PHILOSOPHICAL TRANSACTIONS B

royalsocietypublishing.org/journal/rstb

Research



Cite this article: Arceneaux K, Gravelle TB, Osmundsen M, Petersen MB, Reifler J, Scotto TJ. 2021 Some people just want to watch the world burn: the prevalence, psychology and politics of the 'Need for Chaos'. *Phil. Trans. R. Soc. B* **376**: 20200147. https://doi.org/10.1098/rstb.2020.0147

Accepted: 9 December 2020

One contribution of 18 to a theme issue 'The political brain: neurocognitive and computational mechanisms'.

Subject Areas:

cognition

Keywords:

politics, Need for Chaos, marginalization, personality

Author for correspondence:

Kevin Arceneaux

e-mail: kevin.arceneaux@temple.edu

Electronic supplementary material is available online at https://doi.org/10.6084/m9.figshare. c.5252496.

THE ROYAL SOCIETY

Some people just want to watch the world burn: the prevalence, psychology and politics of the 'Need for Chaos'

Kevin Arceneaux¹, Timothy B. Gravelle³, Mathias Osmundsen², Michael Bang Petersen², Jason Reifler⁴ and Thomas J. Scotto⁵

KA, 0000-0002-2884-5238; TBG, 0000-0002-7091-206X; MO, 0000-0002-6234-5624; MBP, 0000-0002-6782-5635; JR, 0000-0002-1116-7346; TJS, 0000-0003-4801-6821

People form political attitudes to serve psychological needs. Recent research shows that some individuals have a strong desire to incite chaos when they perceive themselves to be marginalized by society. These individuals tend to see chaos as a way to invert the power structure and gain social status in the process. Analysing data drawn from large-scale representative surveys conducted in Australia, Canada, the United Kingdom and the United States, we identify the prevalence of *Need for Chaos* across Anglo-Saxon societies. Using Latent Profile Analysis, we explore whether different subtypes underlie the uni-dimensional construct and find evidence that some people may be motivated to seek out chaos because they want to rebuild society, while others enjoy destruction for its own sake. We demonstrate that chaos-seekers are not a unified political group but a divergent set of malcontents. Multiple pathways can lead individuals to 'want to watch the world burn'.

This article is part of the theme issue 'The political brain: neurocognitive and computational mechanisms'.

'Some men just want to watch the world burn'

—The Dark Knight [1]

1. Introduction

Political observers and scholars are sounding alarms over increasing polarization between political parties [2,3], the emergence of populist movements and leaders [4], the circulation of misinformation [5], hostile interactions on social media [6] and rising levels of actual political violence [7]. While traditional forms of political activism in Western democracies focus on winning power and support through conventional means provided by the political system, these emerging forms of activism seek to disrupt the existing system altogether [8]. As Alfred the Butler, a character in *The Dark Knight*, explains in the quote above, some people want to tear down existing social and political institutions rather than build them.

Prior research links current-day disruptive activism to experiences of social marginalization [8] and rising economic inequality [7]. At the same time, however, not everyone who feels marginalized has a desire to 'watch the world burn'. In fact, an emerging line of research suggests that these highly disruptive sentiments, referred to as a *Need for Chaos*, are contingent on a particular set of psychological dispositions: an intense desire for social status [8–10]. Individuals vary in the degree to which they crave status and, when excluded, individuals who possess an intense desire for status are more likely to view disruption and chaos as a viable strategy for obtaining

¹Department of Political Science, Temple University, Philadelphia, PA, USA

²Department of Political Science, Aarhus University, Aarhus, Denmark

³SurveyMonkey, Aurora, Ontario, Canada

⁴Department of Politics, University of Exeter, Exeter, UK

⁵School of Social and Political Sciences, University of Glasgow, Glasgow, UK

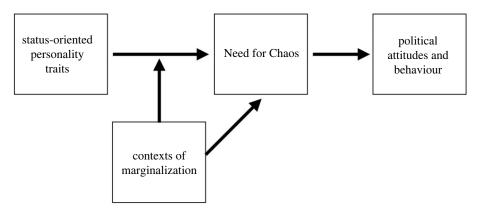


Figure 1. Theoretical model for causes and consequences of Need for Chaos.

the status that they crave. Accordingly, status-obsessed yet marginalized individuals may find it more attractive to disrupt the entire social hierarchy altogether rather than to engage in a slow, seemingly futile climb up the social ladder.

Need for Chaos is defined as 'a desire for a new beginning through the destruction of order and established structures' [8]. To measure individual differences in such desires, Petersen, Osmundsen and Arceneaux developed and validated a battery of eight items that reflect individual differences in desires for a new beginning, the destruction of established structures and upsetting the established order (e.g. degree of agreement with items such as 'I think society should be burned to the ground' and 'Sometimes I just feel like destroying beautiful things'). This Need for Chaos scale (henceforth, NFC_{Chaos} scale) is highly predictive of a heightened orientation towards disruptive behaviours, such as political violence and the sharing of hostile political content [8,11].¹

Downloaded from https://royalsocietypublishing.org/ on 17 July 202

Psychologically, the Need for Chaos is best conceptualized as a characteristic adaptation-i.e. a latent attitude that is made manifest in the interplay between particular personality traits and particular social contexts [12]. Consistent with this view, prior research shows that the Need for Chaos is highly correlated with, but distinct from, statusoriented personality traits such as the Dark Triad of Machiavellianism, Psychopathy and Narcissism [8]. Furthermore, and again consistent with the characteristic adaptation perspective, research shows that such personality traits are particularly predictive of a Need for Chaos in contexts involving deprivation and exclusion [8]. In contrast, status-oriented individuals have consistently been found to engage in so-called 'system-justification' when deprivation is absent; in this context, systemic injustices are explained away as a reflection of individual choice [13]. Figure 1 illustrates this theoretical model: Need for Chaos is activated by the confluence of status-oriented personality traits and the presence of perceived marginalization. In this regard, it is also important to note that while chaos-oriented motivations are triggered by thwarted status aspirations, chaos-seekers do not need to be deprived in an absolute sense. In fact, previous research suggests that a Need for Chaos is more widespread in middle rather than low income groups [8].

While existing work has identified chaos-seeking as a measurable social strategy and demonstrates how it leads to disruptive political behaviour, we know much less about *who* chaos-seekers are. The aim of the present manuscript thus provides the first comprehensive, cross-national

assessment of the profile of a core challenge facing Western democracies: that a number of individuals are so fed up with the current system that they would rather see it burned to the ground than reformed. In doing so, it seeks to answer three descriptive questions.

First, what is the prevalence of the Need for Chaos? What proportion of the public in modern democracies support burning it all down?' The media and scholarly attention to disruptive behaviours, such as sharing 'fake news,' may suggest that a craving for chaos is exceptionally widespread. Indeed, prior research argues that individuals who are high in Need for Chaos may comprise a significant minority of the American population [8]. Yet, at present, this question has only been assessed in the United States, which is notable for its high level of polarization and inequality relative to other industrialized countries. Here, we provide comparative evidence by relying on representative surveys in four Englishspeaking democracies that vary significantly in their levels of polarization and inequality: Australia, Canada, the United Kingdom and the United States. We also contribute in terms of measurement. While previous research has demonstrated that the Need for Chaos is a measurable, unidimensional concept [8], its nature as a characteristic adaptation suggests that there are many potential pathways that may trigger this need. To examine this, we add to existing research by exploring whether there are different subtypes within the overarching category of chaos-seekers.

Second, it is unclear how (un)representative individuals high in Need for Chaos are in terms of demographics and personality. Are all groups equally likely to hold a segment of radicals, or are particular groups more likely than others to contain those with such attitudes? While some evidence exists that the Need for Chaos is distinct from other malevolent traits [8], it is crucial to replicate this finding in countries outside of the United States.

Finally, we know little about the political aims and behaviours of chaos-seekers beyond their orientation to disruption. Are they a uniform political group in the sense that they share a set of ideological positions and issue attitudes? Or, in contrast, does 'chaos seeking' constitute a thin ideology [14] that weakly links a politically diverse and uncoordinated set of individuals who want to watch the world burn for very different reasons? Prior exploratory analyses suggest that individuals high in Need for Chaos can be found at the extremes of both the political Right and Left, but a broad assessment of their political inclinations on standard inventories of political behaviours and attitudes has not yet been done.

royalsocietypublishing.org/journal/rstb

Phil. Trans. R. Soc. B 376: 20200147

Table 1. Multigroup Latent Profile Analysis: Need for Chaos indicators. $N = 12\,250$ (USA N = 5000; UK N = 5105; Canada N = 1045; Australia N = 1100; Likelihood: -146298.27; AlC: 292696.53; BlC: 293067.20; sample size adjusted BlC: 292908.30). Paired t-tests comparing means of the Low Chaos indicators to means obtained for the other classes are all significant at p < 0.05. Indicator means are constrained to be equal across the nations ('groups').

indicator	Low Chaos	Rebuild	Medium Chaos	High Chaos
1. I get a kick when natural disasters strike in foreign countries.	1.15	2.06	3.54	6.05
2. I fantasize about a natural disaster wiping out most of humanity such that a small group of people can start all over.	1.30	3.48	3.70	6.09
3. I think society should be burned to the ground.	1.20	3.90	3.69	6.11
4. When I think about our political and social institutions, I cannot help thinking 'just let them all burn'.	1.80	4.40	3.90	5.90
5. We cannot fix the problems in our social institutions, we need to tear them down and start over.	2.26	4.34	3.92	5.69
6. I need chaos around me—it is too boring if nothing is going on.	1.43	2.49	3.69	5.99
7. Sometimes I just feel like destroying beautiful things.	1.07	1.29	4.14	6.57

2. Exploring the presence of subtypes underlying the *NFC*_{Chaos} scale

We placed the NFC_{Chaos} scale on nationally representative surveys of the British, American, Canadian and Australian publics' political and social attitudes. The scale was placed on the December 2018 waves of a large multiwave panel study conducted in the United Kingdom (UK) and the United States (US), fielded by YouGov with sample sizes of 5105 and 5000, respectively. The Australian and Canadian studies were fielded by Research Now-Survey Sampling International (now Dynata) in January 2019 with sample sizes of 1045 and 1100, respectively. Poststratification weights bring all samples into line with population demographics. Our first step was to replicate [8]. We found that (i) NFC forms a uni-dimensional scale that is (ii) positively correlated with negative personality traits (the Dark Triad and Narcissism) but (iii) distinct from them (see sections 1 and 2 of the electronic supplementary material for details). Therefore, we provide additional evidence that the NFC_{Chaos} scale is a valid scale in the USA as well as in other Anglo-Saxon contexts.

Having confirmed that the NFC_{Chaos} scale measures a continuous uni-dimensional trait, we now turn toward exploring whether there are subtypes of individuals who are driven by different motivations. The challenge in doing this kind of descriptive analysis is that we need to place people into distinct categories (e.g. 'chaos seeker') based on a measure that is both theoretically and empirically continuous. In order to avoid the pitfalls that would be inherent in using arbitrary cut-offs (e.g. above/below the scale median), we address this issue using Latent Profile Analysis. Although NFC_{Chaos} forms a single factor, Latent Profile Analysis can take a concept defined by a single dimension and delineate groups of cases that constitute subtypes of the overall concept [15]. As Bernstein & Zvolensky [16, p. 99] note, 'a key distinction between factor analytic in comparison to ... latent class/profile analytic strategies is that the former is concerned with the structure of the variables (i.e. their correlations), whereas the latter is concerned with the structure of cases (i.e. the latent taxonomic structure).'

Table 2. Profile membership across nations: Need for Chaos. Percentages based on profile membership derived from the estimated model in Mplus v. 8.4.

profile	USA (%)	UK (%)	Canada (%)	Australia (%)
Low Chaos	69	70	66	60
Rebuilders	10	13	8	11
Medium Chaos	17	15	16	21
High Chaos	5	3	10	8

We performed exploratory latent profile mixture modelling in Mplus, constraining the means of the indicators (now considered interval level) to be equivalent across the four nations.² To determine the appropriate number of profiles, we employ both empirical fit statistics and look for points of substantive interpretation. From fit statistics and subsequent modelling, it is clear that there are more profiles underlying these data than a simple two profile, 'high/low' NFC_{Chaos}. Our analysis suggests that classifying respondents into one of four profiles is empirically supported and substantively meaningful.³

Results from the four profile model appear in table 1, which reports the mean level on each indicator by profile (all four countries combined) and table 2, which reports the size of the latent profiles for each of the four countries we examine. There is a clear pattern to each of the profiles. The first one, which we label 'Low Chaos' (LC), is a profile of individuals who have, on average, scores close to the minimum of the seven point scale on all of the indicators. The second is a set of respondents who have average scores only slightly higher than those in the LC profile on items 1, 6 and 7, but higher scores on the middle four items. We label this group the 'Rebuilders' (RB), because they tend to score low on items that measure a desire for destruction without a purpose, while scoring higher on items that indicate a desire to tear down existing structures in the hope of building something better. We labelled a third group of respondents as 'Medium Chaos' (MC), because their scores on each item tend

Table 3. Need for Chaos profile membership by generation and graduate status. Scenario—male, no higher education, and average on personality traits.

ountry	generation	Low Chaos (%)	Rebuild (%)	Medium Chaos (%)	High Chaos (%
ower education					
United States	Silent	79	15	3	4
	Boomer	77	13	9	1
	X	59	20	18	3
	Millennial	53	21	25	1
United Kingdom	Silent	68	19	8	5
	Boomer	72	14	11	4
	Χ	66	15	16	3
	Millennial	44	17	35	3
Canada	Silent	78	8	10	4
	Boomer	78	8	7	7
	χ	57	23	12	8
	Millennial	49	21	18	12
Australia	Silent	53	45	2	0
	Boomer	53	35	8	3
	χ	50	24	18	7
	Millennial	43	26	24	7
igher education					
United States	Silent	88	8	4	0
	Boomer	86	8	1	5
	χ	79	10	8	3
	Millennial	87	6	3	4
United Kingdom	Silent	76	19	4	2
	Boomer	76	10	11	3
	X	71	18	9	2
	Millennial	71	14	11	5
Canada	Silent	91	6	0	3
	Boomer	74	12	3	11
	χ	56	16	17	12
	Millennial	63	8	13	16
Australia	Silent	50	32	4	12
	Boomer	70	20	5	6
	χ	51	13	32	4
	Millennial	40	11	35	14

to be near the midpoint of the scale.⁴ For the three items that explicitly mention political or social institutions, 'Rebuilders' express higher mean scores than the those in the 'Medium Chaos' group. Finally, we identified a 'High Chaos' (HC) profile, in which respondents' scores were, on average, approximately 6 out of 7 on each of the items. Note that in contrast to the RB class, the items with the highest means in this profile are those that favour destruction for the sake of destruction.

Turning to table 2 to get a sense of the size of the profiles, the majority of respondents in each nation are most likely to fall into the LC profile. Approximately 1 in 5 respondents are part of a profile where the average response is near the scale midpoint for each item. Approximately 1 in 10 respondents in

each nation, ranging from a high of 13% in the UK to a low of 8% in Canada, most likely fit the RB profile. Lastly, there is a small but significant group of respondents who, on average, tend to strongly agree with each of the items of the NFC_{Chaos} scale and fall into the HC profile. This ranges from a low of 3% in the UK sample to a high of 10% in the Canadian sample. Combining the RB and HC profiles for each nation suggests that between 15% and 19% crave chaos to some degree.

3. Who is high in Need for Chaos?

In this section, we turn our attention to exploring the correlates of our NFC_{Chaos} latent class profiles. Is it the case that

royalsocietypublishing.org/journal/rstb

Phil. Trans. R. Soc. B 376: 20200147

individuals who fall in the HC profile are different from those who fall in the RB profile? If so, this may indicate that these individuals' craving for chaos have roots in different motivations. We explore this question by investigating whether demographic characteristics and political ideology contribute to variance in the NFC_{Chaos} latent profiles. Our analytical approach involves using multinomial logit to regress the latent profile categories on measures of demographic characteristics and political ideology, while controlling for Big 5 personality traits and racial categories relevant to each country. It is important to control for Big 5 personality traits because Need for Chaos may reflect an 'undercontrolled personality prototype'—a pattern where someone is low in agreeableness and conscientiousness and high in neuroticism [17]. The data, shown in section 3 of the electronic supplementary material, offer some support for this possibility.⁵

We focus on demographic characteristics (gender, age and education) that previous research has found to be linked to perceived marginalization and the motivation to acquire status, both of which are associated with the Need for Chaos. With respect to gender and age, psychological studies often conceptualize status-seeking as part of a 'young male syndrome' [18]. Education may also be important because it has become a major fault line in Western democracies, as those without a college degree often feel left out and pushed aside in post-industrial knowledge economies [7,19].

The results of the multinomial logit analysis show a clear pattern across all four countries: men and young people are more likely to be classified as RB or HC (see electronic supplementary material for results). Yet as table 3 shows, the relationship between age and Need for Chaos appears conditional on education. This table shows the predicted probabilities generated from the multinomial logit models where we interacted education with indicators for generation cohorts (Silent, Boomer, Generation X and Millennial generation). We focus on generation cohorts, because 'trends in political alienation reflect political and historical events or periods which affect all members of the population in a similar fashion' [20, p. 160]. For the most part, individuals with higher levels of education are more likely to fall in the LC category than individuals with lower levels of education, across generational cohorts. There are some exceptions to this pattern, particularly in Australia where education does not seem to discriminate the LC category very much. In contrast, relative to more educated individuals, less educated individuals seem to be more drawn to the RB category and, to a lesser extent, the HC category. Australia offers yet another exception to this pattern, with more educated individuals gravitating to the HC category at a higher rate than those with less education. Turning our attention to generational differences, we do not observe large or consistent differences across cohorts with respect to RB or HC.

Next, we explore whether ideology influences whether people gravitate toward HC. Across all nations, respondents were asked to place themselves on an eleven point ideology scale, which we recode to five categories ranging from 'Far Left' to 'Far Right'. Table 4 shows the predicted probabilities generated from the same multinomial logit models that generated table 3 (we set the other variables in the model such that these are specifically the probabilities for a male without a college degree, who falls in the Boomer generation, with average scores average scores on the Big Five personality traits). Across all four countries, individuals categorized as HC are also more

Table 4. High Chaos profile membership by ideology across nations. Scenario—male, no higher education, average personality, boomer.

ideology	USA (%)	UK (%)	Canada (%)	Australia (%)	
Very Left	3	2	7	0	
Left	2	4	10	1	
Moderate	1	4	7	3	
Right	2	4	7	6	
Very Right	6	9	12	7	

likely to consider themselves to be on the political Right. This suggests that there is indeed an overlap between Right-wing populism and Need for Chaos. Alternatively, some of the dynamics occasionally attributed to Right-wing populism (e.g. circulation of misinformation and preferences for strong leaders) may, in fact, reflect desires for chaos among some on the Right-wing rather than populist values [10]. We return to this below.

4. What do people high in Need for Chaos want?

The previous analysis suggests that education explains some of the variation between LC individuals and the rest and that Right-wing ideology explains some of the variance in HC categorization. Nonetheless, we do not find a clear pattern that distinguishes HC and RB with respect to demographics, which raises this question about whether these categories map onto differences in political preferences and behaviour. We now turn to this question.

These analyses focus on the USA and UK in this section, because the Australian and Canadian surveys contained a more limited (and non-comparable) set of variables. Beginning with political preferences, table 5 shows regression coefficients for each of the latent profile categories (with LC being the excluded category). The items in the rows are the dependent variables that measure policy preferences for each of the regression models. The dependent variables were measured using five-point Likert agree/disagree scales. The regression models include controls for demographic characteristics (age, gender, race, education and interaction between education and age), personality traits and political ideology.

We do not observe a consistent pattern in political preferences across the latent profile categories in the USA and UK. In both countries, individuals in the LC category are less likely to agree that immigration should be halted relative to the other categories. There are also no major differences between RB and HC categories with respect to immigration—individuals in both of these categories would prefer that immigration be stopped. In both countries, it also appears that those who fall in the RB category are more bothered by 'new lifestyles' than are individuals in the HC category. In the USA, individuals in the RB category are also more likely to question capitalism, while those in the UK are more supportive of the death penalty. Our interpretation of these findings is that those who fall in the RB category exhibit enough idealism or principles that are distinct from the full embrace of nihilism apparent in the 'High Chaos' profile.

royalsocietypublishing.org/journal/rstb

Downloaded from https://royalsocietypublishing.org/ on 17 July 2021

Table 5. The association between Need for Chaos latent profile categories and policy preferences. Each row represents a separate regression model. The models include a full slate of appropriate control variables, with full results available in the electronic supplementary material. In these two panels, we report the unstandardized coefficients for the 'Rebuilders', 'Medium Chaos', and 'High chaos' groups versus the excluded category of those in the 'Low Chaos' profile. *p < 0.05; **p < 0.01; ***p < 0.005.

policy position	Rebuild Profile	Medium Chaos	High Chaos
(a) USA: Regression coefficients for chaos profiles for attitudinal outcomes	(Low Chaos excluded category)		
Islam is a serious danger to Western civilization.	0.25**	0.02	0.14
	(0.09)	(0.11)	(0.15)
All further immigration to the USA should be halted.	0.40***	0.36***	0.55***
	(0.10)	(0.12)	(0.16)
The death penalty, even for very serious crimes, is never justified.	-0.03	0.55***	0.75***
	(0.10)	(0.12)	(0.16)
People are better off in a free market economy.	-0.23***	-0.46***	0.15
	(0.08)	(0.09)	(0.13)
The welfare state makes people less able to look after themselves.	0.11	-0.11	0.16
	(0.09)	(0.10)	(0.14)
Newer lifestyles are contributing to the breakdown of society.	0.28***	-0.01	0.21
	(0.08)	(0.10)	(0.14)
(b) UK: Regression coefficients for chaos profiles for attitudinal outcomes	(Low Chaos excluded category)		
Islam is a serious danger to Western civilization.	0.40***	0.37***	0.73***
	(0.09)	(0.10)	(0.16)
All further immigration to the UK should be halted.	0.57***	0.53***	0.56***
	(0.09)	(0.10)	(0.16)
The death penalty, even for very serious crimes, is never justified.	-0.27***	0.06	0.21
	(0.09)	(0.11)	(0.17)
People are better off in a free market economy.	-0.10	-0.12	0.05
	(0.07)	(0.08)	(0.13)
The welfare state makes people less able to look after themselves.	0.06	0.22*	0.33*
	(0.08)	(0.09)	(0.15)
Newer lifestyles are contributing to the breakdown of society.	0.21**	-0.04	0.47
	(0.07)	(0.08)	(0.13)

Next, we consider the relationship between NFC_{Chaos} latent profile categories and political participation. Table 6 shows regression coefficients for each of the latent profile categories (with LC being the excluded category). The items in the rows are the dependent variables that measure political participation for each of the regression models. The dependent variables reflect survey items that asked respondents on a 0–10 scale how likely they are to take part in a variety of political activities in the 'next few years'. The regression models include controls for demographic characteristics (age, gender, race, education and interaction between education and age), personality traits and political ideology. Consistent with Petersen et al. [8], we find that individuals who fall in the HC category are much more likely to say that they would take part in an 'illegal protest,' even relative to those in the RB category.

5. Conclusion

The purpose of this study was to explore whether different motivations underlie the characteristic adaptation Need for Chaos [8]. We replicated previous research in four AngloSaxon countries. The *NFC*_{Chaos} scale forms a uni-dimensional scale that captures a continuous characteristic adaptation in the Australia, Canada, the UK and the USA. We then turned to Latent Profile Analysis to investigate whether different subtypes of individuals explained variance in the *NFC*_{Chaos} scale. We found evidence that this may indeed be the case, with individuals falling into four different latent categories: Low Chaos, Medium Chaos, Rebuild and High Chaos. The key difference between those in the Rebuild and High Chaos categories is that Rebuilders were less likely to agree with statements supporting destruction for the sake of destruction relative to those who were in the High Chaos category (e.g. T get a kick when natural disasters strike in foreign countries').

Across all four countries, most people fell in the Low Chaos category and few people fell in the High Chaos category, but combining the Rebuild and High Chaos categories showed that there is support for some degree of chaos-seeking at around 20% in the four Anglo-Saxon countries. Is this something that should be worrying from a normative standpoint? We believe that the Latent Profile

Table 6. The association between Need for Chaos latent profile categories and political participation. Each row represents a separate regression model. The models include a full slate of appropriate control variables, with full results available in the electronic supplementary material. In these two panels, we report the un-standardized coefficients for the 'Rebuilders', 'Medium Chaos', and 'High chaos' groups versus the excluded category of those in the 'Low Chaos' profile. *p < 0.05; **p < 0.01; ***p < 0.005.

	participation item	Rebuild Profile	Medium Chaos	High Chaos
Wear or display a campaign badge or sticker. -0.03 0.59 1.42 Vote in a presidential election. -0.78** -1.39*** -0.35 Vote in a presidential election. -0.78** -1.39*** -0.35 Work for a political party, candidate or action group. -0.38 0.68* 1.30*** Fake part in a lawful protest or public demonstration. 0.08 1.20**** 1.55*** Fake part in an illegal protest. 0.46* 1.72**** 2.79*** Fake part in an illegal protest. 0.46* 1.72**** 2.79*** Fake part in an illegal protest. 0.46* 1.72**** 2.79*** Foot in a local election. -0.50* -1.24*** 0.04 Foot in a local election. 0.020 0.221 0.32 Foot in a local election. 0.05* -1.24*** 0.04 Foot in a local election. 0.020 0.223 0.03 Foot in a local election. 0.030 0.233 0.04 0.03 Foot in a local election. 0.020 0.023 0.03 0.05 Foo	(a) USA: Regression coefficients for chaos profiles for forms of participation.	ation (Low Chaos excluded categ	ory)	
Vote in a presidential election. -0.78** -1.39*** -0.35 Work for a political party, candidate or action group. -0.28 0.68* 1.30*** Work for a political party, candidate or action group. -0.28 0.68* 1.30*** 154e part in a lawful protest or public demonstration. 0.08 0.23* 0.47* 155e part in an illegal protest. 0.46* 1.72*** 2.79**** 164e part in an illegal protest. 0.46* 1.72*** 2.79**** 165e part in an illegal protest. 0.46* 1.72*** 2.79**** 165e part in an illegal protest. 0.46* 1.72*** 0.04 165e part in an illegal protest. 0.46* 1.24**** 0.04 165e part in an illegal protest. 0.09* 0.23 0.03 165e part in a local election. -0.50 0.41 0.89 165e part in a political party or candidate. -0.03 0.04 0.05* 165e part in a political posts of family on social media. 0.24 1.00* 0.95* 165e part in a political party, candidate or action group. 0.22 0.23	Wear or display a campaign badge or sticker.			1.42
		(0.32)	(0.36)	(0.50)
Work for a political party, candidate or action group. -0.38 0.68* 1.30*** Gake part in a lawful protest or public demonstration. (0.28) (0.34) (0.44) Gake part in a lawful protest or public demonstration. (0.29) (0.33) (0.47) Gake part in an illegal protest. (0.19) (0.22) (0.32) Vote in a local election. -0.50* -1.24*** 0.04 Gave money to a political party or candidate. -0.50 0.41 0.89 Post about politics on Facebook, Twitter or other social media. -0.03 -0.08 0.63 Post about political party or candidate. 0.03 0.39) 0.57) Comment on political posts of family on social media. -0.03 -0.08 0.63 Comment on political posts of family on social media. 0.24 1.00* 0.95 Work or a parliamentary election. -0.03 0.39) 0.53) Work or a parliamentary election. -1.80*** -1.95*** -1.80*** Work for a political party, candidate or action group. 0.07 0.20* 0.23 0.21 0.23	Vote in a presidential election.	-0.78**	—1.39***	-0.35
(0.28)		(0.20)	(0.22)	(0.30)
Take part in a lawful protest or public demonstration. 0.08 1.20*** 1.55*** Iake part in an illegal protest. 0.29) (0.33) (0.47) Iake part in an illegal protest. 0.46* 1.72**** 2.79**** Vote in a local election. -0.50* 1.21*** 0.04 Vote in a political party or candidate. -0.50* 0.41 0.89 Sive money to a political party or candidate. -0.50 0.41 0.89 Post about politics on Facebook, Twitter or other social media. -0.03 -0.08 0.63 Comment on political posts of family on social media. 0.24 1.00* 0.95 Comment on political posts of family on social media. 0.24 1.00* 0.95 (b) UK: Regression coefficients for chaos profiles for forms of participation (Low Chaos excluded category) 0.039 0.057 Wear or display a campaign badge or sticker. 0.38 0.41 -0.12 Wear or display a campaign badge or sticker. 0.38 0.41 -0.12 Wear in a parliamentary election. -1.80*** -1.95*** 0.25* Wear in a parliamentary election. <td>Work for a political party, candidate or action group.</td> <td>-0.38</td> <td>0.68*</td> <td>1.30***</td>	Work for a political party, candidate or action group.	-0.38	0.68*	1.30***
(0.29) (0.33) (0.47) Fake part in an illegal protest.		(0.28)	(0.34)	(0.44)
Take part in an illegal protest. 0.46* 1.72**** 2.79*** Vote in a local election. -0.50* -1.24**** 0.04 Vote in a local election. -0.50* -1.24**** 0.04 Give money to a political party or candidate. -0.50 0.41 0.89 Post about politics on Facebook, Twitter or other social media. -0.03 -0.08 0.63 Post about political posts of family on social media. 0.24 1.00* 0.95 Comment on political posts of family on social media. 0.24 1.00* 0.95 Comment on political posts of family on social media. 0.24 1.00* 0.95 Comment on political posts of family on social media. 0.24 1.00* 0.95 Comment on political posts of family on social media. 0.24 1.00* 0.95 Comment on political posts of family on social media. 0.24 1.00* 0.95 Work in a parliamentary election. -1.80**** -1.95**** -1.80**** Work for a political party, candidate or action group. 0.02 0.23 0.23 0.23 0.23 0.23	Take part in a lawful protest or public demonstration.	0.08	1.20***	1.55**
(0.19)		(0.29)	(0.33)	(0.47)
Vote in a local election. -0.50° -1.24*** 0.04 (0.20) (0.23) (0.33) Give money to a political party or candidate. -0.50 0.41 0.89 Post about politics on Facebook, Twitter or other social media. -0.03 -0.08 0.63 Post about political posts of family on social media. 0.23 0.39) 0.57 Comment on political posts of family on social media. 0.24 1.00* 0.95 Comment on political posts of family on social media. 0.24 1.00* 0.95 Comment on political posts of family on social media. 0.24 1.00* 0.95 Comment on political posts of family on social media. 0.24 1.00* 0.95 (b) UK: Regression coefficients for chaos profiles for forms of participation (Low Chaose excluded category) 0.03 0.41 -0.12 (b) UK: Regression coefficients for chaos profiles for forms of participation (Low Chaose excluded category) 0.24 0.24 0.24 (b) UK: Regression coefficients for chaos profiles for forms of participation (Low Chaose excluded category) 0.24 0.24 0.24 (b) UK: Regression coefficients for chaose profiles for forms	Take part in an illegal protest.	0.46*	1.72***	2.79***
(0.20) (0.23) (0.33) (0.33) (0.33) (0.33) (0.33) (0.33) (0.33) (0.33) (0.32) (0.36) (0.50) (0.50) (0.32) (0.36) (0.50) (0.50) (0.35) (0.35) (0.39) (0.57) (0.35) (0.39) (0.57) (0.35) (0.39) (0.57) (0.35) (0.39) (0.57) (0.39) (0.57) (0.39) (0.57) (0.39) (0.57) (0.39) (0.53) (0.39) (0.53) (0.39) (0.53) (0.39) (0.53) (0.53) (0.39) (0.53) (0.53) (0.39) (0.53) (0.53) (0.39) (0.53)		(0.19)	(0.22)	(0.32)
Five money to a political party or candidate. (0.32) (0.36) (0.36) (0.50) Post about politics on Facebook, Twitter or other social media. (0.35) (0.39) (0.39) (0.57) Comment on political posts of family on social media. (0.34) (0.39) (0.39) (0.53) (0.53) (0.50	Vote in a local election.	-0.50*	—1.24***	0.04
(0.32) (0.36) (0.50)		(0.20)	(0.23)	(0.33)
Post about politics on Facebook, Twitter or other social media.	Give money to a political party or candidate.	-0.50	0.41	0.89
(0.35) (0.39) (0.57)		(0.32)	(0.36)	(0.50)
Comment on political posts of family on social media. 0.24 1.00* 0.95 (b) UK: Regression coefficients for chaos profiles for forms of participation (Low Chaos excluded category) Wear or display a campaign badge or sticker. 0.38 0.41 —0.12 Wore in a parliamentary election. —1.80*** —1.95*** —1.80*** Work for a political party, candidate or action group. 0.07 0.80**** 0.26 Work for a political party, candidate or action group. 0.07 0.80**** 0.26 Take part in a lawful protest or public demonstration. 0.11 0.72**** 0.26 Take part in an illegal protest. 0.41* 0.93**** 0.92**** Work in a local election. —1.37*** —1.60**** 0.20*** Work in a local election. —1.37*** —1.60*** 0.20*** Work in a local election. —1.37*** —1.60*** —2.00*** Work in a local election. —0.28 0.65** 0.24 Work in a local election. —0.28 0.65** 0.24 Work in a local election. —0.28 0.65** 0.24 Work i	Post about politics on Facebook, Twitter or other social media.	-0.03	-0.08	0.63
(0.34) (0.39) (0.53) (b) UK: Regression coefficients for chaos profiles for forms of participation (Low Chaos excluded category) Wear or display a campaign badge or sticker. 0.38 0.41 -0.12 (0.23) (0.24) (0.42) Wote in a parliamentary election1.80*** -1.95*** -1.80*** (0.22) (0.23) (0.37) Work for a political party, candidate or action group. 0.07 0.80*** 0.26 (0.18) (0.21) (0.33) Take part in a lawful protest or public demonstration. 0.11 0.72*** 0.26 (0.22) (0.26) (0.39) Take part in an illegal protest. 0.41* 0.93*** 0.92*** (0.16) (0.18) (0.30) Wore in a local election1.37*** -1.60*** -2.00*** (0.22) (0.25) (0.42) Give money to a political party or candidate0.28 0.65** 0.24 (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 (0.74) (0.26) (0.46) Comment on political posts of family on social media. 0.23 0.39 1.04*		(0.35)	(0.39)	(0.57)
Wear or display a campaign badge or sticker.	Comment on political posts of family on social media.	0.24	1.00*	0.95
Wear or display a campaign badge or sticker. 0.38 0.41 -0.12 (0.23) (0.24) (0.42) Wote in a parliamentary election. -1.80*** -1.95*** -1.80*** (0.22) (0.23) (0.37) Work for a political party, candidate or action group. 0.07 0.80*** 0.26 (0.18) (0.21) (0.33) Take part in a lawful protest or public demonstration. 0.11 0.72*** 0.26 (0.22) (0.26) (0.39) Take part in an illegal protest. 0.41* 0.93*** 0.92*** (0.16) (0.18) (0.30) Wote in a local election. -1.37**** -1.60*** -2.00*** (0.22) (0.25) (0.42) Give money to a political party or candidate. -0.28 0.65** 0.24 Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 Comment on political posts of family on social media. 0.23 0.39 1.04*		(0.34)	(0.39)	(0.53)
Vote in a parliamentary election. (0.23) (0.24) (0.42) Vote in a parliamentary election. -1.80*** -1.95*** -1.80*** Work for a political party, candidate or action group. 0.07 0.80*** 0.26 Work for a political party, candidate or action group. (0.18) (0.21) (0.33) Take part in a lawful protest or public demonstration. 0.11 0.72*** 0.26 (0.22) (0.26) (0.39) Take part in an illegal protest. 0.41* 0.93*** 0.92*** Vote in a local election. -1.37*** -1.60*** -2.00*** Vote in a local election. -1.37*** -1.60*** -2.00*** Give money to a political party or candidate. -0.28 0.65** 0.24 Construction of Facebook, Twitter or other social media. 0.37 0.60* 0.25 Comment on political posts of family on social media. 0.23 0.39 1.04*	(b) UK: Regression coefficients for chaos profiles for forms of participal	tion (Low Chaos excluded catego	ry)	
Vote in a parliamentary election. -1.80*** -1.95*** -1.80*** (0.22) (0.23) (0.37) Work for a political party, candidate or action group. 0.07 0.80**** 0.26 (0.18) (0.21) (0.33) Take part in a lawful protest or public demonstration. 0.11 0.72**** 0.26 (0.22) (0.26) (0.39) Take part in an illegal protest. 0.41* 0.93**** 0.92**** (0.16) (0.18) (0.30) Vote in a local election. -1.37**** -1.60*** -2.00*** (0.22) (0.25) (0.42) Give money to a political party or candidate. -0.28 0.65** 0.24 (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 Comment on political posts of family on social media. 0.23 0.39 1.04*	Wear or display a campaign badge or sticker.	0.38	0.41	-0.12
(0.22) (0.23) (0.37) Work for a political party, candidate or action group. 0.07 0.80*** 0.26 (0.18) (0.21) (0.33) Take part in a lawful protest or public demonstration. 0.11 0.72*** 0.26 (0.22) (0.26) (0.39) Take part in an illegal protest. 0.41* 0.93*** 0.92*** (0.16) (0.18) (0.30) Wote in a local election1.37*** -1.60*** -2.00*** (0.22) (0.25) (0.42) Give money to a political party or candidate0.28 0.65** 0.24 (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 (0.74) (0.26) (0.46) Comment on political posts of family on social media. 0.23 0.39 1.04*		(0.23)	(0.24)	(0.42)
Work for a political party, candidate or action group. (0.18) (0.21) (0.33) Take part in a lawful protest or public demonstration. (0.11) (0.22) (0.26) (0.39) Take part in an illegal protest. (0.41* (0.16) (0.18) (0.30) Vote in a local election. (0.22) (0.26) (0.39) Vote in a local election. (0.16) (0.18) (0.30) Vote in a local party or candidate. (0.22) (0.25) (0.42) Give money to a political party or candidate. (0.28) (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 (0.46) 0.46) Comment on political posts of family on social media. 0.23 0.39 1.04*	Vote in a parliamentary election.	—1.80***	—1.95***	-1.80***
(0.18) (0.21) (0.33) Fake part in a lawful protest or public demonstration. (0.22) (0.26) (0.39) Fake part in an illegal protest. (0.16) (0.18) (0.30) Vote in a local election. (0.22) (0.26) (0.39) Vote in a local election. (0.16) (0.18) (0.30) Vote in a local election. (0.22) (0.25) (0.42) Give money to a political party or candidate. (0.22) (0.25) (0.42) Give money to a political party or candidate. (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 (0.60* 0.25) (0.74) (0.26) (0.46) Comment on political posts of family on social media. 0.23 (0.39)		(0.22)	(0.23)	(0.37)
Take part in a lawful protest or public demonstration. 0.11 0.72*** 0.26 (0.22) (0.26) (0.39) Take part in an illegal protest. 0.41* 0.93*** 0.92*** (0.16) (0.18) (0.30) Vote in a local election1.37*** -1.60*** -2.00*** (0.22) (0.25) (0.42) Give money to a political party or candidate0.28 0.65** 0.24 (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 (0.74) 0.26) 0.46) Comment on political posts of family on social media. 0.23 0.39 1.04*	Work for a political party, candidate or action group.	0.07	0.80***	0.26
(0.22) (0.26) (0.39) Take part in an illegal protest. 0.41* 0.93*** 0.92*** (0.16) (0.18) (0.30) Wote in a local election1.37*** -1.60*** -2.00*** (0.22) (0.25) (0.42) Give money to a political party or candidate0.28 0.65** 0.24 (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 (0.74) (0.26) (0.46) Comment on political posts of family on social media. 0.23 0.39 1.04*		(0.18)	(0.21)	(0.33)
Take part in an illegal protest. 0.41* 0.93*** 0.92*** (0.16) (0.18) (0.30) Vote in a local election. -1.37*** -1.60*** -2.00*** (0.22) (0.25) (0.42) Give money to a political party or candidate. -0.28 0.65** 0.24 (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 (0.74) (0.26) (0.46) Comment on political posts of family on social media. 0.23 0.39 1.04*	Take part in a lawful protest or public demonstration.	0.11	0.72***	0.26
(0.16) (0.18) (0.30) Vote in a local election1.37*** -1.60*** -2.00*** (0.22) (0.25) (0.42) Give money to a political party or candidate0.28 0.65** 0.24 (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 (0.74) (0.26) (0.46) Comment on political posts of family on social media. 0.23 0.39 1.04*		(0.22)	(0.26)	(0.39)
Vote in a local election. -1.37*** -1.60*** -2.00*** (0.22) (0.25) (0.42) Give money to a political party or candidate. -0.28 0.65** 0.24 (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 (0.74) (0.26) (0.46) Comment on political posts of family on social media. 0.23 0.39 1.04*	Take part in an illegal protest.	0.41*	0.93***	0.92***
(0.22) (0.25) (0.42) Give money to a political party or candidate0.28 0.65** 0.24 (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 (0.74) (0.26) (0.46) Comment on political posts of family on social media. 0.23 0.39 1.04*		(0.16)	(0.18)	(0.30)
Give money to a political party or candidate. -0.28 0.65^{**} 0.24 (0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60^* 0.25 (0.74) (0.26) (0.46) Comment on political posts of family on social media. 0.23 0.39 1.04^*	Vote in a local election.	—1.37***	-1.60***	-2.00***
(0.18) (0.20) (0.36) Post about politics on Facebook, Twitter or other social media. 0.37 0.60* 0.25 (0.74) (0.26) (0.46) Comment on political posts of family on social media. 0.23 0.39 1.04*		(0.22)	(0.25)	(0.42)
Post about politics on Facebook, Twitter or other social media. 0.37 $0.60*$ 0.25 $0.60*$ 0.25 0.74 0.26 0.26 0.26 0.28 Comment on political posts of family on social media. 0.23 0.39 0.39	Give money to a political party or candidate.	-0.28	0.65**	0.24
(0.74) (0.26) (0.46) Comment on political posts of family on social media. 0.23 0.39 1.04*		(0.18)	(0.20)	(0.36)
Comment on political posts of family on social media. 0.23 0.39 1.04*	Post about politics on Facebook, Twitter or other social media.	0.37	0.60*	0.25
		(0.74)	(0.26)	(0.46)
(0.24) (0.28) (0.46)	Comment on political posts of family on social media.	0.23	0.39	1.04*
		(0.24)	(0.28)	(0.46)

Analysis helps answer this question. If 20% of a country yearned for a violent overthrow of the current system, it would be worrying, but it seems that a considerable fraction of this 20% does not want destruction for the sake of destruction, but rather they imagine rebuilding society's institutions in a way that does not involve violence. We leave aside whether their particular vision is a 'good' one, and simply

note that most Utopian visions begin with the notion that society must be remade in some fundamental way.

We then turned our attention to exploring whether demographic and political characteristics help differentiate who falls in the different latent profile categories. Echoing previous research, we found evidence that chaos-seeking tends to be higher among the young, men and those with less than a

college degree. Interestingly, we did not find consistent differences in terms of demographics between the Rebuilder and High Chaos subtypes. This would suggest that chaos-seekers, whether they like destruction for the sake of destruction or not, may be motivated by a sense of marginalization and grievance that exists at high levels in Western society today [7].

We also found that individuals who identify as Right wing were also more likely to fall in the High Chaos category, yet when we turned our attention to the political preferences of these individuals, the only consistent pattern that emerged was a dislike of immigration. Consistent with [8], we do not find much evidence that individuals in the High Chaos category are idealistic visionaries who want to dismantle social and political institutions to build a better world. Our evidence was much more consistent with the results of previous research that paint individuals high on the NFC_{Chaos} scale as nihilists who are only looking out for themselves. In contrast, individuals who fell in the Rebuild category did seem to have something approaching a social outlook. They do not like new lifestyles and, in the USA, they are not fans of capitalism. Perhaps these individuals want to replace established political institutions to make the world a better place (at least their view of what constitutes 'better'.).

The empirical result of two substantive 'chaos-seeking' profiles warrants further comment and speculation given the current political environment and the challenges that populists politicians and causes (such as Donald Trump and Brexit) pose to the established order. Populists potentially knock on an 'open door' because western political systems under-supply political parties with socially conservative and economically Left-leaning manifestos [21,22]. A close look at table 5 suggests a picture of the RB and the HC members having some characteristics of politically alienated social conservatives, with the larger Rebuilder profile displaying more of these characteristics-e.g. opposition to free market capitalism and immigration or 'new lifestyles'. The 'supply' of candidates and opportunities matters; results from table 6 suggest that Rebuilders and (in the UK) High Chaos respondents have little interest in traditional political activity. Will Brexit as a 'rebuilding' opportunity change the propensity of Rebuilders to eschew the act of voting and differentiate the two profiles further? These are areas ripe for additional research given the empirical establishment and cross-national validation of the two chaos profiles presented in this paper.

Summing up, it is important to recognize that the quest for status and recognition is deeply ingrained in human nature [23]. The finding that thwarted status-desires drive a Need for Chaos, which then activates support for political protest and violence, suggests that a Need for Chaos may be a key driver of societal change, both currently and historically. In this regard, the present analyses emphasize that while some simply want to 'watch the world burn', others want to the see a new world rebuilt from the ashes. Thus, we observe both nihilists (captured by the High Chaos group) and those who who have a purpose (captured by the Rebuilders group). Nonetheless, owing to the destructive force of a high Need for Chaos, one of the key challenges of contemporary societies is indeed to meet, recognize and, to the extent possible, alleviate the frustrations of these individuals. The alternative is a trail of nihilistic destruction.

Data accessibility. T.J.S., K.A., T.B.G., J.R., M.B.P. and M.O., 2020, 'Replication Data for: Some people just want to watch the world burn: The prevalence, psychology and politics of the 'Need for Chaos', https://doi.org/10.7910/DVN/MCFN1Z, Harvard Dataverse.

Authors' contributions. M.B.P. collaborated on writing the paper and supervising the analysis and conceptually developed need for chaos. T.J.S. took the lead on methodology and data analysis and edited the paper. T.B.G. helped with data analysis and edited the paper. M.O. conceptually developed need for chaos with K.A. and M.B.P. J.R. financially supported data collection and edited the paper. Competing interests. We declare we have no competing interests.

Funding. This project received funding from the Economic and Social Research Council (grant #ES/L011867/1) and the University of Melbourne, Australia. The authors are listed alphabetically and declare no conflicts of interest.

Endnotes

¹We use the somewhat awkward acronym *NFC*_{Chaos} in order to differentiate this scale from the Need for Cognition and Need for Closure scales, which are also often referred to with the acronym 'NFC'. ²The interval scale ranges from 1 to 7, where 1 is 'strongly disagree' and 7 is 'strongly agree'.

³We note that the quality of classification statistic—'entropy' or the probability a respondent is classified in one group over another—is 98.5%. Estimating additional classes yields slightly lower entropy, and the size of the additional profiles is small and substantively uninteresting. Equality constraints on the indicator means are used to permit valid and meaningful cross-national comparisons of the sizes of each of the profiles.

⁴Auxiliary analyses suggest this profile contains respondents who tend to answer at the midpoints of other scales, and in the USA and UK, answer affirmatively to questions as to whether they are prone not to take surveys seriously. In the remaining portion of this paper, we set this profile mostly aside in our analyses and interpretations.

⁵We thank an anonymous reviewer for pointing out this possibility to us. We ran separate models for each country. See section 3 of the electronic supplementary material for the full regression results.

References

Downloaded from https://royalsocietypublishing.org/ on 17 July 202

- Nolan C et al. 2008 The Dark Knight. Burbank, CA: Warner Home Video.
- Iyengar S, Lelkes Y, Levendusky M, Malhotra N, Westwood SJ. 2019 The origins and consequences of affective polarization in the United States. *Annu. Rev. Polit. Sci.* 22, 129–146. (doi:10.1146/annurev-polisci-051117-073034)
- Mason L 2018 Uncivil agreement: how politics became our identity. Chicago, IL: University of Chicago Press.
- Norris P, Inglehart R 2019 Cultural backlash: Trump, Brexit, and authoritarian populism. Cambridge, UK: Cambridge University Press.
- Vosoughi S, Roy D, Aral S. 2018 The spread of true and false news online. *Science* 359, 1146–1151. (doi:10.1126/science.aap9559)
- Tucker JA, Theocharis Y, Roberts ME, Barberá P. 2017 From liberation to turmoil: social media and democracy. *J. Democracy* 28, 46–59. (doi:10.1353/ jod.2017.0064)
- Turchin P 2016 Ages of discord. Chaplin, CT: Beresta Books. [Google Scholar].
- Petersen MB, Osmundsen M, Arceneaux K. 2020
 The 'need for chaos' and motivations to share hostile political rumors. https://psyarxiv.com/6m4ts/.
- Bartusevičius H, van Leeuwen F, Petersen MB. 2020
 Dominance-driven autocratic political orientations predict political violence in Western, educated, industrialized, rich, and democratic (WEIRD)

- Petersen MB, Osmundsen M, Bor A. 2020 Beyond populism: the psychology of status-seeking and extreme political discontent. (doi:10.31234/osf.io/ puqzs)
- Lawson A, Kakkar H. 2020 Of pandemics, politics, and personality: the role of conscientiousness and political ideology in sharing of fake news. (doi:10. 31234/osf.io/ves5m)
- McAdams DP, Pals JL. 2006 A new Big Five: fundamental principles for an integrative science of personality. *Am. Psychol.* 61, 204. (doi:10.1037/ 0003-066X.61.3.204)
- 13. Jost JT, Banaji MR, Nosek BA. 2004 A decade of system justification theory: accumulated evidence of conscious and unconscious bolstering of the status quo. *Polit. Psychol.* **25**, 881–919. (doi:10.1111/j. 1467-9221.2004.00402.x)

Downloaded from https://royalsocietypublishing.org/ on 17 July 2021

- 14. Mudde C. 2004 The populist zeitgeist. *Gov. Oppos.* **39**, 541–563. (doi:10.1111/j.1477-7053.2004.00135.x)
- McCutcheon AL 1987 Quantitative Applications in the Social Sciences Number 64: Latent Class Analysis. Newbury Park, CA: Sage.
- Bernstein A, Zvolensky MJ. 2011 Empirical approaches to the study of latent structure and classification of child and adolescent anxiety psychopathology. In *Handbook of child* and adolescent anxiety disorders (eds D McKay, EA Storch), pp. 91–104. New York, NY: Springer.
- Asendorpf JB, Borkenau P, Ostendorf F, Van Aken MA. 2001 Carving personality description at its joints: confirmation of three replicable personality prototypes for both children and adults. *Eur. J. Pers.* 15, 169–198. (doi:10.1002/per.408)
- Wilson M, Daly M. 1985 Competitiveness, risk taking, and violence: the young male syndrome. *Ethol. Sociobiol.* 6, 59–73. (doi:10.1016/0162-3095(85)90041-X)

- Iversen T, Soskice D 2019 Democracy and prosperity: reinventing capitalism through a turbulent century. Princeton, NJ: Princeton University Press.
- 20. Cutler NE, Bengtson VL. 1974 Age and political alienation: maturation, generation and period effects. *Ann. Am. Acad. Pol. Soc. Sci.* **415**, 160–175. (doi:10.1177/000271627441500112)
- Scotto TJ, Sanders D, Reifler J, 2018 The consequential Nationalist—Globalist policy divide in contemporary Britain: some initial analyses. *J. Elect. Public Opin. Parties* 28, 38–58. (doi:10.1080/17457289.2017.1360308)
- 22. Van der Brug W, Van Spanje J. 2009 Immigration, Europe and the 'new' cultural dimension. *Eur. J. Polit. Res.* **48**, 309–334. (doi:10.1111/j.1475-6765.2009.00841.x)
- 23. Kenrick DT, Griskevicius V, Neuberg SL, Schaller M. 2010 Renovating the pyramid of needs: contemporary extensions built upon ancient foundations. *Perspect. Psychol. Sci.* **5**, 292–314. (doi:10.1177/1745691610369469)