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Please cite the final published version:

Arceneaux, K., Gravelle, T. B., Osmundsen, M., Petersen, M. B., Reifler, J., & Scotto, T. J. (2021). Some people just want to watch the world burn: The prevalence, psychology and politics of the 'Need for Chaos'. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 376(1822), [20200147]. <https://doi.org/10.1098/rstb.2020.0147>

Publication metadata

Title:	Some people just want to watch the world burn: The prevalence, psychology and politics of the 'Need for Chaos'
Author(s):	Kevin Arceneaux, Timothy B. Gravelle, Mathias Osmundsen, Michael Bang Petersen, Jason Reifler, Thomas J. Scotto
Journal:	<i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 376(1822), [20200147]
DOI/Link:	https://doi.org/10.1098/rstb.2020.0147
Document version:	Accepted manuscript (post-print)

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Some people just want to watch the world burn

The prevalence, psychology and politics of the “Need for Chaos”

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Abstract

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. Analyzing 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.”

Keywords: Politics; Need for Chaos; Marginalization; Personality

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

—“Some men just want to watch the world burn,” *The Dark Knight*

Political observers and scholars are sounding alarms over increasing polarization between political parties (Iyengar et al., 2019; Mason, 2018), the emergence of populist movements and leaders (Norris and Inglehart, 2019), the circulation of misinformation (Vosoughi, Roy and Aral, 2018), hostile interactions on social media (Tucker et al., 2017) and rising levels of actual political violence (Turchin, 2016). 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 (Petersen, Osmundsen and Arceneaux, 2020). 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 than build them.

Prior research links current-day disruptive activism to experiences of social marginalization (Petersen, Osmundsen and Arceneaux, 2020) and rising economic inequality (Turchin, 2016). 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 (Petersen, Osmundsen and Arceneaux, 2020; Petersen, Osmundsen and Bor, 2020; Bartusevičius, van Leeuwen and Petersen, 2020). 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 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” (Petersen, Osmundsen and Arceneaux, 2020). To measure individual differences in such desires, Petersen, Osmundsen and Arceneaux developed and validated a battery of eight items that reflects 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 behaviors, such as political violence and the sharing of hostile political content (Petersen, Osmundsen and Arceneaux, 2020; Lawson and Kakkar, 2020).

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 (McAdams and Pals, 2006). Consistent with this view, prior research shows that the Need for Chaos is highly correlated with, but distinct from, status-oriented personality traits such as the Dark Triad of Machiavellianism, Psychopathy and Narcissism (Petersen, Osmundsen and Arceneaux, 2020). 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 (Petersen, Osmundsen and Arceneaux, 2020). In contrast, status-oriented individuals have consistently been found to engage in so-called “system-justification” when deprivation is absent; in this content, systemic injustices are explained away as a reflection of individual choice (Jost, Banaji and Nosek, 2004). 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 (Petersen, Osmundsen and Arceneaux, 2020).

While existing work has identified chaos-seeking as a measurable social strategy and demonstrates how it leads to disruptive behavior political behavior, 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 behav-

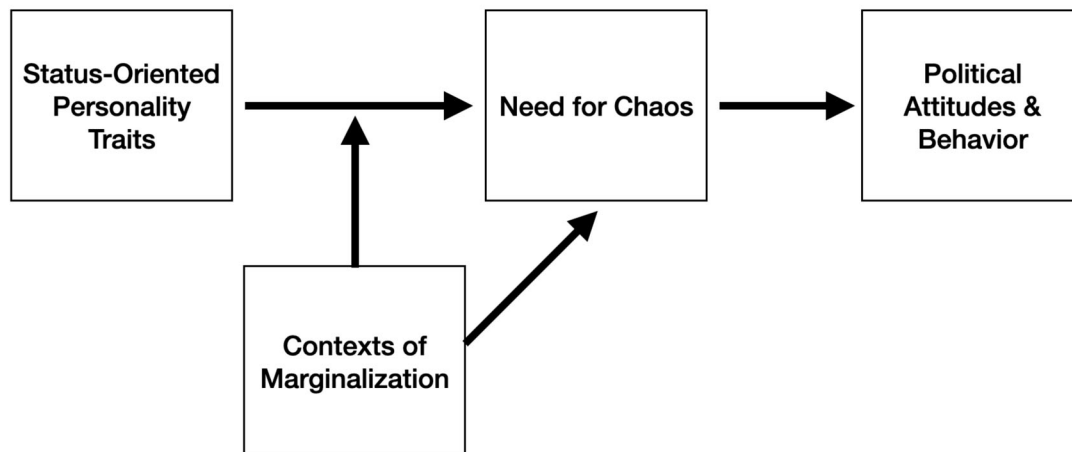


Figure 1: Theoretical Model for Causes and Consequences of Need for Chaos

iors, 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 (Petersen, Osmundsen and Arceneaux, 2020). 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 English-speaking 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, uni-dimensional concept (Petersen, Osmundsen and Arceneaux, 2020), 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 (Petersen, Osmundsen and

Arceneaux, 2020), it is crucial to replicate this finding in countries outside of the United States.

Finally, we know little about the political aims and behaviors 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 issues attitudes? Or, in contrast, does ‘chaos seeking’ constitute a thin ideology (Mudde, 2004) 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 behaviors and attitudes has not yet been done.

Exploring the Presence of Subtypes Underlying the NFC_{Chaos} Scale

We placed the NFC_{Chaos} scale on nationally representative surveys of 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 5,105 and 5,000, respectively. The Australian and Canadian studies were fielded by Research Now-Survey Sampling International (now Dynata) in January 2019 with sample sizes of 1,045 and 1,100, respectively. Poststratification weights bring all samples into line with population demographics. Our first step was to replicate Petersen, Osmundsen and Arceneaux (2020). We found that 1) NFC forms a uni-dimension scale that is 2) positively correlated with negative personality traits (the Dark Triad and Narcissism) but 3) distinct from them (See Sections 1 and 2 of the Appendix for details). Therefore, we provide additional evidence that the NFC_{Chaos} scale is a valid scale in the US 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 em-

empirically continuous. In order to avoid the pitfalls that would be inherent in using arbitrary cutoffs (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 (McCutcheon, 1987). As Bernstein and Zvolensky (2011, 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).”

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.¹ 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 modeling, 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.²

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

¹The interval scales run from 1-7, where 1 is “Strongly Disagree” and 7 is “Strongly Agree.”

²We 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 profile.

Table 1: Multigroup Latent Profile Analysis: Need for Chaos Indicators

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

Notes: $N = 12,250$ (USA $N=5000$; UK $N=5105$; Canada $N=1045$; Australia $N=1100$; Likelihood: -146298.27; AIC: 292696.53; BIC: 293067.20; Sample Size Adjusted BIC: 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").

of building something better. We labelled a third group of respondents as "Medium Chaos" (MC), because their scores on each item tend to be near the midpoint of the scale.³ (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 favor 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% of 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%

³Auxiliary analyses suggest this profile contains respondents who tend to answer at the midpoints of other scales, and in the US 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.

Table 2: Profile Membership Across Nations: Need for Chaos

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%

Notes: Percentages based on profile membership derived from the estimated model in Mplus v 8.4

crave chaos to some degree.

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 individuals who fall in the HC profile are different from those who fall in the RB profile? If so, it may indicate that these individuals’ craving for chaos has 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 (Asendorpf et al., 2001). The data, shown in Section 3 of the Appendix, offer some support for this possibility.⁴

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” (Wilson and Daly, 1985). Education may also be important because it has become a major fault line in Western democracies,

⁴We thank an anonymous reviewer for pointing out this possibility to us. We ran separate models for each country. See Section 3 of the Appendix for the full regression results.

as those without a college degree often feel left out and pushed aside in post-industrial knowledge economies (Iversen and Soskice, 2019; Turchin, 2016).

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 Appendix 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). 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” (Cutler and Bengtson, 1974, 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 this are specifically the probabilities for a male without a college degree, who falls in the Boomer generation, and scores average scores on the Big Five personality traits). Across all four countries, individuals categorized as HC are also more 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

Table 3: Need for Chaos Profile Membership by Generation and Graduate Status

Lower Education					
Country	Generation	Low Chaos	Rebuild	Medium Chaos	High Chaos
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%
	X	66%	15%	16%	3%
	Millennial	44%	17%	35%	3%
Canada	Silent	78%	8%	10%	4%
	Boomer	78%	8%	7%	7%
	X	57%	23%	12%	8%
	Millennial	49%	21%	18%	12%
Australia	Silent	53%	45%	2%	0%
	Boomer	53%	35%	8%	3%
	X	50%	24%	18%	7%
	Millennial	43%	26%	24%	7%
Higher Education					
United States	Silent	88%	8%	4%	0%
	Boomer	86%	8%	1%	5%
	X	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%
	X	56%	16%	17%	12%
	Millennial	63%	8%	13%	16%
Australia	Silent	50%	32%	4%	12%
	Boomer	70%	20%	5%	6%
	X	51%	13%	32%	4%
	Millennial	40%	11%	35%	14%

Notes: Scenario–Male, No Higher Education, and average on personality traits.

Table 4: High Chaos Profile Membership by Ideology Across Nations

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%

Notes: Scenario–Male, No Higher Education, Avg Personality, Boomer

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 (Petersen, Osmundsen and Bor, 2020). We return to this below.

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 difference in political preferences and behavior. We now turn to this question.

These analyses focus on the US 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 US and UK. In both countries, individuals in the LC category are less likely to agree

Table 5: The Association between Need for Chaos Latent Profile Categories and Policy Preferences

(a) US: Regression coefficients for chaos profiles for attitudinal outcomes (low chaos excluded category)

Policy Position	Rebuild Profile	Medium Chaos	High Chaos
Islam is a serious danger to Western civilization.	0.25** (0.09)	0.02 (0.11)	0.14 (0.15)
All further immigration to the US should be halted.	0.40*** (0.10)	0.36*** (0.12)	0.55*** (0.16)
The death penalty, even for very serious crimes, is never justified.	-0.03 (0.10)	0.55*** (0.12)	0.75*** (0.16)
People are better off in a free market economy.	-0.23*** (0.08)	-0.46*** (0.09)	0.15 (0.13)
The welfare state makes people less able to look after themselves.	0.11 (0.09)	-0.11 (0.10)	0.16 (0.14)
Newer lifestyles are contributing to the breakdown of society.	0.28*** (0.08)	-0.01 (0.10)	0.21 (0.14)

(b) UK: Regression coefficients for chaos profiles for attitudinal outcomes (low chaos excluded category)

Policy Position	Rebuild Profile	Medium Chaos	High Chaos
Islam is a serious danger to Western civilization.	0.40*** (0.09)	0.37*** (0.10)	0.73*** (0.16)
All further immigration to the UK should be halted.	0.57*** (0.09)	0.53*** (0.10)	0.56*** (0.16)
The death penalty, even for very serious crimes, is never justified.	-0.27*** (0.09)	0.06 (0.11)	0.21 (0.17)
People are better off in a free market economy.	-0.10 (0.07)	-0.12 (0.08)	0.05 (0.13)
The welfare state makes people less able to look after themselves.	0.06 (0.08)	0.22* (0.09)	0.33* (0.15)
Newer lifestyles are contributing to the breakdown of society.	0.21** (0.07)	-0.04 (0.08)	0.47 (0.13)

Notes: Each row represents a separate regression model. The models include a full slate of appropriate control variables, with full results available in the appendix. 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. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$

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 US, 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 is distinct from the full embrace of nihilism apparent in the “High Chaos” profile.

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, Osmundsen & Arceneaux (2020), 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.

Conclusion

The purpose of this study was to explore whether different motivations underlie the characteristic adaptation Need for Chaos (Petersen, Osmundsen and Arceneaux, 2020). We replicated previous research in four Anglo-Saxon countries. The NFC_{Chaos} scale forms a uni-dimensional scale that captures a continuous characteristic adaptation in the Australia, Canada, the UK, and the US. 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

Table 6: The Association between Need for Chaos Latent Profile Categories and Political Participation

(a) US: Regression coefficients for chaos profiles for forms of participation (low chaos excluded category)

Participation Item	Rebuild Profile	Medium Chaos	High Chaos
Wear or display a campaign badge or sticker	-0.03 (0.32)	0.59 (0.36)	1.42 (0.50)
Vote in a presidential election	-0.78** (0.20)	-1.39*** (0.22)	-0.35 (0.30)
Work for a political party, candidate, or action group	-0.38 (0.28)	0.68* (0.34)	1.30*** (0.44)
Take part in a lawful protest or public demonstration	0.08 (0.29)	1.20*** (0.33)	1.55** (0.47)
Take part in an illegal protest	0.46* (0.19)	1.72*** (0.22)	2.79*** (0.32)
Vote in a local election	-0.50* (0.20)	-1.24*** (0.23)	0.04 (0.33)
Give money to a political party or candidate	-0.50 (0.32)	0.41 (0.36)	0.89 (0.50)
Post about politics on Facebook, Twitter, or other social media	-0.03 (0.35)	-0.08 (0.39)	0.63 (0.57)
Comment on political posts of family on social media	0.24 (0.34)	1.00* (0.39)	0.95 (0.53)

(b) UK: Regression coefficients for chaos profiles for forms of participation (low chaos excluded category)

Participation Item	Rebuild Profile	Medium Chaos	High Chaos
Wear or display a campaign badge or sticker	0.38 (0.23)	0.41 (0.24)	-0.12 (0.42)
Vote in a parliamentary election.	-1.80*** (0.22)	-1.95*** (0.23)	-1.80*** (0.37)
Work for a political party, candidate, or action group	0.07 (0.18)	0.80*** (0.21)	0.26 (0.33)
Take part in a lawful protest or public demonstration	0.11 (0.22)	0.72*** (0.26)	0.26 (0.39)
Take part in an illegal protest.	0.41* (0.16)	0.93*** (0.18)	0.92*** (0.30)
Vote in a local election	-1.37*** (0.22)	-1.60*** (0.25)	-2.00*** (0.42)
Give money to a political party or candidate	-0.28 (0.18)	0.65** (0.20)	0.24 (0.36)
Post about politics on Facebook, Twitter, or other social media	0.37 (0.74)	0.60* (0.26)	0.25 (0.46)
Comment on political posts of family on social media	0.23 (0.24)	0.39 (0.28)	1.04* (0.46)

Notes: Each row represents a separate regression model. The models include a full slate of appropriate control variables, with full results available in the appendix. 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. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$

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., “I 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 percent among Anglo-Saxon countries. Is this something that should be worrying from a normative standpoint? We believe that the Latent Profile Analysis helps answer this question. If 20 percent 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 percent 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 (Turchin, 2016).

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 Petersen, Osmundsen and Arceneaux (2020), 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 US, 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 (Van der Brug and Van Spanje, 2009; J. Scotto, Sanders and Reifler, 2018). A close look at Tables 5 suggests that the picture of the RB and the HC members have 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 matter; 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 (Kenrick et al., 2010). The finding that thwarted status-desires drive a Need for Chaos, which then activates support for political protest and violence, suggest that a Need for Chaos may be a key driver of societal change, both presently and historically. In this regard, the present analyses emphasize that some simply “watch the world burn”, others want to see a new world rebuilt from the ashes. Thus, we observe both nihilists (captured by the High Chaos group) and those who have a purpose (captured by the Rebuilders group). Nonetheless, due 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 people. The alternative is a trail of nihilistic destruction.

References

- Asendorpf, Jens B, Peter Borkenau, Fritz Ostendorf and Marcel AG Van Aken. 2001. “Carving personality description at its joints: Confirmation of three replicable personality prototypes for both children and adults.” *European Journal of Personality* 15(3):169–198.
- Bartusevičius, Henrikas, Florian van Leeuwen and Michael Bang Petersen. 2020. “Dominance-driven autocratic political orientations predict political violence in Western, educated, industrialized, rich, and democratic (WEIRD) and non-WEIRD samples.” *Psychological science* p. 0956797620922476.
- Bernstein, Amit and Michael J Zvolensky. 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*. Springer pp. 91–104.
- Cutler, Neal E and Vern L Bengtson. 1974. “Age and political alienation: Maturation, generation and period effects.” *The Annals of the American Academy of Political and Social Science* 415(1):160–175.
- Iversen, Torben and David Soskice. 2019. *Democracy and prosperity: Reinventing capitalism through a turbulent century*. Princeton University Press.
- Iyengar, Shanto, Yphtach Lelkes, Matthew Levendusky, Neil Malhotra and Sean J Westwood. 2019. “The origins and consequences of affective polarization in the United States.” *Annual Review of Political Science* 22:129–146.
- J. Scotto, Thomas, David Sanders and Jason Reifler. 2018. “The consequential Nationalist–Globalist policy divide in contemporary Britain: some initial analyses.” *Journal of Elections, Public Opinion and Parties* 28(1):38–58.
- Jost, John T, Mahzarin R Banaji and Brian A Nosek. 2004. “A decade of system justification the-

- ory: Accumulated evidence of conscious and unconscious bolstering of the status quo.” *Political psychology* 25(6):881–919.
- Kenrick, Douglas T, Vladas Griskevicius, Steven L Neuberg and Mark Schaller. 2010. “Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations.” *Perspectives on psychological science* 5(3):292–314.
- Lawson, Asher and Hemant Kakkar. 2020. “Of Pandemics, Politics, and Personality: The Role of Conscientiousness and Political Ideology in Sharing of Fake News.”.
- Mason, Lilliana. 2018. *Uncivil agreement: How politics became our identity*. University of Chicago Press.
- McAdams, Dan P and Jennifer L Pals. 2006. “A new Big Five: fundamental principles for an integrative science of personality.” *American psychologist* 61(3):204.
- McCutcheon, Allan L. 1987. *Quantitative Applications in the Social Sciences Number 64: Latent Class Analysis*. Newbury Park, CA: Sage.
- Mudde, Cas. 2004. “The populist zeitgeist.” *Government and opposition* 39(4):541–563.
- Norris, Pippa and Ronald Inglehart. 2019. *Cultural backlash: Trump, Brexit, and authoritarian populism*. Cambridge University Press.
- Petersen, Michael Bang, Mathias Osmundsen and Alexander Bor. 2020. “Beyond Populism: The Psychology of Status-Seeking and Extreme Political Discontent.”.
- Petersen, Michael Bang, Mathias Osmundsen and Kevin Arceneaux. 2020. “The “need for chaos” and motivations to share hostile political rumors.”.
- URL:** <https://psyarxiv.com/6m4ts/>
- Tucker, Joshua A, Yannis Theocharis, Margaret E Roberts and Pablo Barberá. 2017. “From liberation to turmoil: Social media and democracy.” *Journal of democracy* 28(4):46–59.

- Turchin, Peter. 2016. "Ages of discord." *Chaplin, CT: Beresta Books.[Google Scholar]* .
- Van der Brug, Wouter and Joost Van Spanje. 2009. "Immigration, Europe and the new cultural dimension." *European Journal of Political Research* 48(3):309–334.
- Vosoughi, Soroush, Deb Roy and Sinan Aral. 2018. "The spread of true and false news online." *Science* 359(6380):1146–1151.
- Wilson, Margo and Martin Daly. 1985. "Competitiveness, risk taking, and violence: The young male syndrome." *Ethology and sociobiology* 6(1):59–73.