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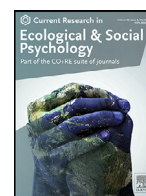
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# Look past the divide: Social dominance, authoritarianism, future thinking, and superordinate identity underlie the political divide on environmental issues

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## ABSTRACT

Research in social and political science has documented a political divide on environmental issues, describing greater environmental concern as well as more proenvironmental attitudes and behaviours amongst left-wing (or liberal) than right-wing (or conservative) citizens. However, the specific psychological components that underlie this divide remain underexplored. In the present study, we explore the role of several socio-cognitive components known to be associated with political orientation and assess how well each can account for the relationship between political orientation and proenvironmental views. Evidence from a large-scale survey in the UK ( $N = 1,147$ ) reveals that higher right-wing authoritarianism, higher social dominance orientation, lower future thinking and lower superordinate (European) identity, together accounted for half the effect of political orientation. In contrast, belief in a just world, system justification, and ingroup (British) identity, were not significantly related to proenvironmental views. The present work advances past research by informing which psychological routes may be useful for interventions and persuasion to bridge the political divide on environmental issues.

## 1. Introduction: political divide on environmental issues

Research in the political and social sciences has consistently demonstrated that more left-wing (or liberal) people express greater belief in and concern for environmental issues whereas more right-wing (or conservative) people are more likely to resist proenvironmental actions and express climate change denial (McCright & Dunlap, 2011)—a political divide that may be deepening (Kennedy & Johnson, 2020).

A general explanation relies on the socioeconomic values defended by the different political camps and their compatibility with environmental protection measures. As McCright and Dunlap (2011, p. 160) put it, “environmental protection typically entails governmental intervention into markets and restrictions on property rights, challenging conservative values, but is consistent with liberals’ view that protecting collective welfare is a proper role of government” (see also Baker et al., 2017). However, this explanation does not consider the specific psychological factors involved in the political divide and that might be particularly relevant for shaping environmental views (Jost et al., 2003). In this respect, we concur with others that additional explanation is needed (Bugden, 2022).

Indeed, describing and recognising that environmental views vary with political orientation is a first step, but it gives no indication as

to how this divide might be addressed, as it seems hardly possible to influence people’s political orientation. In contrast, specific psychological factors might be amenable to change. Therefore, identifying which psychological constructs drive the political divide is a crucial step for developing appropriately targeted interventions and methods of communication (Feygina, 2021). In this short paper, we report evidence from a cross-sectional survey investigating the proenvironmental views of a representative UK sample. Drawing from previous research, we identified seven socio-cognitive components, known to be associated with political views, that could potentially account for the link between political orientation and proenvironmental views. Specifically, we examine the role of right-wing authoritarianism, social dominance orientation, system justification, belief in a just world, future thinking, and levels of social identity.

### 1.1. Socio-cognitive components underlying the political divide on environmental issues

#### 1.1.1. Right-wing authoritarianism

Right-wing authoritarianism (RWA) is a general attitudinal orientation characterised by endorsement of conventional values, submission to authorities, and approval of aggression against those violating

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the rules imposed by authorities (Altemeyer, 1988). Strongly associated with but conceptually distinct from a conservative political orientation, RWA is a key predictor of social attitudes (e.g., prejudice, racism) including proenvironmental attitudes (Feygina, 2021): RWA is negatively related to environmental concern (Schultz & Stone, 1994) and support for environmental protection measures (Peterson et al., 1993). It is also positively related to climate change denial (Häkkinen & Akrami, 2014; Kerr & Wilson, 2021) and acceptance of unethical, anti-environmental decisions made by a leader (Son Hing et al., 2007).

### 1.1.2. Social dominance orientation

Social dominance orientation (SDO) represents a general attitudinal orientation associated with right-wing views. Different from RWA, it is characterised by dominance and feelings of superiority towards out-groups (Zakrisson, 2005). High-SDO individuals prefer social relationships to be organised hierarchically rather than equally and are motivated to maintain or enhance the superior status of certain social groups. SDO is negatively related to support for environmental policies (Pratto et al., 1994) and positively related to climate change denial (Häkkinen & Akrami, 2014; Kerr & Wilson, 2021), agreement with human domination of nature (“utilisation”, Milfont et al., 2013) and anti-environmental decision making when in a position of power (Son Hing et al., 2007; see also Feygina, 2021; Santos & Feygina, 2017).

### 1.1.3. Belief in a just world

Belief in a just world (BJW) relates to needs for certainty, stability, and control, and is generally more prevalent amongst people with a right-wing orientation (Furnham et al., 2009). It reflects the need to believe that we live in a world where people generally get what they deserve. As environmental threats, especially climate change, disrupt perceptions of the world as just and fair, people with high BJW tend to react with scepticism and resistance to proenvironmental initiatives (Feinberg & Willer, 2010; see also Feygina, 2021; Santos & Feygina, 2017).

### 1.1.4. System justification

System justification represents the motivation to perceive the social system as fair, legitimate, beneficial, and stable, in order to satisfy basic needs for certainty and security. In most Western countries, system justification is higher amongst the political right than the political left (Jost & Hunyady, 2005). It is associated with a tendency to rationalise how things are and to defend the status quo, and with a reluctance to acknowledge flaws in the existing system, which would be necessary to effectively fight climate change (Feygina et al., 2010). Unsurprisingly, higher system justification is related to less proenvironmental attitudes and behaviours, greater climate change scepticism and denial, as well as unwillingness to support climate initiatives (Feygina, 2021; Hennes et al., 2016; Santos & Feygina, 2017).

### 1.1.5. Future thinking

Future thinking, reflecting a personal tendency to think more about the future (Seginer, 2009; Zimbardo & Boyd, 1999), is related to different forms of long-term oriented behaviour and attitudes, including proenvironmental behaviour and environmental concern (e.g., Bruderer Enzler, 2015; Milfont & Demarque, 2015; see Joireman & King, 2016, for a review). Research on the relationship with political orientation is scarce, but recent evidence suggests that left-wing individuals express a higher future orientation than right-wing individuals (Joireman & Liu, 2014; Lalot et al., 2021).

### 1.1.6. Social identities

The last construct we consider here is social identity. According to social categorisation theory (Turner, 1985), an individual can self-

categorise at different levels (subordinate, intermediate, superordinate), from which they derive different personal and social identities influencing their behaviour. Because environmental issues are a collective problem that virtually affects all people across social groups, environmental commitment increases when people self-categorise at a superordinate level (e.g., as ‘human’, Reese, 2016) and when a common in-group is made salient (Wolsko, 2017). Conversely, self-categorisation at the intermediate level (e.g., country-level) can relate to lower environmental commitment, partly because a strong country-level identification increases feeling of dependence on the system and lowers the willingness to challenge the status quo (Feygina et al., 2010). Importantly, a superordinate identity is more pronounced amongst the political left (McFarland et al., 2012) while an intermediate-level national identity is more pronounced amongst the political right (Feygina et al., 2010; Verkuyten et al., 2022).

## 1.2. The present research

Past research has identified a clear political divide on environmental issues but has not specified which socio-cognitive psychological components likely underlie this divide. The relatively fewer pieces that have looked at psychological components have focused mostly on RWA and SDO (see above). With rare exceptions (Feygina et al., 2010; Häkkinen & Akrami, 2014; Kerr & Wilson, 2021; Son Hing et al., 2007), they typically consider only one component at a time. In addition, most papers looking at psychological components do not include political orientation and thus cannot elucidate the extent to which the psychological components may account for the relationship between political orientation and environmental views (for exceptions, see Feygina et al., 2010; Häkkinen & Akrami, 2014; Kerr & Wilson, 2021).

In the present research, we conduct a more integrative test of the psychological factors underlying the political divide on environmental issues. We test the relationships between political orientation, environmental views, and the seven socio-cognitive factors described above, in order to statistically compare and quantify their relative power to account for environmental views when considered simultaneously (for a similar approach, see e.g., Feygina, 2021; Feygina et al., 2010; Hennes et al., 2016; Santos & Feygina, 2017). We selected these factors based on the state of previous research, on the assumption that they might be particularly likely candidates to account for the political divide. In general terms, we expected these factors to be related to both political orientation and environmental views, and that part of the relationship between political orientation and environmental views would be statistically attributable to at least some of these factors. In line with previous research, we expected a more right-wing political orientation would be related to stronger RWA, SDO, belief in a just world, system justification, and national identity; and to lower future thinking and superordinate identity. Turning to environmental views, we expected that RWA, SDO, belief in a just world, system justification, and national identity would be negatively related to environmental views, whilst future thinking and superordinate identity would be positively related to them. Apart from these general directional expectations, we remained agnostic as to which factor(s), when considered together, are more likely to yield significant effects.

As data were collected during the first year of the COVID-19 pandemic, we focused our investigation on respondents’ willingness to prioritise the ‘green agenda’. Indeed, at the time, the public and media were discussing how to best rebuild the economy after the pandemic had waned and many were calling for considering the environmental crisis when doing so, in an effort towards a ‘green recovery’ from COVID-19 (Hodgkin & Sasse, 2021).

**Table 1**  
Descriptive statistics and zero-order correlations between all constructs.

		<i>M</i> ( <i>SD</i> )	$\alpha$ / $\omega_T$	2	3	4	5	6	7	8	9
1	Political orientation	3.78 (1.41)	-	.42***	.36***	.37***	.17***	-.08**	.35***	-.32***	-.35***
2	RWA	3.46 (1.04)	.73 / .73		.28***	.32***	.10**	-.04	.29***	-.34***	-.26***
3	SDO	2.02 (0.79)	.76 / .82			.17***	.06	-.15***	.12***	-.31***	-.36***
4	System justification	2.79 (0.96)	.82 / .82				.51***	-.08**	.42***	-.18***	-.20***
5	Belief in a just world	3.02 (0.84)	.69 / .69					-.07*	.17***	.03	-.11***
6	Future thinking	3.23 (1.20)	-						-.04	.12***	.23***
7	British identity	3.19 (1.39)	.92 / .92							-.10**	-.18***
8	European identity	2.33 (1.38)	.95 / .95								.30***
9	Green agenda	3.55 (1.07)	-								

Note. RWA = Right-wing authoritarianism. SDO = Social dominance orientation. Green agenda = Willingness to prioritise the green agenda.  $\alpha$  = Cronbach's alpha,  $\omega_T$  = McDonald's omega total.

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

## 2. Method

### 2.1. Participants and procedure

Data are part of a large-scale research project tracking social cohesion in the UK during COVID-19 (Abrams et al., 2021).<sup>1</sup> Participants were drawn from the general population of the regions of Scotland and Wales as well as the county of Kent in England. An external research partner (Qualtrics Panels) distributed the online survey, recruiting and remunerating the participants directly. The sample was stratified to be representative on sex and age categories. The study received Ethics approval from the School of Psychology at the University of Kent. Sample size was determined prior to data collection based on feasibility and funding capacities.

A total of 1,147 respondents (56.3% female,  $M_{age} = 49.17$ ,  $SD = 16.52$ ) completed the online questionnaire in August–September 2020. All demographics are reported in Electronic Supplementary Material (ESM1).<sup>2</sup> Descriptive statistics and zero-order correlations between all constructs are reported in Table 1.

### 2.2. Measures

#### 2.2.1. Political orientation

Political orientation was measured on a 7-point scale (labelled 1 = Left-wing, 4 = Centre, 7 = Right-wing;  $M = 3.78$ ,  $SD = 1.41$ ): 34.7% of participants self-described as left-wing (scoring 1, 2, or 3), 40.3% as centre (scoring 4), and 25.0% as right-wing (scoring 5, 6, or 7).

#### 2.2.2. Socio-cognitive factors

Unless stated otherwise, all items were measured on a 5-point Likert scale (1 = Strongly disagree, 5 = Strongly agree). Two items were used for *right-wing authoritarianism* (authoritarian submission: “What our country needs most is discipline, with everyone following our leaders in unity”, authoritarian aggression: “The facts on crime and the recent public disorders show we have to crack down harder on troublemakers, if we are going preserve law and order”, Bizumic & Duckitt, 2018). *Social dominance orientation* was measured with the 4-item short SDO

scale (e.g., “Superior groups should dominate inferior groups”, Pratto et al., 2013). Three items drawn from Kay and Jost (2003) assessed *system justification* (e.g., “In general the British political system operates as it should”). Two items were used for *belief in a just world* regarding the self (procedural justice: “I feel that the world treats me fairly”, distributive justice: “I feel that I get what I deserve”, Lucas et al., 2011). *Future thinking* was measured with one item: “I often think about how things might be in the next 50 years.” *Social identity* was measured at an intermediate (national, i.e., British) and superordinate (European) level with two items for each (e.g., “I feel [British / European]”).

#### 2.2.3. Environmental views

*Willingness to prioritise the green agenda* was assessed in the context of the ongoing COVID-19 pandemic. Specifically, we asked, “When planning for the recovery post-Covid, to what extent do you think the green agenda should be made a priority?” (1 = Definitely not made a priority, 3 = Unsure, 5 = Definitely made a priority). 631 respondents (55%) said it should be made a priority, 355 (31%) were unsure, and 161 (14%) said it should not.<sup>3</sup> All data as well as code for the analyses are publicly available on the OSF page dedicated to the project: <https://osf.io/wn84p>.

## 3. Results

### 3.1. Analytical strategy

Relationships between political orientation (as the more distal predictor), socio-cognitive components (as more proximal predictors), and willingness to prioritise the green agenda (as dependent variable) were investigated through a series of structural equation models (SEM) including the measurement model and the regression model. We initially considered the role of demographics (age, sex, and subjective socioeconomic status). However, the variables were not significantly related to the dependent variable, and their inclusion gave virtually identical results. They are therefore not discussed further.

We tested a first model including all seven socio-cognitive components. A second model then focused on the four constructs that were found to be significantly related to the dependent variable. The direct and indirect effects of political orientation were tested on the basis of

<sup>1</sup> The questionnaire contained a number of other measures (mostly related to views on the COVID-19 pandemic) that are not covered in the present paper. We scanned the overall questionnaire prior to running any analyses to select variables relevant to the present research question based on the environmental psychology literature. We did not conduct any other analyses than those reported here, nor was any variable initially considered but later discarded because of nonsignificant results.

<sup>2</sup> It should be noted that data from the same sample are presented in a separate paper (Lalot et al., 2022). However, there is no overlap in the variables presented in both papers except for political orientation and demographics.

<sup>3</sup> Arguably, this measure constitutes a quite specific assessment of environmental views. In a preliminary test, we investigated its correlation with a more straightforward measure of environmental concern included in the questionnaire (“Compared with other things, how concerned are you about each of the following policy areas? - Environmental issues”; 1 = Not at all, 5 = Extremely). Both measures were strongly correlated,  $r(1145) = .59$ ,  $p < .001$ , suggesting that willingness to prioritise the green agenda is related to environmental views in a broader sense.

**Table 2**

Linear regression results from the second structural equation model including political orientation (distal predictor), willingness to prioritise the green agenda (outcome), and RWA, SDO, future thinking, and European identity (proximal parallel predictors).

	<i>b</i> (SE)	z-test	<i>p</i> -value	95% CI	Standardised coefficient $\beta$
<i>Effect of political orientation on:</i>					
RWA	.313 (.023)	13.52	< .001	[.265, .363]	.489
SDO	.172 (.015)	11.78	< .001	[.142, .202]	.396
Future thinking	-.067 (.025)	-2.69	.007	[-.118, -.012]	-.079
European identity	-.297 (.028)	-10.76	< .001	[-.354, -.239]	-.324
<i>Effect on willingness to prioritise the green agenda</i>					
~ RWA	-.118 (.044)	-2.66	.008	[-.208, -.023]	-.102
~ SDO	-.392 (.059)	-6.63	< .001	[-.528, -.267]	-.229
~ Future thinking	.147 (.023)	6.32	< .001	[.099, .194]	.168
~ European identity	.116 (.024)	4.79	< .001	[.065, .164]	.143
<i>Political orientation: Direct, indirect and total effects</i>					
Direct (residual) effect	-.113 (.025)	-4.51	< .001	[-.164, -.054]	-.153
Indirect through RWA	-.037 (.014)	-	-	[-.067, -.007]	-.050
Indirect through SDO	-.067 (.011)	-	-	[-.094, -.045]	-.091
Indirect through future think.	-.010 (.004)	-	-	[-.020, -.002]	-.013
Indirect through European ID	-.034 (.008)	-	-	[-.051, -.019]	-.046
Total effect	-.262 (.021)	-12.76	< .001	[-.305, -.217]	-.353

Note. RWA = Right-wing authoritarianism. SDO = Social dominance orientation. ID = identity. 95% confidence intervals are percentile bootstrap confidence intervals.

this second model. We ran a joint-significance test to examine the component paths, then relied on a bootstrap resampling method to examine the magnitude of the indirect effects (percentile bootstrap confidence intervals; see Yzerbyt et al., 2018). Analyses were run on R with the *lavaan* package (Rosseel, 2012).

### 3.2. Which components are related to willingness to prioritise the green agenda?

For brevity, details of the first SEM are reported in ESM2. First, political orientation was strongly related to willingness to prioritise the green agenda, with lower willingness amongst more right-wing respondents (total effect:  $\beta = -.35$ ,  $p < .001$ ). Second, as expected, political orientation was also significantly related to all seven psychological components ( $p_s < .007$ ). However, only four of them were significantly related to willingness to prioritise the green agenda: RWA ( $\beta = -.08$ ,  $p = .032$ ), SDO ( $\beta = -.23$ ,  $p < .001$ ), future thinking ( $\beta = .16$ ,  $p < .001$ ), and European identity ( $\beta = .15$ ,  $p < .001$ ). A significant direct effect of political orientation remained ( $\beta = -.12$ ,  $p = .001$ ).

### 3.3. Accounting for the effect of political orientation on green agenda prioritisation

The second SEM included political orientation as the distal predictor, green agenda prioritisation as the outcome, and RWA, SDO, future thinking, and European identity as four parallel proximal predictors. Results are summarised in Table 2 and Fig. 1 (see ESM3 for the complete output). All relationships were significant ( $p_s < .008$ ). The parallel indirect effects of political orientation through each of the four components were also significant (bootstrapped 95% confidence intervals did not include zero). When the proximal predictors were included, the direct residual effect of political orientation was reduced by more than half its size (total effect:  $\beta = -.35$ , direct effect:  $\beta = -.15$ ). Finally, fit indices showed a satisfactory fit of the model, CFI = .945, RMSEA = .077, 90% CI [.069, .085], SRMR = .081.

## 4. General Discussion

### 4.1. The political divide on environmental issues

Past research has identified a political divide on environmental issues. The present research aimed to provide new insights into that divide by investigating the socio-cognitive psychological factors that may

underlie it. In particular, it seems valuable to identify which of a set of plausible underlying psychological factors might be most relevant and to consider whether these factors may be amenable to change. The present research contributes to this new effort. Initially considering seven potential psychological components, our results identify four that together account for more than half of the relationship between political orientation and environmental views. In decreasing order of variance accounted for, more proenvironmental views are associated with lower social dominance orientation, lower right-wing authoritarianism, higher identification with a superordinate (European) group, and greater future thinking. The present work advances prior research that mainly focused on either SDO or RWA by directly comparing and quantifying the effect of different socio-cognitive components. It thus contributes to a better understanding of the political divide on environmental issues and gives impetus for possible interventions targeting sustainable behaviour.

### 4.2. Implications

The present evidence can inform strategies and interventions aiming to bridge the political divide by addressing underlying psychological components. We now consider the advantages and disadvantages of different options.

#### 4.2.1. Targeting right-wing authoritarianism and social dominance orientation

RWA and SDO show the largest effect sizes in the association between political orientation and prioritisation of the green agenda. We identified two general approaches to target both factors.

First, one might want to directly influence people's expression of RWA and SDO. This might prove difficult as both are conceptualised as general attitudinal orientations influenced by rather stable personality characteristics (Perry & Sibley, 2012). However, research has found that SDO varies across social situations, increasing notably when people are put in a dominant social position (Guimond et al., 2003). This suggests the possibility of situation-based interventions aiming to dismantle highly hierarchical interactions in favour of more egalitarian ones. Other work shows that an experimental induction of awe reduces SDO, and in turn increases proenvironmental views (Zhao et al., 2018), highlighting other possible interventions.

Second, proenvironmental regulations and persuasive communications could be framed to be more congruent with right-wing views. Protection of nature could be framed as a duty towards fauna and flora and



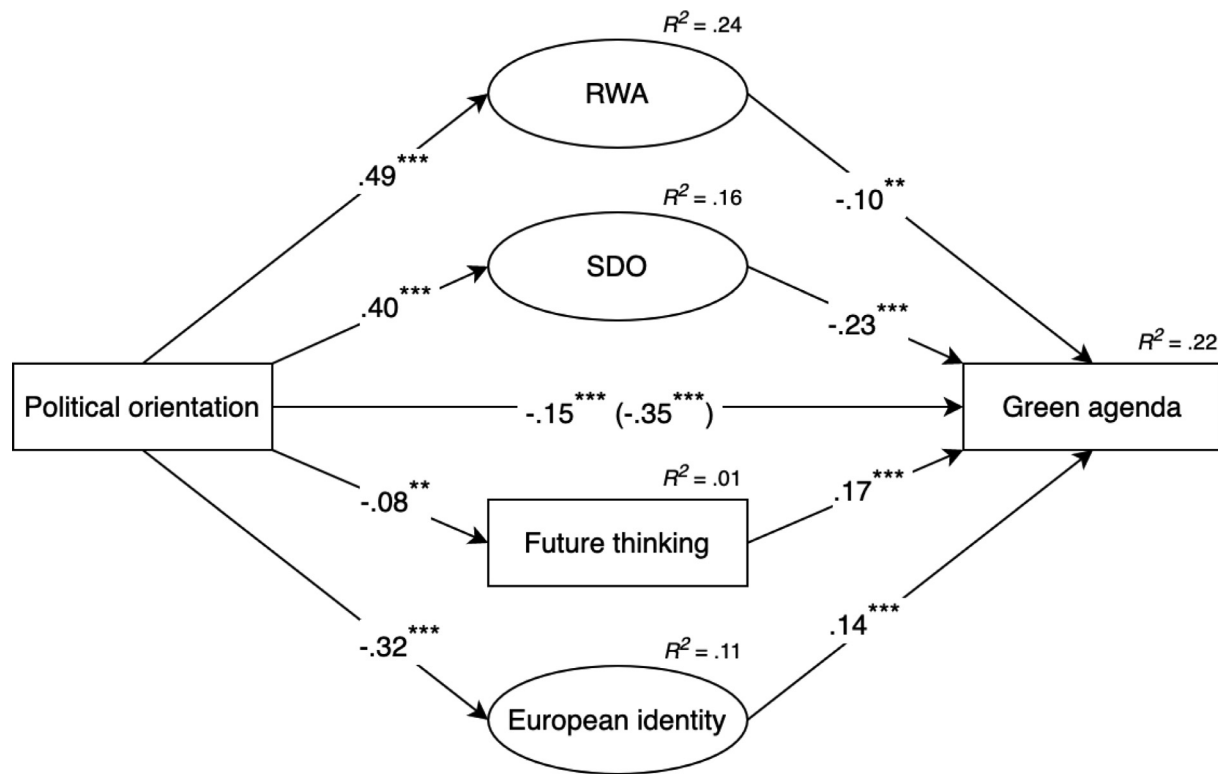


Fig. 1. Final structural equation model testing political orientation as distal predictor, and RWA, SDO, future thinking, and European identity as proximal predictors of willingness to prioritise the green agenda.

Note. RWA = Right-wing authoritarianism. SDO = Social dominance orientation. Coefficients reported are standardised betas. \*\*  $p < .01$ , \*\*\*  $p < .001$ .

as a ‘patriotic act’ (see Feygina et al., 2010). In addition, if political leaders can be convinced to adopt and implement green policies, we would also expect individuals high on RWA (particularly on the submission dimension) to accept and follow the leaders’ decision (Son Hing et al., 2007).

Intriguingly, right-wing and proenvironmental views may also trigger each other reciprocally, as a 5-year cross-lagged study suggests (Stanley et al., 2019). Accordingly, triggering some initial proenvironmental views could initiate a virtuous circle, in which a decreased SDO and increased proenvironmental views would feed one another.

#### 4.2.2. Targeting future thinking

Compared to RWA and SDO, targeting future thinking might be an easier avenue to follow, although the present results suggest interventions would only yield effects of modest size. Future thinking reflects a personal tendency, but several procedures have the potential to increase it on the long run, such as training to engage in episodic future thinking (or “mental time travel”, e.g., Altgassen et al., 2015; Bromberg et al., 2015; see Szpunar et al., 2018, for a review). Many futures workshops have also been developed in the past decades; such workshops should enhance one’s trait propensity to think about the future in general (Miller, 2015) and about future environmental issues more specifically, which in turn should lead to greater environmental commitment (Joireman & King, 2016).

#### 4.2.3. Targeting superordinate identity

Finally, targeting superordinate identity could constitute a good middle-ground when considering both effect size and feasibility. The present study relied on European identity as an indicator of a superordinate identity (as opposed to a national, British, identity) and results suggest that strengthening this identity might positively impact environmental views. Although people forge stable identities, identity *salience* can vary contextually (Reed, 2004). Proenvironmental communication

and persuasive attempts could therefore aim to make a relevant superordinate identity more salient (European or related to another continent, ‘human’, etc.). Yet, this strategy may backfire if people feel threatened in their intermediate social identity (e.g., national). Therefore, communications should highlight the distinctiveness of the intermediate ingroup, whilst integrating it into a greater superordinate identity (i.e., two-subgroups-in-one-group recategorisation or “Us+Them=We”, see Dovidio et al., 2000).

#### 4.3. Limitations and future directions

Some limitations to the present study must be recognised. First, the cross-sectional design of the research limits a causal interpretation of the results. Given initial evidence that proenvironmental views can also influence individual socio-cognitive factors (Stanley et al., 2019), longitudinal studies would be helpful to assess these changing dynamics over time. Second, only short measures were used for most of the constructs considered (ranging 1–4 items), which might have limited their content validity. The instruments also did not allow for the investigation of a more nuanced conceptualisation of the constructs (e.g., distinguishing authoritarian submission vs. aggression, or belief in procedural vs. distributive justice, or different aspects of identity such as strength, salience, belonging, pride, etc.). Additional studies using more comprehensive instruments will be useful to complement and refine the present results. Thirdly, we only focused on the UK. Given that the magnitude of the political gap on environmental views varies between countries (e.g., Ziegler, 2017), further research is needed to understand the role of the relevant cultural and contextual attributes.

Intriguingly, in the present research neither belief in a just world nor system justification were significant predictors of environmental views in the multiple regression model. This is surprising given past findings suggesting an association between these variables and environmental views (Feinberg & Willer, 2010; Feygina et al., 2010). Part of the expla-

nation might lie in our use of a general measure of system justification rather than economic system justification, which might be more closely related to environmental views (Hennes et al., 2016). Alternatively, this may indicate that the association is better explained by other components of a right-wing political orientation. Indeed, zero-order correlations between these constructs and environmental views were significant, but the effects did not hold in the multiple regression model. This implies that our results and the conclusions drawn from it are dependent on the set of variables considered. Had some factors not been included in the multiple regression model, the effect of belief in a just world or system justification might have been found significant. Therefore, a more careful interpretation of our results is that these two constructs do not emerge as the most important in the present sample, with the present measures. This does not necessarily imply that they play no role in explaining environmental views; in prior research considering a different set of variables and relying on different instruments, conclusions have been different.

Relatedly, it is possible that the relative importance of the different constructs depends on the social and political context. Future work will need to compare different constructs in different contexts, notably distinguishing between strong bipartite political systems (such as USA) and multipartite systems (such as most European countries), and countries with a right- versus left-wing government in office.

Moreover, as the four socio-cognitive constructs identified here accounted for approximately half of the effect of political orientation on environmental views, it is worth continuing to explore additional psychological constructs that may contribute to this association. (Dis)trust in science (Bugden, 2022), social norms (Wong-Parodi & Feygina, 2020) and other aspects of cultural cognition (Santos & Feygina, 2017) may be particularly promising.

Future work on the political divide will also need to more systematically distinguish the outcomes considered. Environmental attitudes are changing quickly (Kenward & Brick, 2021) and different results might arise when considering environmental attitudes, concern, or behaviour. Focusing on climate change versus other issues might also influence the magnitude of the divide (e.g., Mossler et al., 2017), as would considering concern over environmental issues versus endorsement of ways of action (Thonig et al., 2021).

## 5. Conclusions

The present work contributes to a growing literature trying to dissect the political divide on environmental issues. By identifying and quantifying the role of four socio-cognitive components that underlie the divide, we are able to suggest ways forward and interventions that could target them directly. Such interventions potentially increase the acceptance of proenvironmental measures amongst right-wing individuals without necessarily conflicting with conservative values, thus avoiding reactance and increasing openness to change.

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## Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## CRediT authorship contribution statement

**Fanny Lalot:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Visualization, Writing – original draft. **Melissa Jauch:** Formal analysis, Visualization, Writing – original draft.

**Dominic Abrams:** Conceptualization, Funding acquisition, Investigation, Methodology, Project administration, Writing – review & editing.

## Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.cresp.2022.100062.

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