Schoemann et al. (2017) when considering moderate relations between the moderator and other variables (r = 0.40) with 350 participants, it is possible



to detect a significant indirect effect with power at 0.99 and  $\alpha = 0.05$ . The survey was devised and administered on an online platform (Qualtrics) and was part of a larger cross-cultural study. We advertised the study online and all those who responded within 15 days were involved in the study. To ensure balance among the different countries we aimed at collecting at least 250 participants in each country that is the necessary sample size to achieve stable estimates for correlations in typical scenarios (Schönbrodt and Perugini, 2018).

#### Materials and Procedure

Data were collected in April 2020, during the first wave of COVID-19 when vaccines were not available and people's behaviors were the main tool to prevent the pandemic spread. After giving informed consent, participants answered questions about their socio-demographic information. Then, they filled a one-item on a 7-point Likert scale measuring their political orientation (higher scores indicate a stronger right-wing orientation), the ingroup attachment scale (Roccas et al., 2006), a shortened version of the Right-wing authoritarianism scale (RWA scale; Manganelli Rattazzi et al., 2007), the mandatory and discretionary COVID-19 related behavioral intentions scale (Pagliaro et al., 2021), and other measures that go beyond the scope of this study (the complete material is available at https://osf.io/c4k2g/). A brief overview of the mentioned measures follows.

#### National Identification

To measure individual differences in national group identification, we used the scale developed by Roccas et al. (2006) (16 items, e.g., "It is important to me to view myself as Italian,"  $\alpha = 0.92$ ).

#### **Right-Wing Authoritarianism**

We used a shortened 10-item version of the RWA scale (Manganelli Rattazzi et al., 2007) based on the previous work by Altemeyer (1988). The scale measures individual differences in tendencies to demonstrate conservatism, authoritarian submission, and aggression ("Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the" rotten apples "who are ruining everything";  $\alpha = 0.71$ ).

#### Mandatory COVID-19 Behavioral Intentions

A 7-item *ad hoc* constructed scale was used to measure participants' support to mandatory COVID-19 related behaviors. Respondents were asked to indicate the extent to which they consider helpful specific actions and to what extent they support some practices (e.g., "self-isolating at home"; "wearing a face mask when going out in public";  $\alpha = 0.77$ ). This scale was built on the prevention campaign promoted by the Italian Ministry of Health.

#### **Discretionary COVID-19 Behavioral Intentions**

A 7-item *ad hoc* constructed scale was used to measure participants' support to discretionary COVID-19 related behaviors toward ingroup and outgroup members. As for

mandatory behavioral intentions, participants were asked how much they consider helpful specific actions and to what extent they support some practices (e.g., "Healthy citizens should volunteer for hospitals, local organizations, Civil protection"; "Our country should send surplus medical supplies (e.g., masks, ventilators, life support machines) to other countries that have lack of them,"  $\alpha = 0.61$ ). This measure was based on the main topics and initiatives promoted by institutions and social agents (e.g., NGO, social organizations) and disseminated through the media and various communication campaigns to encourage social cooperation and solidarity during the COVID-19 spread.

Participants answered all the items on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*).

## RESULTS

Descriptive and correlation analyses were performed using the statistical software SPSS version 27. We have used the SPSS macro PROCESS version 3.5 (Hayes, 2017) to conduct a moderated mediation analysis. Descriptive statistics and correlations between the study variables are presented in **Table 1**. Data of this study are publicly available at: https://osf.io/4m7tw/.

As theoretically expected, the correlations between political orientation with both national identification and RWA are significant and positive. Furthermore, discretionary behavioral intentions are significantly and negatively related to political orientation and RWA, while their correlation with national identification is not significant. Political orientation and RWA are not related to mandatory behavioral intentions. Finally, as expected, compliance with mandatory behaviors and with discretionary behaviors are significantly correlated.

Basing on the pattern of correlation, to test our hypotheses, we performed a moderated mediation analysis (Model 14, Hayes, 2017) using political orientation as the predictor variable, the COVID-19 (discretionary and mandatory) behavioral intentions as the outcome variable, RWA as a mediator, and national identification as moderator. We examined the moderating effect of national identification on the mediator path (path b). We tested the mediation effects of RWA on high (84th percentile) and low (16th percentile) levels of national identification by following the bootstrapping method with 10,000 Monte Carlo draws. Participant scores on the predictor and moderator variables were mean-centered before analyzing the data (Baron and Kenny, 1986). Since the two predictors (i.e., RWA and national

TABLE 1 | Descriptive statistics and correlations between the study variables.

Variable	м	SD	1	2	3	4	5
Political orientation (1)	3.36	1.42	1				
RWA (2)	2.98	1.00	0.49**	1			
National identification (3)	4.48	1.09	0.27**	0.42**	1		
Mandatory behaviors (4)	6.40	0.69	- 0.03	0.02	0.30**	1	
Discretionary behaviors (5)	5.05	0.87	- 0.18**	- 0.22**	0.10	0.26**	1

*M* and SD represent the means and standard deviations. \*\*indicates p < 0.01.

identification) proved to be correlated, we computed the indices of collinearity between RWA and national identification. The Variance Inflation Factor (VIF) is low (i.e., 1.2) and, accordingly, the Tolerance Index is high (i.e., 0.82). Thus, it seems that there is no significant multicollinearity that needs to be corrected. Moreover, since the scale of discretionary behavioral intentions includes items related to both individual actions (e.g., "Healthy citizens should help buying groceries and supplies for people who are in guarantine or are in need") and collective or institutional actions (e.g., "Our country should accommodate patients who cannot receive medical assistance in their own country") we run a factorial analysis in order to test the component structure of the scale. Parallel analysis suggested a single-component solution explaining the 34.37% of the variance with all items (bar a single item) having sufficiently high loadings on this component.

In line with the hypothesis, the model showed that national identification moderates the effect of RWA on COVID-19 discretionary behavioral intentions, b = 0.16, SE = 0.04, t = 4.31, p < 0.001, 95% CI [0.09, 0.23]. A significant negative effect of RWA on discretionary behavioral intentions was identified on lower levels (3.50) of national identification identity, b = -0.36, SE = 0.06, t = -5.77, p < 0.001, 95% CI [-0.48, -0.24], while the same effect on higher levels (5.63) of national identification was not significant, b = -0.02, SE = 0.07, t = -0.34, p = 0.731, 95% CI [-0.16, 0.12]. Furthermore, the overall mediation effect of RWA produced confidence intervals that did not include zero thus indicating statistical significance, 95% CI [-0.142, -0.001].

A significant moderation effect of national identification was also identified for the overall moderated mediation model, b = 0.05, SE = 0.02, 95% CI [0.02, 0.08]. For low levels of national identification, RWA significantly mediated the effect of political orientation on discretionary behavioral intentions, b = -0.12, 95% CI [-0.18, -0.97]. The same mediation effect when considering high levels of national identification was not significant, b = -0.01, 95% CI [-0.06, 0.41]. Finally, when we compared the indirect effect of political orientation on discretionary behavioral intentions via RWA, it was found that the mediation effect of RWA was stronger on low levels of national identification, 95% CI [0.05, 0.18].

Then, for exploratory purposes, we carried out the moderated mediation model on "individual" discretionary behavioral intentions and "collective" discretionary behavioral intentions separately. The interaction between RWA and national identification is significant in the first model, b = 0.15, SE = 0.05, t = 3.23, p = 0.001, 95% CI [0.06, 0.24]; total effect of the moderated mediation: b = 0.05, SE = 0.02, 95% CI [0.02, 0.09], as well as in the second model, b = 0.16, SE = 0.04, t = 3.81, p = 0.001, 95% CI [0.08, 0.25]; total effect of the moderated mediation: b = 0.05, SE = 0.02, 95% CI [0.02, 0.09].

In line with the correlational pattern, the same model computed using mandatory behavioral intentions as a dependent variable was not significant, b = 0.01, SE = 0.01, 95% CI [-0.008, 0.03]. For this model, the analysis did not yield a significant interaction between RWA and national identification, b = 0.04, SE = 0.03, t = 1.31, p = 0.19, 95% CI [-0.02, 0.10].

## DISCUSSION

In this study, we tested the effect of group-related processes on the relationship between political orientation and behavioral intentions during the COVID-19 pandemic. Results show that individuals with higher right-wing inclinations were likely to report smaller intentions for voluntary behaviors to stop the virus from spreading and to help the community during the crisis. RWA mediated this effect. In other words, right-wingoriented participants were less likely to endorse discretionary behaviors because of their high levels of RWA expressed in a conservative and mistrustful worldview (Duckitt and Sibley, 2010). It seems that the tendency of high authoritarians to focus on selfish interests might result in a reluctance to go beyond the regulations prescribed by authorities and cooperate with the citizenry. In line with this interpretation, it is worth noting that political orientation and RWA proved to be unrelated to compliance with mandatory behaviors that are imposed by the institutions. Discretionary behaviors are more prone to be affected by individuals' values and group processes for two reasons. First, they are arbitrary, extra-role actions that go beyond explicit and normative mandates, thus being more influenced by personal will. Second, whereas mandatory behaviors can be accomplished for individualistic motives (i.e., avoiding the infection) discretionary behaviors are intrinsically prosocial. Thus, this finding extends previous work on the interplay between political orientation, RWA, and prosocial behavior (Berg and Mussen, 1976; Braithwaite, 1998; Jost et al., 2003; Caprara et al., 2006; Van Lange et al., 2012) to relevant collective actions during the COVID-19 crisis.

Furthermore, national identification was identified as a significant moderator of the mediation effect of RWA. Higher levels of right-wing orientation were associated with less support for discretionary behaviors through a stronger endorsement of RWA. However, that mediation effect was nullified when considering participants with high national identification. A strong feeling of group membership (Greenaway et al., 2015, 2019) and commitment to the group (Ellemers et al., 1997; Castano et al., 2002; Obst and White, 2007) might have suppressed the negative effect of conservatism and mistrust present in right-wing oriented participants. To elaborate further, individuals who strongly identify with their group showed more positive attitudes toward discretionary COVID-19 behaviors regardless of the individual differences in their political beliefs and views. In that regard, national identity acted as a buffer of the strong negative effect of RWA on discretionary behavior and brought participants on different poles in political orientation closer together in prosocial behavior. These results fit well with recent evidence showing the key role of enhanced national identification to handle the COVID-19 pandemic (Moscatelli et al., 2021; Scardigno et al., 2021).

This study has one major implication. Our results suggest that people with different political orientations might pay different levels of importance to discretionary behaviors. To be more specific, left-winged individuals may be more open to and accepting of behaviors that go beyond mandatory rules and policies. Tailoring appeal messages to individuals with different political values might increase the endorsement of discretionary behaviors in the community.

One possibility that was identified in this study is to foster and strengthen social identity. Policymakers should appeal to their citizens by emphasizing that they are part of a community and can give an individual contribution in keeping each member of the said community (family, friends, neighbors, colleagues) safe and healthy. These types of plea messages might be particularly relevant for more conservative and right-wing oriented citizens and decrease differences between right-wing and left-wing oriented individuals when prosocial citizenship action is concerned. However, this does not imply that stronger levels of national identity might contribute to uncooperative and antagonistic attitudes toward outgroups. First, strong positive emotions toward the ingroup are independent of perceived hostility toward the outgroup members (Brewer, 1999; Mummendey et al., 2001; Kende et al., 2019). Furthermore, environmental and societal crises, such as the COVID-19 pandemic, might also foster perceptions of a global common fate (Levine and Manning, 2013; Zagefka, 2021). For example, emphasizing inclusive social identities (e.g., highlighting COVID-19 as an intergroup threat) could be beneficial in improving cooperation and fostering positive ingroup-outgroup relations (Jetten et al., 2020).

This study is not without limitations. First, we employed a cross-sectional study that does not make causal conclusions about the effects identified in our analyses. Second, we collected our data in Italy with Italian nationals as participants. Since national identification is likely to emphasize distinctive values of that specific cultural context (Vargas-Salfate et al., 2020), one should generalize the findings of this study to other cultures with caution. Future studies should replicate our findings in different cultural contexts. It is also plausible that such effects change over time due to people's habituation and familiarity with the crisis. Third, we did not include a measure of a second variable relevant to explaining behavioral and attitudinal differences based on political orientation: the Social Dominance Orientation (SDO; Sidanius and Pratto, 1999; Mirisola et al., 2007; Duckitt and Sibley, 2010). In that regard, we could not study the mediational role of SDO in the relationship between political orientation and discretionary behaviors. Thus, if a strong national identity might affect the negative attitudes toward prosocial behaviors of right-wing individuals with high SDO levels remains an open question. This is particularly relevant when considering the

## REFERENCES

- Altemeyer, B. (1988). Enemies of Freedom: Understanding Right-Wing Authoritarianism. San Francisco, US: Jossey-Bass.
- Anderson, R. M., Heesterbeek, H., Klinkenberg, D., and Hollingsworth, T. D. (2020). How will country-based mitigation measures influence the course of the COVID-19 epidemic? *Lancet* 395, 931–934. doi: 10.1016/S0140-6736(20) 30567-5
- Azevedo, F., and Jost, J. T. (2021). The ideological basis of antiscientific attitudes: effects of authoritarianism, conservatism, religiosity, social dominance, and system justification. *Group Process. Intergr. Relat.* 24, 518–549. doi: 10.1177/ 1368430221990104
- Baron, R. M., and Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical

importance of SDO in predicting prosocial intentions (Politi et al., 2021). Moreover, other variables might intervene in the relation between individual RWA and COVID-19 behaviors. For instance, authoritarianism and conservatism are associated with antiscientific attitudes (Azevedo and Jost, 2021) and specific conspiracy beliefs (Wood and Gray, 2019) that, in their turn, could affect compliance with some prescriptions or suggestions. Future studies should test the role of national identification and these mediators in predicting behaviors likely to mitigate the impact of the COVID-19.

## DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author/s.

## **ETHICS STATEMENT**

The studies involving human participants were reviewed and approved by the Local Ethics Committee of the University of Milano-Bicocca (Protocol RM-2020-271). The patients/participants provided their written informed consent to participate in this study.

## **AUTHOR CONTRIBUTIONS**

AS, SS, MP, SP, and MB conceived and planned the study. SS, MP, SP, and MB collected the data, acquired, and administered funding. AS and SS analyzed the data and AS wrote the original draft. All authors have read and agreed to the final version of the manuscript.

## FUNDING

This research was supported by a "COVID-19 Grant" awarded from the European Association of Social Psychology to SP and the Pomilio Blumm Communication Agency. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript. There are no restrictions on sharing of data and materials.

considerations. J. Pers. Soc. Psychol. 51, 1173–1182. doi: 10.1037/0022-3514.51. 6.1173

- Benner, M. J., and Tushman, M. L. (2003). Exploitation, exploration, and process management: the productivity dilemma revisited. *Acad. Manag. Rev.* 28, 238– 256. doi: 10.2307/30040711
- Berg, N. E., and Mussen, P. (1976). Social class differences in adolescents' Sociopolitical opinions. Youth Soc. 7, 259–270. doi: 10.1177/0044118X76007 00302
- Braithwaite, V. (1998). The value orientations underlying liberalism-conservatism. Pers. Individ. Differ. 25, 575–589. doi: 10.1016/S0191-8869(98)00111-1
- Brewer, M. B. (1999). The psychology of prejudice: ingroup love and outgroup hate? J. Soc. Issues 55, 429–444. doi: 10.1111/0022-4537.00126
- Bruinen de Bruin, Y., Lequarre, A.-S., McCourt, J., Clevestig, P., Pigazzani, F., et al. (2020). Initial impacts of global risk mitigation measures taken during

the combatting of the COVID-19 pandemic. *Saf. Sci.* 128:104773. doi: 10.1016/j.ssci.2020.104773

- Caprara, G. V., Schwartz, S., Capanna, C., Vecchione, M., and Barbaranelli, C. (2006). Personality and politics: values, traits, and political choice. *Polit. Psychol.* 27, 1–28. doi: 10.1111/j.1467-9221.2006.00447.x
- Castano, E., Yzerbyt, V., Paladino, M.-P., and Sacchi, S. (2002). I Belong, therefore, I exist: ingroup identification, ingroup entitativity, and ingroup bias. *Pers. Soc. Psychol. Bull.* 28, 135–143. doi: 10.1177/0146167202282001
- Chirumbolo, A., Leone, L., and Desimoni, M. (2016). The interpersonal roots of politics: social value orientation, socio-political attitudes and prejudice. *Pers. Individ. Differ*. 91, 144–153. doi: 10.1016/j.paid.2015.12.001
- Crawford, J. T., and Pilanski, J. M. (2014). The differential effects of right-wing authoritarianism and social dominance orientation on political intolerance. *Polit. Psychol.* 35, 557–576. doi: 10.1111/pops.12066
- Cruwys, T., Greenaway, K., Ferris, L. J., Rathbone, J. A., Saeri, A. K., Williams, E., et al. (2020). When trust goes wrong: a social identity model of risk taking. *J. Pers. Soc. Psychol.* 120, 57–83. doi: 10.1037/pspi0000243
- de Cremer, D. (2002). Respect and cooperation in social dilemmas: the importance of feeling included. *Pers. Soc. Psychol. Bull.* 28, 1335–1341. doi: 10.1177/ 014616702236830
- de Cremer, D., and Vugt, M. V. (1999). Social identification effects in social dilemmas: a transformation of motives. *Eur. J. Soc. Psychol.* 29, 871–893.
- Dodd, R. H., Pickles, K., Nickel, B., Cvejic, E., Ayre, J., Batcup, C., et al. (2021). Concerns and motivations about COVID-19 vaccination. *Lancet Infect. Dis.* 21, 161–163. doi: 10.1016/S1473-3099(20)30926-9
- Drury, J. (2018). The role of social identity processes in mass emergency behaviour: an integrative review. *Eur. Rev. Soc. Psychol.* 29, 38–81. doi: 10.1080/10463283. 2018.1471948
- Duckitt, J., and Sibley, C. G. (2010). Personality, ideology, prejudice, and politics: a dual-process motivational model. *J. Pers.* 78, 1861–1893. doi: 10.1111/j.1467-6494.2010.00672.x
- Ellemers, N., Spears, R., and Doosje, B. (1997). Sticking together or falling apart: in-group identification as a psychological determinant of group commitment versus individual mobility. J. Pers. Soc. Psychol. 72, 617–626. doi: 10.1037/0022-3514.72.3.617
- Faul, F., Erdfelder, E., Buchner, A., and Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: tests for correlation and regression analyses. *Behav. Res. Methods* 41, 1149–1160. doi: 10.3758/BRM.41.4.1149
- Greenaway, K. H., Haslam, S. A., and Bingley, W. (2019). Are "they" out to get me? A social identity model of paranoia. *Group Process. Intergr. Relat.* 22, 984–1001. doi: 10.1177/1368430218793190
- Greenaway, K. H., Haslam, S. A., Cruwys, T., Branscombe, N. R., Ysseldyk, R., and Heldreth, C. (2015). From "we" to "me": group identification enhances perceived personal control with consequences for health and well-being. *J. Pers. Soc. Psychol.* 109, 53–74. doi: 10.1037/pspi0000019
- Grünhage, T., and Reuter, M. (2020). Personality's influence on political orientation extends to concrete stances of political controversy in Germany – Crossnationally and consistently. J. Soc. Political Psychol. 8, 686–707. doi: 10.5964/ jspp.v8i2.1133
- Hayes, A. F. (2017). Introduction to Mediation, Moderation, and Conditional Process Analysis, Second Edition: A Regression-Based Approach. New York, NY: Guilford Publications.
- Jetten, J., Bentley, S. V., Crimston, C. R., Selvanathan, H. P., and Haslam, S. A. (2021). COVID-19 and social psychological research: a silver lining. Asian J. Soc. Psychol. 24, 34–36. doi: 10.1111/ajsp.12465
- Jetten, J., Reicher, S. D., Haslam, S. A., and Cruwys, T. (2020). *Together Apart: The Psychology of COVID-19*. Thousand Oaks, CA: Sage Publications Ltd.
- Jost, J. T., Glaser, J., Kruglanski, A. W., and Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychol. Bull.* 129, 339–375. doi: 10.1037/0033-2909.129.3.339
- Kende, A., Hadarics, M., and Szabó, Z. P. (2019). Inglorious glorification and attachment: National and European identities as predictors of anti- and proimmigrant attitudes. *Br. J. Soc. Psychol.* 58, 569–590. doi: 10.1111/bjso.1 2280
- La Barbera, F. (2012). Being European in a social dilemma: the effect of European identity on cooperation. TPM Test. Psychom. Methodol. Appl. Psychol. 19, 165–175. doi: 10.4473/TPM19.3.2

- Levine, M., and Manning, R. (2013). Social identity, group processes, and helping in emergencies. *Eur. Rev. Soc. Psychol.* 24, 225–251. doi: 10.1080/10463283.2014. 892318
- Manganelli Rattazzi, A. M., Bobbio, A., and Canova, L. (2007). A short version of the Right-Wing Authoritarianism (RWA) Scale. Pers. Individ. Differ. 43, 1223–1234. doi: 10.1016/j.paid.2007.03.013
- Mirisola, A., Sibley, C. G., Boca, S., and Duckitt, J. (2007). On the ideological consistency between right-wing authoritarianism and social dominance orientation. *Pers. Individ. Differ.* 43, 1851–1862. doi: 10.1016/j.paid.2007.06.006
- Moscatelli, S., Graziani, A. R., Botindari, L., Ciaffoni, S., and Menegatti, M. (2021). Everything Will Be Alright!" National and European identification as predictors of positive expectations for the future during the COVID-19 emergency. *Front. Psychol.* 12:723518. doi: 10.3389/fpsyg.2021.723518
- Mummendey, A., Klink, A., and Brown, R. (2001). Nationalism and patriotism: national identification and out-group rejection. *Br. J. Soc. Psychol.* 40, 159–172. doi: 10.1348/014466601164740
- Obst, P. L., and White, K. M. (2007). Choosing to belong: the influence of choice on social identification and psychological sense of community. J. Community Psychol. 35, 77–90. doi: 10.1002/jcop.20135
- Pagliaro, S., Sacchi, S., Pacilli, M. G., Brambilla, M., Lionetti, F., Bettache, K., et al. (2021). Trust predicts COVID-19 prescribed and discretionary behavioral intentions in 23 countries. *PLoS One* 16:e0248334. doi: 10.1371/journal.pone. 0248334
- Paltiel, A. D., Schwartz, J. L., Zheng, A., and Walensky, R. P. (2021). Clinical outcomes of a COVID-19 vaccine: implementation overeEfficacy. *Health Aff.* 40, 42–52. doi: 10.1377/hlthaff.2020.02054
- Perry, R., Paradies, Y., and Pedersen, A. (2015). Religious ambivalence: suppression of pro-social attitudes toward asylum seekers by Right-Wing Authoritarianism. *Int. J. Psychol. Relig.* 25, 230–246. doi: 10.1080/10508619.2014.921473
- Politi, E., Van Assche, J., Caprara, G. V., and Phalet, K. (2021). No man is an island: psychological underpinnings of prosociality in the midst of the COVID-19 outbreak. *Pers. Individ. Differ.* 171:110534. doi: 10.1016/j.paid.2020.110534
- Roccas, S., Klar, Y., and Liviatan, I. (2006). The paradox of group-based guilt: modes of national identification, conflict vehemence, and reactions to the ingroup's moral violations. *J. Pers. Soc. Psychol.* 91, 698–711. doi: 10.1037/0022-3514.91.4.698
- Scardigno, R., Papapicco, C., Luccarelli, V., Zagaria, A. E., Mininni, G., and D'Errico, F. (2021). The humble charisma of a white-dressed man in a desert place: pope francis' communicative style in the Covid-19 pandemic. *Front. Psychol.* 12:3586. doi: 10.3389/fpsyg.2021.683259
- Schoemann, A. M., Boulton, A. J., and Short, S. D. (2017). Determining Power and Sample Size for Simple and Complex Mediation Models. Soc. Psychol. Personal. Sci. 8, 379–386. doi: 10.1177/1948550617715068
- Schönbrodt, F. D., and Perugini, M. (2018). "At what sample size do correlations stabilize?": corrigendum. J. Res. Pers. 74:194. doi: 10.1016/j.jrp.2018.02.010
- Sidanius, J., and Pratto, F. (1999). Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression. Cambridge: Cambridge University Press, doi: 10.1017/CBO9781139175043
- Solnit, R. (2010). A Paradise Built in Hell: The Extraordinary Communities That Arise in Disaster. New York, NY: Penguin.
- Spears, R., Doosje, B., and Ellemers, N. (1997). Self-stereotyping in the face of threats to group status and distinctiveness: the role of group identification. *Pers. Soc. Psychol. Bull.* 23, 538–553. doi: 10.1177/0146167297235009
- Staw, B. M., Sandelands, L. E., and Dutton, J. E. (1981). Threat-rigidity effects in organizational behavior: a multilevel analysis. Adm. Sci. Q. 26, 501–524. doi: 10.2307/2392337
- Su, Z., Wen, J., Abbas, J., McDonnell, D., Cheshmehzangi, A., Li, X., et al. (2020). A race for a better understanding of COVID-19 vaccine non-adopters. *Brain Behav. Immun.* 9:100159. doi: 10.1016/j.bbih.2020.100159
- Su, Z., Wen, J., McDonnell, D., Goh, E., Li, X., Šegalo, S., et al. (2021). Vaccines are not yet a silver bullet: the imperative of continued communication about the importance of COVID-19 safety measures. *Brain Behav. Immun.* 12:100204. doi: 10.1016/j.bbih.2021.100204
- Tajfel, H., and Turner, J. C. (1979). "An integrative theory of inter-group conflict," in *The Social Psychology of Inter-Group Relations*, eds W. G. Austin and S. Worchel (Monterey, CA: Brooks/Cole), 33–47. doi: 10.1080/ 13623690008409516

- Van Lange, P. A. M., Bekkers, R., Chirumbolo, A., and Leone, L. (2012). Are conservatives less likely to be prosocial than liberals? From games to ideology, political preferences and voting. *Eur. J. Pers.* 26, 461–473. doi: 10.1002/per.845
- Vargas-Salfate, S., Liu, J. H., Gil, and de Zúñiga, H. (2020). Right-Wing Authoritarianism and national identification: the role of democratic context. *Int. J. Public Opin. Res.* 32, 318–331. doi: 10.1093/ijpor/edz026
- Wang, J., Jing, R., Lai, X., Zhang, H., Lyu, Y., Knoll, M. D., et al. (2020). Acceptance of COVID-19 Vaccination during the COVID-19 pandemic in China. *Vaccines* 8:482. doi: 10.3390/vaccines8030482
- Wilson, M. S., and Sibley, C. G. (2013). Social dominance orientation and right-wing authoritarianism: additive and interactive effects on political conservatism. *Polit. Psychol.* 34, 277–284. doi: 10.1111/j.1467-9221.2012.00 929.x
- Wit, A. P., and Wilke, H. A. M. (1992). The effect of social categorization on cooperation in three types of social dilemmas. J. Econ. Psychol. 13, 135–151. doi: 10.1016/0167-4870(92)90056-D
- Wood, M. J., and Gray, D. (2019). Right-wing authoritarianism as a predictor of pro-establishment versus anti-establishment conspiracy theories. *Personal. Individ. Differ.* 138, 163–166. doi: 10.1016/j.paid.2018.09.036
- World Health Organization (2021). WHO Coronavirus (COVID-19) Dashboard. Available online at: https://covid19.who.int [accessed on Oct 12, 2021].

Zagefka, H. (2021). Prosociality during COVID-19: globally focussed solidarity brings greater benefits than nationally focussed solidarity. J. Community Appl. Soc. Psychol. n/a, 1–14. [Epub Online ahead of print] doi: 10.1002/casp.2553

**Conflict of Interest:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

**Publisher's Note:** All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Copyright © 2022 Simić, Sacchi, Pagliaro, Pacilli and Brambilla. This is an openaccess article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.