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Fear Among the Extremes: How Political Ideology Predicts Negative Emotions and Outgroup Derogation

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Abstract

The "rigidity of the right" hypothesis predicts that particularly the political right experiences fear and derogates outgroups. We propose that above and beyond that, the political extremes (at both sides of the spectrum) are more likely to display these responses than political moderates. Results of a large-scale sample reveal the predicted quadratic term on socio-economic fear. Moreover, although the political right is more likely to derogate the specific category of immigrants, we find a quadratic effect on derogation of a broad range of societal categories. Both extremes also experience stronger negative emotions about politics than politically moderate respondents. Finally, the quadratic effects on derogation of societal groups and negative political emotions were mediated by socio-economic fear, particularly among left- and right-wing extremists. It is concluded that negative emotions and outgroup derogation flourish among the extremes.

Keywords

political ideology, political extremism, fear, outgroup derogation

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Rigid adherence to differing political ideologies can lead to heated debates. In both the political arena and public discourse, the political "left" and the political "right" clash on a range of topics and approach the world with a fundamentally different sense of morality (e.g., Graham, Haidt, & Nosek, 2009; Haidt, 2012; see also Janoff-Bulman & Carnes, 2013). Considerable research efforts have therefore been devoted to understanding the underlying psychological motives, needs, and emotions that are connected to political ideology, in particular how the political left versus right differ in their underlying psychology (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Jost, Glaser, Kruglanski, & Sulloway, 2003b; Lammers & Proulx, 2013; Napier & Jost, 2008; Roccato, Vieno, & Russo, 2013; Schlenker, Chambers, & Le, 2012; Van Lange, Bekkers, Chirumbolo, & Leone, 2011). This area of research has provided a wealth of findings, indicating differences in, for instance, how the right versus the left deal with uncertainty and fear, how they experience positive and negative emotions, and how they justify existing societal structures. In the present article, we argue, however, that to truly understand the roots of political ideology, one must also appreciate how the left and the right may be *similar* to each other psychologically. Specifically, besides a distinction between left and right, another meaningful distinction is how the political extremes—at both sides of the political spectrum—differ from political moderates (e.g., Fernbach, Rogers, Fox, & Sloman, 2013; Hardin, 2002; Inglehart, 1987; Tetlock, Armor, & Peterson, 1994; Toner, Leary, Asher, & Jongman-Sereno, 2013).

One of the dominant theoretical perspectives in the psychology of political ideology is the "rigidity of the right" hypothesis (e.g., Jost et al., 2003b; Tetlock, Bernzweig, & Gallant, 1985). The core insight that this theoretical framework offers is that feelings of uncertainty and fear are associated with politically conservative beliefs. This theoretical framework more specifically explains conservatism as a form of "motivated social cognition," meaning that politically right-wing attitudes are grounded in feelings of fear and uncertainty, resulting in conservative attitudes such as resistance to changing the status quo, and a desire for societal order and structure. Such a desire for order and structure may lead people to justify inequalities between various social

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categories. Empirical studies support these assertions. As summarized in the seminal review article by Jost et al. (2003b), the political right experiences more system instability, is less tolerant of ambiguity, and is more dogmatic. Moreover, right-wing conservatism is associated with personality traits that are conceptually linked to outgroup derogation (i.e., the tendency to hold negative attitudes toward outgroups), such as authoritarianism and social dominance orientation. Consistent with this, a range of studies indicate more derogation of societal minority groups, such as ethnic groups and immigrants, among the right than among the left (e.g., Sears & Henry, 2003).

Although the evidence that the right experiences uncertainty and fear more strongly than the left appears solid, we argue that research paid insufficient attention to the additional possibility that the convictions of the political *extremes* are associated with uncertainty and fear, rendering the *extremes* more likely to derogate other groups (Greenberg & Jonas, 2003). Of importance, this extremism hypothesis is not necessarily "alternative" to the rigidity of the right hypothesis: After all, feelings of uncertainty and fear may be stronger among the extreme right than among the extreme left, explaining the robust occurrence of a linear effect (see Jost, Glaser, Kruglanski, & Sulloway, 2003a). Nevertheless, various research findings are at least uncomfortable with the assertion that the relation between ideology and various indicators of fear, cognitive functioning, or outgroup derogation is monotonously and uniformly linear. For instance, in contrast to what is typically found in the United States, research reveals that authoritarianism *positively* predicts endorsement of a Marxist ideology, as well as egalitarian distributive justice norms, in samples collected in the former Soviet Union (McFarland, Ageyev, & Abalakina-Paap, 1992). Moreover, low openness to experience and high needs for security are associated with a right-wing ideology in (predominantly capitalist) Western European countries, but they are associated with a left-wing ideology in Eastern European countries that have a recent history of socialism (Thorisdottir, Jost, Liviatan, & Shrout, 2007). It may thus well be that a quadratic effect explains variance above and beyond the simple linear assertion that people experience more uncertainty and fear to the extent that they move more toward the right end of the political spectrum. Establishing this quadratic effect would provide a more nuanced perspective on the psychology of ideology, as it would suggest that the extreme left experiences uncertainty and fear more strongly than the political center.

At present, there is a paucity of studies testing the possibility that uncertainty and fear are particularly strong among the political extremes, as the majority of studies on political ideology did not include quadratic regression terms in the analyses. There are a few studies that did consider this possibility, however, and they reveal mixed evidence for the extremism hypothesis. Jost and colleagues (2003a) reviewed 13 studies that tested for an extremism effect, of which 6 supported the extremism hypothesis and 7 did not support the extremism hypothesis. Also more recent studies confirm this mixed picture. For instance, in a study by Jost et al. (2007), more extreme scores on a political ideology measure did not predict feelings of uncertainty and threat, thus not supporting the extremism hypothesis (see also Kemmelmeier, 2007, for a similar finding on dogmatism). At the same time, a series of experimental studies within the tradition of Terror Management Theory reveal that inducing death anxiety can increase support for both liberal and conservative presidential candidates (Weise et al., 2008) and make both liberals and conservatives more convinced of their own worldview (Castano et al., 2011). It is unclear whether these findings are specific to death anxiety, however, as other manipulations of fear have produced mixed results (Hogg, Meehan, & Farquharson, 2010; Thorisdottir & Jost, 2012).

We propose that although most studies on this issue have considerably extended insights in the psychology of ideology, their specific empirical test of the extremism hypothesis was somewhat limited. For instance, some of the studies conducted on this issue investigated a trichotomous operationalization of ideology (liberal vs. moderate vs. conservative) instead of a continuous scale, thus failing to appreciate the distinction between the moderate versus extreme left, and the moderate versus extreme right (e.g., McClosky & Chong, 1985; Tetlock et al., 1985; Tetlock, Hannum, & Micheletti, 1984). Other studies tested for quadratic effects of political ideology in samples that are unlikely to contain large numbers of political extremists (e.g., undergraduate university students often in conjunction with small sample sizes; see Chirumbolo, 2002; Fibert & Ressler, 1998; Jost et al., 2007; Kemmelmeier, 1997). Although relatively small samples, often consisting of university students, may be well suited for many (e.g., experimental) research questions, if one seeks to examine the psychology of political extremism it stands to reason that one needs a large sample that contains a substantial number of political extremists. Persuasive empirical evidence that clearly speaks in favor, or against, the extremism hypothesis is currently lacking.

In sum, at present, the evidence for the extremism hypothesis is mixed at best. We propose that theorizing on the psychology of ideology may be substantially and meaningfully extended by a solid test of the idea that the political extremes experience more fear, and are more likely to derogate other groups, than political moderates. What is needed for such a solid test of the extremism hypothesis is a large-scale sample where both extremes are sufficiently represented, a continuous measure of political ideology, and a measurement of political ideology at a different point in time than the measurement of the dependent variables. The present study was designed to conduct exactly this test. In the following, we illuminate our predictions in more detail, after which we outline the specifics of the current research.

Extremism and Fear

The idea that extreme political beliefs are associated with feelings of fear fits well with theoretical perspectives on political extremism, as well as with general insights on how people generally cope with anxiety and uncertainty. Theories on political extremism emphasize the rigid nature of ideological beliefs at both extremes, which is characterized by black-and-white thinking in which social stimuli are dichotomously categorized as good or bad, positive or negative, and the like. Such rigidity is, for instance, reflected in a belief in straightforward and simple solutions to the problems that society faces (Fernbach et al., 2013; Tetlock et al., 1994; see also Greenberg & Jonas, 2003; Hardin, 2002). Historical records further underscore such rigidity by the lack of tolerance of other-minded groups that has been displayed by both extremes. Although not all extremist rigidity has been "bad" (and sometimes stimulated positive social change; see Tetlock et al., 1994), it also laid the foundations for some of the major atrocities committed in the 20th century by the left extreme (e.g., communism) as well as the right extreme (e.g., fascism; Pipes, 1997; see also Baumeister, 1997). It has been noted that rigid belief systems, that proffer simple solutions for complex societal problems, are often rooted in feelings of uncertainty and fear. Specifically, rigid belief systems provide structure and meaning to a complex social environment, making the world seem more understandable and predictable (Kruglanski, Pierro, Mannetti, & De Grada, 2006).

Various complementary lines of research underscore that uncertainty and fear are closely related with ideological extremism. One key insight comes from research on compensatory conviction, which indicates that feelings of uncertainty and fear paradoxically are associated with increased ideological certainty (McGregor, 2006; McGregor, Prentice, & Nash, 2013). This matches with the observation that the political extremes at both the left and the right are more convinced of the correctness of their own political beliefs (Toner et al., 2013). Relatedly, terror management theory stipulates that basic fear of death makes people cling more strongly to their existing worldview, at both sides of the political spectrum (Pyszczynski, Greenberg, & Solomon, 1999; see also Anson, Pyszczynski, Solomon, & Greenberg, 2009). Research findings are consistent with this reasoning, showing how mortality salience increases left-wing liberals' support for liberal values and right-wing conservatives' support for conservative values (Castano et al., 2011; Pyszczynski et al., 2006; Weise et al., 2008). Taken together, these insights and findings suggest that feelings of uncertainty and fear are not exclusive to the political right but more likely characterize the political extremes at both sides of the spectrum.

Instead of tapping indirect personality indicators that are associated with a general desire to reduce fear, in the present research we measure fear directly in a situational-political context. Consistent with a recent call to focus more on system-level emotions in social and political psychology (Solak, Jost, Sümer, & Clore, 2012), we measure participants' socio-economic fear, which we define as fear that the well-being of oneself, or of the collective that one is part of, is compromised by current political and economic developments. Theoretically, our conceptualization of socio-economic fear closely matches the notion of threats to the stability of the social system, which frequently has been posited as related to right-wing political orientation (Jost et al., 2003b, Jost et al., 2007). Moreover, from an applied perspective, socio-economic fear is the emotion that one would associate with societal crisis, which may be related to extremist political opinions. Our conceptualization of socio-economic fear enables us to compare the results of this study with macropolitical insights that connect the rise of extremism to economic or societal crises (Midlarsky, 2011). Based on our line of reasoning, we predict a quadratic effect of political ideology on socio-economic fear, indicating more fear among both extremes than among people in the political center (Hypothesis 1).

Extremism and Outgroup Derogation

Various recent studies challenge the common assertion that the political right necessarily is more prone to derogate other groups than the political left (Brandt, Reyna, Chambers, Crawford, & Wetherell, 2014; see also Crawford & Pilanski, 2014). For instance, Chambers, Schlenker, and Collison (2013) predicted and found that the political right tends to derogate societal groups that most often have a left-wing political orientation (e.g., immigrants, African Americans, homosexuals), but the political left tends to derogate societal groups that most often have a right-wing political orientation (e.g., business people, Christians, bankers). Moreover, such outgroup derogation, among both the left and the right, was mediated by perceived dissimilarity. Converging findings indicate that both liberals and conservatives supported discrimination against ideologically dissimilar groups, a finding that was mediated by perceived value violations (Wetherell, Brandt, & Reyna, 2013). Closely related to this is a study by Inbar and Lammers (2012), which reveals that left-wing political orientation among academics predicts an increased willingness to discriminate against conservative colleagues, in terms of grant or paper reviews, symposium invitations, and hiring decisions. The insight that the political left, too, derogates certain societal categories went unnoticed in many previous studies on political ideology, as outgroup derogation was commonly conceptualized in reference to social categories that the political right tends to have negative sentiments about (e.g., ethnic minorities or immigrants; Sears & Henry, 2003).

Although the above insights are important, they only draw a comparison between the left and the right and conclude that both sides have a comparable tendency to derogate ideologically dissimilar groups. Indeed, Brandt and colleagues (2014) even assert that "liberals and conservatives express *similar levels* of intolerance toward ideologically dissimilar and threatening groups" (p. 27, emphasis added). It might

therefore be tempting to conclude that political ideology is a poor predictor of a general tendency to derogate outgroups, after recognizing that the left and the right derogate different groups. In the present study, we seek to expand on these insights by illuminating that political ideology actually is a strong predictor of outgroup derogation, if one draws a different comparison: Besides comparing the left versus the right, we also compare the extremes versus the moderates. Specifically, we reason that due to their increased socio-economic fear, the political extremes derogate more societal groups than moderates do.

We incorporated two measures of outgroup derogation. The first measure is derogation of immigrants—a specific societal category that frequently has been associated with derogation by the political right (Chambers et al., 2013). It can be predicted that the political right derogates immigrants more strongly than the political left, and hence, this measure serves to confirm the validity of our stimulus materials. Our second measure of outgroup derogation, however, is an index reflecting the likelihood that one experiences negative sentiments about a wider variety of societal groups, including, for instance, artists, soldiers, police officers, and religious believers. If both extremes are prone to derogate other groups, they should have negative sentiments about more social categories than political moderates. Hence, we predict the quadratic effect that the political extremes tend to derogate more societal groups than political moderates (Hypothesis 2).

Furthermore, we test whether such increased outgroup derogation among the extremes is attributable to fear. It has been noted frequently that uncertainty and fear are at the core of outgroup derogation (e.g., Das, Bushman, Bezemer, Kerkhof, & Vermeulen, 2009; Duckitt, 2005; Stephan & Stephan, 2000). Moreover, such uncertainty and fear has been assumed to drive the relation between political ideology and outgroup derogation (Jost et al., 2003b). Integrating these notions with our first two hypotheses, we argue that the increased fear that we predict among the political extremes drives their tendency to derogate various societal groups. Thus, we predict that socio-economic fear mediates derogation of societal groups particularly among left- and right-wing extremists (Hypothesis 3).

The Current Research

We tested our three hypotheses in a large-scale sample that was conducted in the Netherlands. We propose that this constitutes an ideal setting to test the extremism hypothesis, as the Netherlands is one of the rare countries in the Western world where both the extreme left and the extreme right have substantial electoral significance among the population. At the far right side of the political spectrum is a party called the PVV (the *Partij voor de Vrijheid*, which translates into the "Freedom party")—a party known for its right-wing populism and its radical anti-immigration sentiments. At the far left side of the political spectrum is the SP (the *socialistische partij*, which translates into the "Socialist Party"), a party that was founded based on Marxist and Maoist ideological principles (by means of illustration, politicians who serve in Parliament for the SP have to hand in their entire salary to the party, and get an average Dutch salary in return). In the elections for Dutch Parliament in 2012, these parties ended third and fourth, respectively (in a Parliament currently containing 11 parties) and acquired 10.08% (PVV) versus 9.7% (SP) of the votes. Moreover, election polls reveal that both parties have even larger potential among the Dutch electorate. Contrary to, for instance, the United States where radical left-wing ideologies such as socialism and communism are rare, the Netherlands has both extremes clearly represented within the voting population.

Besides socio-economic fear, derogation of immigrants, and outgroup derogation, our questionnaire also included various other measures for more exploratory reasons to further insights into the psychological dynamics underlying political extremism. First, we also included a measure of the negative emotions that people experience about political parties. This measure was inspired by previous arguments that the political extremes display more political cynicism and hence tend to withdraw from mainstream politics (Hardin, 2002). As such, this measure enables us to examine political cynicism among the extremes, as reflected by their negative emotions about political parties. Finally, we assessed the value that people place in emotions generally, to establish whether the predicted effects are specific to emotions in response to societal and political events.

Method

Procedure

We collected the data in two waves. The first wave was conducted during national elections for Dutch Parliament. This wave had the form of a "VAA" (Voting Advice Application) referred to as *Kieskompas* ("Election compass")—a popular Dutch Internet tool, coordinated by the second author of this contribution, that is designed to help citizens determine their preferred party in the complex, multi-party political landscape of the Netherlands. This tool included the main independent variable (political ideology) as well as background variables (gender and age). At the end of the VAA, participants were asked to leave their email address in case they wanted to be contacted for future research purposes. The second wave took place almost a year later and was (as an Internet link) sent to the respondents who left their email address during the first wave. Participation was voluntary. The second wave included all the dependent measures, which are described in more detail below.

Sample

A total of 7,553 participants were identifiable in both waves and could be merged into the same data file. Hence, these

participants formed the basis for our analyses. Our sample contained 4,388 men, 1,433 women, and 1,732 participants who did not report their gender. Age (as recorded during the first wave) ranged from 18 to 92 years (M_{age} = 51.94, *SD* = 15.29; 1,716 missing).

We also measured political ideology during the first wave, by asking participants to place themselves on a political scale ranging from 1 (*very left-wing*) to 10 (*very right-wing*). Such a single item is the most common way to measure political ideology and has good construct validity (e.g., Chirumbolo, 2002; Fibert & Ressler, 1998; Jost et al., 2007; Kemmelmeier, 1997). Participants on average scored close to the midpoint of the scale, suggesting that both the political left and the political right were sufficiently represented (*M* = 4.92, *SD* = 2.20; 177 missing values). Although we assessed an "opt-in" sample that is not necessarily representative for the Dutch population at large, both the size of the sample and its composition according to political ideology make the sample well suited for the phenomena that are under investigation here.

Dependent Measures

Of the below dependent variables, we measured the variables that formed the basis of our three hypotheses—socio-economic fear, derogation of immigrants, and derogation of societal groups—in the entire sample. To reduce the size of the questionnaire somewhat (and to hence increase response rate), we measured negative political emotions, and the value of emotionality, only in random parts of the sample (*n* = 3,214 and *n* = 3,144, respectively).

Emotion measures. To measure participants' *socio-economic fear*, we included the following 13 items (1 = *strongly disagree*, 7 = *strongly agree*): "I am afraid that the financial crisis will escalate into a worldwide chaos"; "I frequently worry about the future of the Netherlands"; I am afraid that there will be major food shortages in the near future, which may threaten our existence"; "As long as the crisis lasts, I consider the risk of buying a house too big"; "In the future, the Dutch economy will be strong enough to ensure employment for most people" (recoded); "Globalization threatens social security"; "I believe that in the near future, the Western world will be set back to a much lower level of prosperity"; "In the future, my salary will not be sufficient to make a living"; "I find the current economic situation reason not to bring a child into this world"; "I am afraid that the Netherlands will be dragged down by the financial crisis in Southern European countries"; "I keep on making major purchases despite the crisis in Europe" (recoded); "To be able to compete with other countries, we will lose our social security"; and "It is improbable that there is much pension left when I'm old." These 13 items were averaged into a reliable scale (α = .87).

To measure participants' *value of emotionality*, we posed the following eight items (1 = *strongly disagree*, 7 = *strongly agree*): "I am a very emotional person"; "Decision making based on feelings usually leads to mistakes" (recoded); "I prefer to keep my feelings under control" (recoded); "I consider it important to reflect upon my feelings"; "I find it important to know how others feel"; "It is important for me to be aware of my emotions"; I try to anticipate on, and prevent, emotional situations" (recoded); and "I dislike experiencing strong emotions" (recoded). We averaged participants' responses to these items into a value of emotionality scale with acceptable reliability (α = .67).

We also measured participants' *negative political emotions*. We asked participants to indicate the extent to which the following four emotions describe their feelings about Dutch political parties (1 = *does not describe my feelings at all*, 9 = *completely describes my feelings*): "anger," "afraid," "fearful," and "disgust." Participants' responses to these items were averaged into a reliable scale (α = .81), which provides an index of the extent to which participants experience negative emotions about Dutch politics.

Outgroup derogation measures. The *derogation of immigrants* scale included the following nine items (1 = *strongly disagree*, 7 = *strongly agree*): "The religious practices of immigrants enrich the Dutch culture" (recoded); "Immigrants benefit more from social security than they contribute to it"; "Because of the open borders in Europe, Dutch employees lose their jobs to cheaper workers from Eastern European countries"; "There is a lot that Dutch people can learn from different cultures" (recoded); "The relation between Muslims and Europeans will in the future be characterized by violent conflicts"; "Immigration is beneficial to the Dutch labor market" (recoded); "Immigrants are a threat to the safety of Dutch citizens"; "I often feel that the Dutch culture is disappearing"; and "Immigrants are the most important cause of crime within the Netherlands." These nine items were averaged into a reliable scale (α = .90).

Whereas the derogation of immigrants scale assesses participants' negative sentiments about the specific category of immigrants only, we also measured participants' more general tendency to derogate other groups by assessing how they evaluated a range of social categories. Participants were provided with a total of 12 social categories that all are part of Dutch (and any other modern) society. These 12 social categories were the following: "Politicians," "Homosexuals," "Scientists," "Religious believers," "Police officers," "Bankers," "Millionaires," "Muslims," "Artists," "Soldiers," "Lawyers," and "Public employees." For each social category, participants were requested to indicate dichotomously whether they believed that the group makes a positive or a negative contribution to Dutch society. We then summed the number of "negative" responses. This yields an index ranging from 0 to 12, with higher scores indicating increased derogation of societal groups—operationalized as the number of societal categories that one has a negative attitude about.

Table 1. Means, Standard Deviations, and Inter-Correlations of Political Ideology and the Dependent Variables.

	M	*SD*	1	2	3	4	5	6
1. Socio-economic fear	3.94	1.10	—					
2. Derogation of immigrants	3.97	1.36	.59***	—				
3. Outgroup derogation	4.16	2.49	.48***	.49***	—			
4. Value of emotionality	4.39	0.84	−.09***	−.21***	−.13***	—		
5. Negative political emotions	4.30	2.00	.50***	.35***	.41***	−.09***	—	
6. Political ideology	4.92	2.20	.06***	.42***	.10***	−.18***	.04*	—

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

Validation

As three of the measures (socio-economic fear, derogation of immigrants, and negative political emotions) involved negative feelings, we conducted a factor analysis on the underlying items to establish that these are empirically separate constructs.[1] We specified the predicted three factors (principal axis factoring, oblimin-rotation) and found that all three factors had Eigenvalues > 1. For each scale, all items had high loadings ($|f_{ij}| > .40$) on one of the factors, with no cross-loadings. These results reveal that the measures of socio-economic fear, negative political emotions, and derogation of immigrants are empirically distinguishable constructs.

Results

The means, standard deviations, and inter-correlations of all variables are displayed in Table 1. Following recommendations for quadratic regression analyses by Cohen, Cohen, West, and Aiken (2003), we mean-centered the political ideology variable and calculated the quadratic term based on this mean-centered variable. All dependent measures were analyzed by means of hierarchical regression analyses. We entered the political ideology main effect in Step 1, along with age and gender as control variables.[2] The quadratic term was added to the regression model in Step 2. Given the large sample size, we set the alpha level for significance at .01 for all analyses.

Emotion Measures

Socio-economic fear. On socio-economic fear, Step 1 was significant ($R^2 = .02$), $F(3, 5170) = 26.22$, $p < .001$. As can be seen in Table 2, both control variables and the effect of political ideology were significant. The beta weight of political ideology was positive, indicating more socio-economic fear at the right side of the political spectrum, which is consistent with the rigidity of the right hypothesis (Jost et al., 2003b). Adding Step 2 to the regression model, however, indicated a significant quadratic term ($\Delta R^2 = .02$), $F(1, 5169) = 96.68$, $p < .001$. Moreover, as can be seen in Table 2, the political ideology main effect was reduced to non-significance after including the quadratic term ($p = .06$). The quadratic effect is displayed graphically in Figure 1a.

To examine the nature of the quadratic effect, we conducted simple slopes analyses by testing the effect of political ideology on economic fear at both the left extreme (−1 *SD*) and the right extreme (+1 *SD*). At the left extreme, the effect was significant and negative ($\beta = -.22$, $p < .001$), revealing that participants experienced more socio-economic fear to the extent that they scored more extremely to the left end of the political scale. At the right extreme, the effect was significant and positive ($\beta = .27$, $p < .001$), revealing that participants also experienced more socio-economic fear to the extent that they scored more extremely to the right end of the political scale. These findings support Hypothesis 1, which stipulates that both extremes experience more fear about societal and economic issues than people in the political center.

The value of emotionality. The analyses indicated that Step 1 was significant ($R^2 = .08$), $F(3, 2435) = 68.49$, $p < .001$. Political ideology displayed a negative relation, suggesting that the political left values emotions more than the political right (see Table 2). Importantly, Step 2 was not significant, $F < 1$. The political extremes do not differ from political moderates in the value that they attach to emotions in general.

Negative political emotions. We then analyzed participants' negative emotions about politics in the Netherlands. Results indicated that Step 1 was significant ($R^2 = .01$), $F(3, 2381) = 4.19$, $p < .01$. This effect, however, was due to men experiencing more negative political emotions than women; the effect of political ideology was non-significant (see Table 2). Adding Step 2 to the regression model, however, revealed that the quadratic term explained a significant portion of the variance above and beyond the main effects ($\Delta R^2 = .01$), $F(1, 2380) = 33.36$, $p < .001$. The quadratic effect is displayed graphically in Figure 1b.

We again conducted simple slopes analyses. At the left extreme (−1 *SD*), the relation between political ideology and negative political emotions was negative ($\beta = -.20$, $p < .001$), and at the right extreme (+1 *SD*), this relation was positive ($\beta = .23$, $p < .001$). These findings indicate that as participants scored more extremely toward either the political left or the political right, they experienced more negative emotions about Dutch politics.

Table 2. Results of Hierarchical Regression Analyses—Emotion Measures.

	Socio-economic fear		Value of emotionality		Negative political emotions	
Step 1	β	*t*(5170)	β	*t*(2435)	β	*t*(2381)
Age	.10	7.26***	−.07	−3.74***	.02	0.98
Gender	.07	4.85***	.18	9.18***	−.06	−2.68**
Political ideology	.05	3.38**	−.17	−8.79***	.04	1.72
Step 2	β	*t*(5169)	β	*t*(2434)	β	*t*(2380)
Age	.10	7.45***	−.07	−3.73***	.02	1.03
Gender	.07	4.88***	.18	9.19***	−.06	−2.72**
Political ideology	.03	1.87	−.17	−8.63***	.02	0.47
Quadratic term	.14	9.83***	−.01	−0.73	.12	5.78***

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

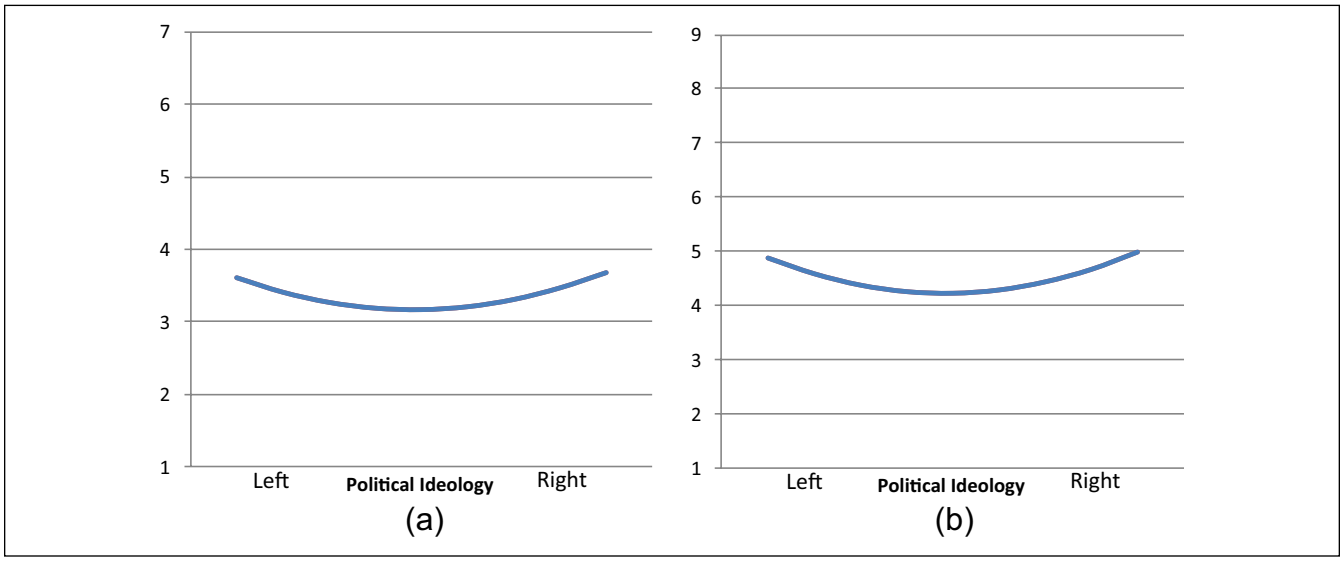

Figure 1. The quadratic effects of political ideology on (a) socio-economic fear and (b) negative political emotions.
Note. Linear effects in Step 2 were not significant. Socio-economic fear was measured on 7-point scales, negative political emotions were measured on 9-point scales. Higher values indicate higher ratings on the dependent variable in question.

Summary of emotion measures results. The results on socio-economic fear support the hypothesis that politically extreme respondents—at both sides of the spectrum—are more fearful about socio-economic issues than politically moderate respondents. Moreover, the results reveal that the political extremes also experience more negative emotions about politics than political moderates. These findings were not attributable to differences in how the extremes value emotions in general.

Outgroup Derogation Measures

Derogation of immigrants. On the derogation of immigrants scale, results revealed that Step 1 was significant ($R^2 = .18$), $F(3, 5170) = 387.15$, $p < .001$. The linear effect of political ideology was strong and significant (see Table 3), indicating that the political right derogates immigrants more strongly than the political left. This finding is consistent with previous findings (Sears & Henry, 2003). Adding Step 2 (the quadratic term) to the model explained a significant additional portion of the variance ($\Delta R^2 = .01$), $F(1, 5169) = 89.19$, $p < .001$. The linear and quadratic effects are displayed in Figure 2a.

Simple slopes analyses revealed that at the left extreme, the association with political ideology is significant and positive ($\beta = .18$, $p < .001$). At the right extreme, this association is positive as well but has increased in strength ($\beta = .60$, $p < .001$). These findings are consistent with previous models claiming more outgroup derogation at the political right—if operationalized as derogation of ethnic minorities (e.g., Chambers et al., 2013; Sears & Henry, 2003). Interestingly, the strength of this effect is more pronounced as people classify themselves more toward the right extreme.

Derogation of societal groups. The results on the number of societal groups that people derogate indicated that Step 1

Table 3. Results of Hierarchical Regression Analyses—Outgroup Derogation Measures.

	Derogation of immigrants		Derogation of societal groups	
Step 1	β	*t*(5170)	β	*t*(4576)
Age	.14	10.79***	.07	4.63***
Gender	−.02	−1.49	−.07	−4.51***
Political ideology	.41	32.25***	.08	5.41***
Step 2	β	*t*(5169)	β	*t*(4575)
Age	.14	11.00***	.07	4.82***
Gender	−.02	−1.51	−.07	−4.64***
Political ideology	.39	30.71***	.05	3.67***
Quadratic term	.12	9.44***	.16	10.88***

***$p < .001$.

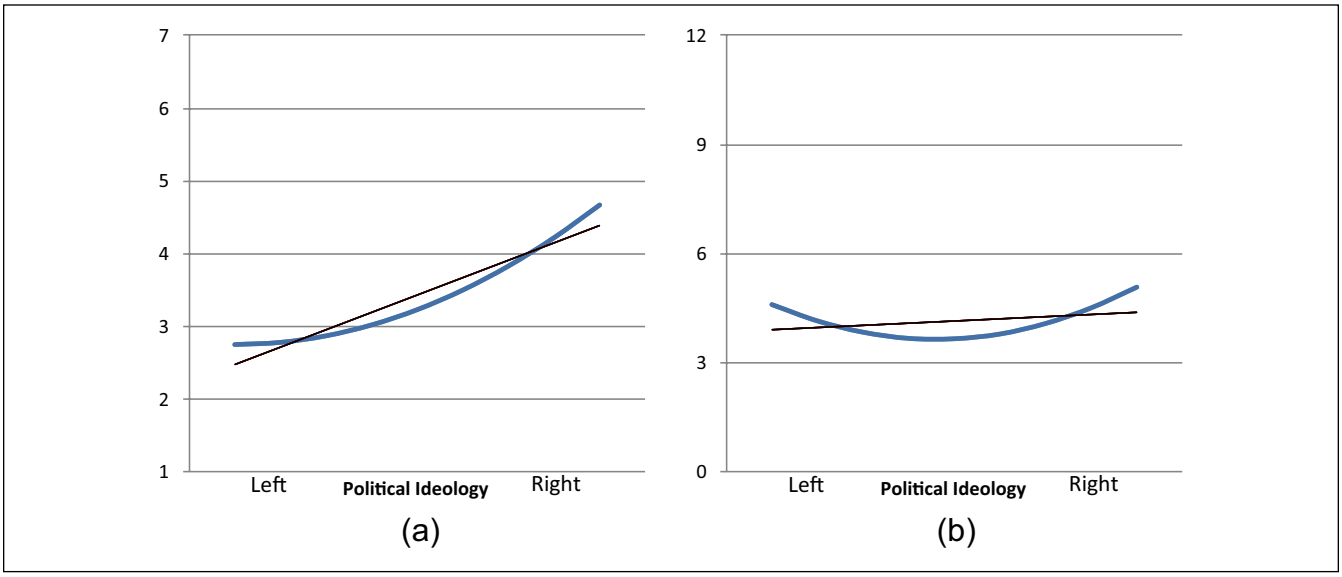

Figure 2. The linear and quadratic effects of political ideology on (a) derogation of immigrants and (b) derogation of societal groups.
Note. Derogation of immigrants was measured on a 7-point scale, derogation of societal groups was an index ranging from 0 to 12. Higher values indicate higher ratings on the dependent variable in question.

was significant ($R^2 = .02$), $F(3, 4576) = 26.07$, $p < .001$. The linear effect of political ideology was significant, suggesting more derogation of societal groups on the right side of the spectrum (see Table 3). Step 2 was significant as well, however ($\Delta R^2 = .03$), $F(1, 4575) = 118.35$, $p < .001$. As can be seen in Table 3, when both the linear and the quadratic terms were included in the regression model, the quadratic term was 3 times as strong as the linear term (quadratic β = .16 vs. linear β = .05). The linear and quadratic effects are displayed graphically in Figure 2b.

Simple slopes analyses indicate that at the left extreme (−1 *SD*), the effect of political ideology is negative, indicating that participants derogate more societal groups as they score closer toward the left end of the political spectrum (β = −.23, $p < .001$). At the right extreme (+1 *SD*), the effect of political ideology is positive, indicating that they derogate more societal groups as they score closer toward the right end of the political spectrum (β = .34, $p < .001$). Above and beyond the linear effect that the political right derogates more societal groups, the results reveal that the extremes derogate more societal groups than moderates. These findings support Hypothesis 2.

Somewhat exploratively, we performed logistic regression analyses to establish how derogation of the specific categories is predicted by political ideology. The effect of ideology in Step 1 was significant for 10 out of 12 categories (*p*s < .001), with the left being more likely to derogate bankers ($B = −0.11$, $SE = .01$), soldiers ($B = −0.25$, $SE = .02$), and millionaires ($B = −0.24$, $SE = .01$), and the right being more likely to derogate scientists ($B = 0.15$, $SE = .03$), artists ($B = 0.36$, $SE = .02$), Muslims ($B = 0.29$, $SE = .01$), public employees ($B = 0.19$, $SE = .01$), lawyers ($B = 0.08$, $SE = .01$), politicians ($B = 0.08$, $SE = .01$), and homosexuals ($B = 0.26$, $SE = .02$). The effect of ideology was non-significant only for

police officers and religious believers[3] ($ps > .41$). In Step 2 of the logistic regression models, we added the quadratic term. This term was significant for 10 out of 12 categories ($ps \leq .001$; $0.02 < Bs < 0.06$), the only exceptions being scientists and homosexuals ($ps > .06$). As might be expected, the left and the right differ in which societal categories they derogate (cf. Brandt et al., 2014); but even then, derogation tends to be most pronounced at either the left or the right extreme, as suggested by the quadratic terms.

Summary of outcome derogation results. If conceptualized as derogation of immigrants, we observe the frequently replicated pattern that the political right shows more outgroup derogation than the political left—although it is noteworthy that the relative strength of this effect intensifies as people move more toward the right extreme. But when we include a larger range of societal categories in the outgroup derogation measure, a different picture emerges: Although the right derogates more societal groups than the left, both extremes derogate more societal groups than political moderates. These findings expand recent observations, that both the left and the right derogate other groups, with the insight that outgroup derogation is stronger among the extremes than among the moderates.

Mediational Analyses

In our line of reasoning, socio-economic fear is a central construct underlying the psychology of political extremism and the theoretical antecedent of outgroup derogation. As a next step, we therefore tested Hypothesis 3 predicting that socio-economic fear would mediate the quadratic effect of political ideology on derogation of societal groups, particularly among left- and right-wing extremists. We also tested whether socio-economic fear would mediate the findings on negative political emotions, which also was predicted by the quadratic term of political ideology. To test for such mediation of a quadratic effect, we used the MEDCURVE SPSS-macro by Hayes and Preacher (2010). In our mediation models, we specified a quadratic relation between the independent variable (political ideology) and the mediator (socio-economic fear), a quadratic indirect effect on the dependent variable in question, and a linear relation between socio-economic fear and each dependent variable (5,000 bootstrap samples per analysis).

The results on derogation of societal groups revealed a significant indirect effect at the left extreme (−1 *SD*; $\theta = -.11$, $SE = .02$), as indicated by the fact that 0 is not in the 99% confidence interval (CI) = [−.16, −.07]. At the right extreme (+1 *SD*), the indirect effect was also highly significant ($\theta = .16$, $SE = .01$), 99% CI = [.12, .19]. In the political center, the effect was still significant, although the size of the effect was smaller than at the extremes ($\theta = .02$, $SE = .01$), 99% CI = [.01, .04]. Thus, socio-economic fear mediated the quadratic effect of political ideology on derogation of societal groups, and this effect was particularly strong at the extremes. This finding supports Hypothesis 3.

Socio-economic fear also significantly mediated the relation between political ideology and negative political emotions at the left extreme (−1 *SD*; $\theta = -.11$, $SE = .02$), 99% CI = [−.16, −.06] and at the right extreme (+1 *SD*; $\theta = .16$, $SE = .02$), 99% CI = [.12, .20]. In the political center, the mediation model was significant, although the effect was again much smaller than at the extremes ($\theta = .02$, $SE = .01$), 99% CI = [.001, .05]. These results reveal that socio-economic fear also mediates the quadratic effect of political ideology on negative political emotions. Again, this mediational effect is particularly pronounced among both extremes.

Discussion

The study presented here was designed to test the extremism hypothesis, that is, the idea that fear and outgroup derogation are particularly strong among people who endorse an extreme political ideology, at both the far left end and the far right end of the political spectrum. We conceptualized fear in situational terms, that is, the fear that people experience as a result of current political and societal issues. Results revealed that such socio-economic fear, as well as negative political emotions, could indeed be meaningfully predicted by political extremism. Furthermore, we measured outgroup derogation in two ways: derogation of the specific category of immigrants and derogation of a variety of societal groups. Whereas the political right derogates immigrants more than the political left (Chambers et al., 2013; Sears & Henry, 2003), political extremists—at both the left and the right—derogated a larger number of societal groups than political moderates did. Thus, both extremes display more outgroup derogation than moderates if conceptualized in reference to a broader range of social categories. Finally, consistent with insights that uncertainty and fear drive outgroup derogation (Das et al., 2009; Duckitt, 2005; Stephan & Stephan, 2000), we found that our measure of socio-economic fear mediated participants' derogation of various societal groups. This mediation effect was more pronounced at the left and right extremes than in the political center. Taken together, these findings provide solid support for the extremism hypothesis.

The current results suggest that—to fully understand the relation between political ideology, negative emotions, and outgroup derogation—it does not suffice to only examine the linear relationships, or to satisfy with the conclusion that the right experiences stronger uncertainty and fear than the left. As such, the main contribution of the present research is the recognition that the relation between political ideology and these variables is nonlinear and that the political extremes have various commonalities in their underlying psychology. Whereas the left and the right extremes may have different ideologies in terms of content, our findings imply that both extremes—at least to some extent—may be characterized by converging underlying psychological processes. Moreover,

we hope that the present findings may stimulate political psychology researchers to also examine the quadratic effects of political ideology instead of only examining its linear effects.

Integrating these findings with the extant literature, it should be noted that the extremism hypothesis is not necessarily "alternative" to the rigidity of the right hypothesis: After all, the effects of ideology may be stronger at the right extreme than at the left extreme (see Jost et al., 2003a). It is well possible that both the tendency to radicalize in one's ideology (at either the left or the right) and the specific content of right-wing ideologies independently contribute to people's experience of fear and uncertainty. Indeed, besides a quadratic term, we also found a linear term on several of the dependent variables (i.e., socioeconomic fear in Step 1 of the regression model, derogation of immigrants, and derogation of societal groups), and this linear term consistently pointed in the direction that would be predicted by the rigidity of the right hypothesis. Furthermore, in our studies, we only assessed a few of the plethora of variables that have been examined in the context of the rigidity of the right hypothesis. We are doubtful that the quadratic effect materializes on all of the variables that are part of this theoretical framework. For instance, we would not predict an extremism effect on social dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994): Central in this construct is the extent to which people accept inequality between societal groups, and extreme left-wing ideologies are characterized by extreme egalitarianism. Hence, future research may investigate how the left differs from the right, how the extremes differ from moderates, and both.

Strengths, Limitations, and Future Research

The current results were obtained with a relatively large sample size, which installs substantial faith in the validity of our conclusions. Despite the fact that we only offer a single study in this contribution, the findings presented here provide strong evidence for the extremism hypothesis. At the same time, it should be acknowledged that the conclusions are restricted to the specific conceptualizations of fear and outgroup derogation that we endorsed and constituted a nonrepresentative (i.e., opt-in) sample drawn in the Netherlands. Although this population may be limited in terms of generalizability, from a theoretical perspective the Netherlands provides an excellent setting to test the extremism hypothesis: On one hand, both ideological extremes have electoral significance in the Dutch political landscape, and on the other hand, the Netherlands is a modern, Western country that is on many dimensions comparable with most other countries that typically form the background of research on political ideology. At least in this specific setting, the extreme left turns out to be more fearful, and to derogate more societal groups, than political moderates. These findings call the linear nature of the relation between political ideology and indicators of fear or outgroup derogation into question.

Another strength of the present research is the fact that we measured political ideology separate from the dependent measures, avoiding the problem of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). It has been noted by Siemsen, Roth, and Oliveira (2010) that whereas linear effects can emerge (or can be accentuated) *because* of common method variance, quadratic effects usually emerge *despite* of common method variance, as quadratic regression weights are particularly "likely to suffer from strong deflation" due to common method variance (p. 468). Whenever political ideology and (personality or context-specific) indicators of fear or outgroup derogation are assessed within the same survey, the methodological deck may therefore be systematically stacked against the extremism hypothesis. Any study comparing a linear effect (rigidity of the right) with a quadratic effect (extremism) hence needs to be attentive to this problem to give the quadratic effect a fair test.

A limitation of our approach is that it does not enable conclusions about the exact causal processes. Indeed, process assumptions seem inconsistent in the research practice of political ideology studies: Whereas experimental studies usually operationalize fear as the independent variable, investigating its causal effect on ideology as dependent variable (e.g., Castano et al., 2011; Weise et al., 2008), many applied studies enter ideology as the independent variable in the analyses, with indicators of uncertainty, fear, or other emotions as the dependent variable (e.g., Fibert & Ressler, 1998; McClosky & Chong, 1985; Napier & Jost, 2008; Tetlock et al., 1994; Tetlock et al., 1984; Toner et al., 2013). Part of this discrepancy may stem from the difficulty of showing reverse causal effects, as it is impossible to experimentally manipulate political ideology. Be that as it may, applied political psychology studies often are not designed to test causality, but instead focus on the question how people, in their everyday life, have different emotions and beliefs depending on their ideology. Our study was rooted in the latter approach and makes a novel contribution by illuminating the empirical relations between political extremism, socioeconomic fear, negative political emotions, and outgroup derogation. Specifically, our findings suggest that the extremes experience more fear than moderates, and because of this increased fear, they derogate more outgroups.

To overcome the limitation that the present conclusions are restricted to the Netherlands, replication in different countries is needed. What we would particularly recommend is to conduct more research on the effects of political ideology in countries that have a dominant socialist political system. Although the effects of political ideology have been tested in many countries (for an overview, see Jost et al., 2003b), the vast majority of these countries are Western countries with a dominant capitalist political ideology. Only a few studies have been conducted in socialist—or formerly

socialist—countries, sometimes revealing linear effects that are opposite to what is commonly found (McFarland et al., 1992; Thorisdottir et al., 2007). It would be particularly interesting to compare the linear and quadratic effects of political ideology in a multitude of countries that vary in the extent to which the national norm leans toward capitalism versus socialism (cf. Malka, Soto, Inzlicht, & Lelkes, 2014).

The idea that the political extremes are similar to one another on various psychological dimensions may be useful to help explain some of the major tragedies of the 20th century that were caused by either the left extreme (e.g., communism) or the right extreme (e.g., fascism). These political systems were characterized by high levels of nationalism, along with strong derogation of other groups. This led to mass-scale persecution, for instance, of people who were suspected of being a capitalist "enemy of the state" in communist regimes, or of various minority groups (Jews, Gypsies) in fascist regimes. It has been observed that politically extremist regimes are particularly likely to rise to power during the societal crises that result from "ephemeral gains," which refers to short-lived societal gains (e.g., territory, economic prosperity) that are followed by critical losses (Midlarsky, 2011). These socio-political observations are consistent with the present findings, which suggest that political extremism and its implications are associated with socio-economic fear.

Concluding Remarks

Differences in political ideologies form the basis of any well-functioning democracy, and debates that compare these different viewpoints may stimulate progress and improve decision making. But ideological differences may also harm interpersonal relations, promote misunderstanding, or escalate into detrimental forms of conflict. It therefore makes sense to closely investigate psychological differences between different political ideologies, and much research effectively did so (e.g., Adorno et al., 1950; Graham et al., 2009; Jost et al., 2003b; Lammers & Proulx, 2013; Van Lange et al., 2011). But true understanding of political ideology means that one also has to look at the similarities between both ends of an ideological spectrum that are commonly considered to be political opposites. The present findings fit into a range of recent scientific developments illuminating that particularly people with extreme political viewpoints—even when they are opposite in content—may be characterized by a similar set of psychological attributes, and these attributes distinguish them from political moderates. Our study reveals that negative political emotions and outgroup derogation are stronger among the extremes than among the moderates. These phenomena are attributable to the fear that people at both the left and the right extreme experience as a result of societal and economic developments. It is concluded that fear flourishes mostly among the extremes.

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Notes

1. Note that it was impossible to include the derogation of societal groups measurement in the factor analysis, due to its dichotomous response format.
2. Given that we had relatively many missing values on age and gender, inclusion of these variables as controls in the regression analyses implied a substantial loss of data on all variables. We therefore reran the analyses without these control variables. Results for all dependent variables were similar as reported.
3. Of importance, the Netherlands is a very secular country, and unlike many other countries, the Dutch political right (or left) is not clearly associated with religious belief.

Supplemental Material

The online supplemental material is available at http://pspb.sagepub.com/supplemental.

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