



University of Groningen

"Our Country Needs a Strong Leader Right Now"

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Published in: **Psychological Science**

DOI: 10.1177/0956797619875472

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version Publisher's PDF, also known as Version of record

Publication date: 2019

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA): Sprong, S., Jetten, J., Wang, Z., Peters, K., Mols, F., Verkuyten, M., Bastian, B., Ariyanto, A., Autin, F., Ayub, N., Badea, C., Besta, T., Butera, F., Costa-Lopes, R., Cui, L., Fantini, C., Finchilescu, G., Gaertner, L., Gollwitzer, M., ... Wohl, M. J. A. (2019). "Our Country Needs a Strong Leader Right Now": Economic Inequality Enhances the Wish for a Strong Leader. *Psychological Science, 30*(11), 1625-1637. https://doi.org/10.1177/0956797619875472

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Corrigendum



Psychological Science

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Corrigendum: "Our Country Needs a Strong Leader Right Now": Economic Inequality Enhances the Wish for a Strong Leader

Original article: Sprong, S., Jetten, J., Wang, Z., Peters, K., Mols, F., Verkuyten, M., . . . Wohl, M. J. A. (2019). "Our country needs a strong leader right now": Economic inequality enhances the wish for a strong leader. Psychological Science, 30, 1625-1637. doi:10.1177/0956797619875472

After the article was posted, an attentive reader kindly pointed out an error in two of our figures. This Corrigendum is correcting these errors.

In Figure 2, the total effect is being changed to 2.89***. In Figure 4, the figure will remain the same, but

the second to last line of the caption is being changed as follows: "On the lower paths, the value outside parentheses is the total effect, and the value inside parentheses is the direct effect."

~

"Our Country Needs a Strong Leader Right Now": Economic Inequality Enhances the Wish for a Strong Leader

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Psychological Science 2019, Vol. 30(11) 1–13 © The Author(s) 2019 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0956797619875472 www.psychologicalscience.org/PS



Abstract

Societal inequality has been found to harm the mental and physical health of its members and undermine overall social cohesion. Here, we tested the hypothesis that economic inequality is associated with a wish for a strong leader in a study involving 28 countries from five continents (Study 1, N = 6,112), a study involving an Australian community sample (Study 2, N = 515), and two experiments (Study 3a, N = 96; Study 3b, N = 296). We found correlational (Studies 1 and 2) and experimental (Studies 3a and 3b) evidence for our prediction that higher inequality enhances the wish for a strong leader. We also found that this relationship is mediated by perceptions of anomie, except in the case of objective inequality in Study 1. This suggests that societal inequality enhances the perception that society is breaking down (anomie) and that a strong leader is needed to restore order (even when that leader is willing to challenge democratic values).

Keywords

economic inequality, subjective and objective inequality, anomie, leadership, authoritarianism, populism, preregistered

Received 6/27/18; Revision accepted 8/16/19

I reached the conclusion that no party, but a single man could save Germany. This opinion was shared by others, for when the cornerstone of a monument was laid in my home town, the following lines were inscribed on it: "Descendants who read these words, know ye that we eagerly await the coming of the man whose strong hand may restore order."

-Abel (1938/1986, p. 151)

The above quotation captures the reflections of a Nazi high school teacher in the 1930s. Witnessing the economic chaos during the Weimar Republic strengthened his belief that what Germany needed was a leader-Hitler-who would be strong and therefore able to restore order (Abel, 1938/1986). Even though we now know that this particular leader's rise to power marked the start of one of the darkest periods in human history, there is evidence that the call for strong leadersdefined here as someone who aims to overcome difficulties faced by a group or society by any means necessary (including nondemocratic means)-is also fervent in current times. For example, in a recent survey, Ipsos (2018) asked respondents residing in 25 socioeconomically diverse countries to what extent they agreed that "to fix [country], we need a strong leader willing to break the rules" (p. 7). Fifty-two percent of respondents agreed with the statement to at least some degree, and only 21% of respondents disagreed.

In explaining Hitler's appeal, theorists point to the economic instability in the Weimar Republic in the years preceding the Nazi regime (Abel, 1938/1986; Arendt, 1951). Even though the specific forms of economic instability that characterized pre–World War II Germany may not be a concern that most Western societies encounter today, they do face another threat in the form of rising economic inequality. Economic inequality contributes to economic instability and may trigger economic recessions (Piketty, 2014; Stiglitz, 2012).

In the current research, we tested the idea that economic inequality is associated with the wish for a strong leader. We also explored a potential mechanism for this relation. Specifically, we predicted that economic inequality fuels people's perception that society is breaking down—captured by the sociological concept of anomie (Durkheim, 1897/1987; Messner & Rosenfeld, 2001; Teymoori, Bastian, & Jetten, 2016), a circumstance that people will perceive as best arrested by strong leadership.

Economic Inequality, Anomie, and the Wish for a Strong Leader

Although it is well established that when economic inequality increases in a society, there is an associated depression in trust, cooperation, and social cohesion (e.g., Elgar, 2010; Gustavsson & Jordahl, 2008; Van de Werfhorst & Salverda, 2012), a paucity of empirical attention has been paid to the impact of economic inequality on citizens' sociopolitical attitudes. However, there are reasons to expect that people's political beliefs and preferences may also be affected by economic inequality (Jetten et al., 2017). For instance, initial evidence suggests that higher levels of economic inequality are related to lower political participation (Mueller & Stratmann, 2003; Solt, 2008), lower support for democracy (Andersen, 2012), and greater endorsement of authoritarian values (Solt, 2012). Furthermore, sociologists have suggested that economic inequality (Burgoon, van Noort, Rooduijn, & Underhill, 2018) and cultural alienation (e.g., Inglehart & Norris, 2016) may have contributed to the rising appeal of populist parties and radical leaders.

In this research, we tested one possibility implied by this work and examined whether there is a positive association between levels of economic inequality and the wish for a strong leader (Hypothesis 1). We also examined a potential mechanism underlying this

relation and propose that perceptions of anomie are affected by inequality and, in turn, affect the wish for a strong leader. Anomie-a state of society characterized by social dysfunction and chaos in which society provides little moral guidance to its citizens (Durkheim, 1897/1987)—is a familiar concept in sociology. Following Durkheim's reasoning, we propose that high levels of economic inequality may trigger feelings of anomie. Subsequently, the more that people perceive there to be a breakdown of the social order, the more they should prefer a strong leader who takes charge and makes things right (Hypothesis 2). Supporting this hypothesis, Haslam and Reicher (2007) showed that leaders and groups who are seen to provide a viable alternative to the status quo become more attractive when people have lost faith in the system. Submitting oneself to strong authorities may be a way to deal with feelings of insecurity and anxiety that result from societal dysfunction (Scheepers, Felling, & Peters, 1990, 1992). We assessed these heretofore untested hypotheses empirically across three studies using different research methods.

Study 1

In a first study, we assessed whether there was support for our hypothesized mediation model across 28 countries. We measured economic inequality in two ways: objectively, using the Gini coefficient, and subjectively, among respondents of these 28 countries. We did this because subjective perceptions of inequality (hereafter, *subjective inequality*) may explain variance in outcomes over and above that accounted for by objective indicators (see Van de Werfhorst & Salverda, 2012; Wilkinson & Pickett, 2009). We therefore tested our hypotheses around the wish for a strong leader (Hypothesis 1) as mediated by anomie perceptions (Hypothesis 2) for both inequality measures.

Method

Participants. The data-collection process started in January 2014 and ended in February 2015.1 Participants were recruited through 30 universities in North America (Canada and the United States-one data set from Tennessee and one from Northern California), South America (Chile and Brazil), Europe (The Netherlands, United Kingdom, Spain, Italy, France, Denmark, Finland, Switzerland, Belgium, Portugal, Poland, Hungary, Latvia, and Germany-one data set from former East Germany and one from former West Germany), Asia (China, Japan, Malaysia, Singapore, Indonesia, India, and Pakistan), the Middle East (Iran), Africa (South Africa), and Oceania (Australia). The original version of the questionnaire, which was in English, was translated into the respective native languages of the countries. If necessary, either a back-translation or panel method was used for the translation of the survey. The participants completed the survey via an online platform or on a hard copy. We aimed to recruit at least 150 participants per country. In some cases, this was not feasible (e.g., because the semester ended, which made it impossible to recruit the required number of participants), and data collection had to be stopped prematurely. This was the case in the United Kingdom (n = 74), Malaysia (n =112), and California (n = 141).

A total of 6,112 undergraduate university students completed the questionnaire. The mean age of the participants was 22.53 years (SD = 6.35), and 67% of the sample was female. Descriptive statistics of the whole sample are presented in Table 1. Country-level descriptive statistics can be found in the Supplemental Material available online.

Table 1. Means, Standard Deviations, and Intercorrelations for Main Variables (Study 1)

Variable		M	SD	Correlations							
	Range			1	2	3	4	5	6	7	8
1. Wish for a strong leader	1–7	5.25	1.52								
2. Objective inequality	.2763	.38	.09	.30***	_						
3. Subjective inequality	.0038	.21	.06	.28***	.35***	—					
4. Anomie	1–7	4.32	0.88	.23***	.21***	.33***	—				
5. Political orientation (right wing)	1–7	3.79	1.23	.20***	.05**	01	.08***	_			
6. Gross domestic product	4.80-83.80	34.38	18.80	33***	37***	48***	36***	07***			
7. Democracy Index	1.98-9.11	7.61	1.53	17***	21***	25***	20***	08***	.45***		
8. Gender $(0 = \text{female}, 1 = \text{male})$	0-1	.33		10***	07***	05***	.02	.03*	.06***	02	—
9. Homicide rate	0.26-32.65	4.44	9.04	.22***	.82**	.33***	.22***	01	40***	02	06***

*p < .05. **p < .01. ***p < .001.

Measures.

Economic inequality. We included two indicators of inequality in our analyses. First, the Gini coefficient was taken from the United Nations Human Development Report (2014), whereby a higher score (between 0 and 1) indicates greater levels of inequality. The Gini coefficients in this data set ranged from .27 to .63. Second, we measured subjective inequality. Participants were presented with a table of five rows showing five wealth categories: "very poor," "poor," "average in wealth," "wealthy," and "very wealthy." They were asked to think of 100 citizens in their country and asked how many of these 100 people would be classified into the different wealth categories. Participants estimated the number of people in each wealth category and wrote the number in a box at the end of each row, with the five estimates adding up to 100 people. The perceived inequality index was calculated in the same way as the calculation of the Gini coefficient, and scores could range from 0 to 1 (see the Supplemental Material). In our sample, the perceived inequality index ranged from .00 to .38, with higher scores indicating that participants perceived higher levels of inequality in their country.

Anomie. Recently, Teymoori, Bastian, and Jetten (2016) have brought the concept of anomie under a social psychological spotlight. Adopting Durkheim's (1897/1987) conceptualization, they defined anomie as an individual's perception that society is breaking down, reflecting both a perceived breakdown of the social fabric and a perceived breakdown of government. More specifically, Teymoori, Bastian, & Jetten (2016) argued that anomie is a collectively shared perception within society and will arise when (a) people feel that others cannot be trusted and do not follow moral principles and when (b) leaders or governments are perceived to be ineffective and illegitimate.

The two dimensions of anomie (i.e., breakdown in the social fabric and breakdown in government) were measured using the 12-item scale developed by Teymoori, Jetten et al. (2016). Six of the items assessed the perceived breakdown in the social fabric. The following are two examples of such items: "In [country] today, everyone thinks of him/herself and does not help others in need" and "In [country] today, people think that there are no clear moral standards to follow." The other 6 items measured the perceived breakdown of government or leadership; the following are two examples: "In [country] today, the government laws and policies are effective" and "In [country] today, the government is legitimate" (both items were reverse scored). All items were measured on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Thus, a higher score indicated a stronger perception of anomie. The overall reliability of the 12-item scale was good (α = .82). The reliability for all countries separately was also good; the Cronbach's alpha was equal to or greater than .71 for all countries, except India and Pakistan. However, although lower, the reliability for these countries was still satisfactory ($\alpha = .65$ and $\alpha = .60$, respectively).

Wish for a strong leader. Our key dependent variable was measured with three items, whereby participants were asked to indicate their agreement with statements about the country's leadership: "Our country needs a strong leader right now," "We need strong leadership in order to make this society survive," and "We need strong leadership in order to overcome societies' difficulties." Participants indicated to what extent they agreed with the statements on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). A higher score denoted a greater wish for a strong leader. The overall reliability was excellent ($\alpha = .92$), and for all countries, the Cronbach's alpha exceeded .81.

Political orientation, gender, wealth of the country, state of democracy, and homicide rates. In our analyses, we controlled for a number of variables that might covary in meaningful ways with our key variables. First, we controlled for political orientation because individuals on the right end of the political spectrum have been found to value authorities more (Altemeyer, 1998) and therefore would be more likely to wish for a strong leader. Political orientation was measured using two items adapted from the European Social Survey (2012), whereby participants were asked to place their views on social and economic issues on a left-wing/right-wing scale ranging from 1 (strongly left) to 7 (strongly right). The correlation between the two items assessing political orientation was moderately high and significant (r = .60, p < .001, 95%confidence interval, or CI = [.58, .62]), and the items were averaged.

We also controlled for gender (female = 0, male = 1) and wealth of the country as indexed by the country's gross domestic product at purchasing power per capita (the 2014 value). This measure assesses the total value produced in a country in a given year per citizen after equalizing the differences in price levels. Scores were measured in U.S. dollars and divided by 10,000. Hence, values ranged from 4.80 to 83.80, with higher scores indicating higher levels of national wealth.

Furthermore, we controlled for the state of democracy in every country using the Democracy Index 2014 compiled by the Economist Intelligence Unit (2014). On the basis of 60 indicators divided into five categories (i.e., electoral process and pluralism, civil liberties, functioning of government, political participation, and political culture), the index assesses the level of democracy on a scale from 1 (*authoritarian*) to 10 (*fully democratic*). Scores in our sample ranged from 1.98 to 9.11. Finally, we included the homicide rate of each country as a proxy for the level of violence because higher levels of inequality may be related to higher levels of violence (Hsieh & Pugh, 1993; Whitworth, 2012) and to an increased perception that society is breaking down. Data on homicide rates per 100,000 people were obtained from the United Nations Office on Drugs and Crime for the year 2014 (United Nations Office on Drugs and Crime, 2019). For Malaysia, no data were available for the year 2014. Therefore, we included the homicide rate of 2013 for this country. The sample's homicide rates per 100,000 people ranged from 0.26 to 32.65.

Method of analysis. Because the data were collected in different countries, it is important to take the nested structure of the data into account. We estimated the multilevel models in Mplus Version 7.3 (Muthén & Muthén, 2012). The only variables with relatively large numbers of missing cases were subjective inequality, political orientation, and gender: 367 (6% of the sample), 281 (4.6% of the sample), and 286 (4.6% of the sample), respectively. In the case of political orientation and gender, this was mainly because these questions were not included in Pakistan. For all other included variables, the number of missing values did not constitute more than 0.02% of the sample. The missing cases were dealt with in Mplus using fullinformation maximum likelihood, assuming that missing values were missing at random (Muthén & Muthén, 2012). Two samples were collected in Germany (East and West) and the United States (Tennessee and California), and these were included as separate countries.

Results

Descriptive results. Despite significant variation across countries (see the Supplemental Material), the overall levels of participants' wish for a strong leader and anomie were relatively high (see Table 1), and both mean scores were above the midpoint of their respective scales.

In line with previous findings, the correlation between the objective and subjective indicators of inequality was positive and significant (Table 1), but this association accounted for only about 12% of their respective variances. Both inequality measures had significant positive correlations with the wish for a strong leader as well as anomie, consistent with our expectations. Anomie, in turn, was significantly positively correlated with the wish for a strong leader.

Multilevel analyses. We performed the multilevel analyses in two steps. In a first step, we compared the null model with the intercept-only model. Significant parts of the variance in the wish for a strong leader (intraclass correlation coefficient = .27) and anomie (intraclass correlation coefficient = .25) were found to be between countries.

In a second step, we added the predictors to the model using a stepwise approach (see the Supplemental Material). The model that included all individual- and countrylevel predictors provided the best fit to the data; we interpret the model coefficients below.

Both objective and subjective economic inequality predicted the wish for a strong leader (see Table 2 and Fig. 1). In relation to the objective-inequality measure, this suggests that there is greater baseline support for strong leaders in more countries with more economic inequality. Interestingly, subjective economic inequality was significantly positively associated with the wish for a strong leader, even after analyses controlled for objective levels of economic inequality. Furthermore, although there was no evidence that anomie mediated the impact of objective inequality on the wish for a strong leader, anomie did mediate the effect of subjective economic inequality on the wish for a strong leader. Although both objective and subjective inequality were associated with a greater wish for a strong leader, only higher subjective economic inequality was associated with higher levels of anomie.

To check robustness, we reran the mediation analysis separately for the anomie dimensions related to breakdown of the social fabric (α = .77) and breakdown of government (α = .82). Results were largely identical to those reported above: Subjective (but not objective) economic inequality was significantly positively associated with both anomie dimensions, and both anomie dimensions were positively and significantly related to the wish for a strong leader. Interestingly, however, although subjective inequality had a similarly strong effect on both anomie dimensions, the effect of the perceived breakdown in the social fabric on the wish for a strong leader was significantly stronger than the effect of perceived breakdown in government (Δb = 0.08, SE = 0.03, p = .008). This suggests that particularly the perceived breakdown of the social fabric plays an important role in explaining the relation between perceived inequality and the wish for a strong leader (see Table S4 in the Supplemental Material).

To further check robustness, we reran the mediation analysis on the individual level, adding the different countries as controls in the form of dummies. This means that country differences were accounted for, providing more confidence that unobservable differences between countries were not driving the observed associations (see Table S6 and Fig. S2 in the Supplemental Material).

Discussion

Study 1 showed that both objective and subjective economic inequality were positively associated with the wish for a strong leader. Even though objective

		Anomie perception	S	Wish for a strong leader			
Predictor	b	95% CI	p	b	95% CI	þ	
Intercept	4.67	[3.78, 5.62]	< .001	3.41	[1.44, 5.38]	.001	
		Individual level					
Anomie				0.19	[0.15, 0.23]	< .001	
Subjective inequality							
Total effect	2.05	[1.66, 2.44]	< .001	0.96	[0.30, 1.62]	.004	
Direct effect				0.57	[-0.09, 1.23]	.088	
Subjective inequality \rightarrow anomie				0.38	[0.27, 0.50]	< .001	
Political orientation (right wing)	-0.08	[-0.09, -0.06]	< .001	0.17	[0.14, 0.20]	< .001	
Gender (male)	0.02	[-0.03, 0.06]	.431	-0.17	[-0.24, -0.10]	< .001	
		Country level					
Objective inequality							
Total effect	0.34	[-1.60, 2.28]	.728	4.30	[0.28, 8.32]	.036	
Direct effect				4.20	[0.20, 8.10]	.039	
Objective inequality \rightarrow anomie				0.15	[-0.72, 1.01]	.740	
Gross domestic product	-0.01	[-0.02, -0.01]	.001	-0.02	[-0.03, 0.00]	.041	
Democracy Index	-0.03	[-0.10, 0.05]	.471	-0.02	[-0.14, 0.18]	.829	
Homicide rate	0.01	[-0.02, 0.03]	.673	-0.02	[-0.06, 0.03]	.452	
	1	Variance componer	nts				
Individual level	0.56	[0.54, 0.58]	< .001	1.55	[1.50, 1.61]	< .001	
Country level	0.08	[0.04, 0.12]	< .001	0.35	[0.17, 0.53]	< .001	

Table 2. Results From the Final Multilevel Model Predicting Anomie and a Wish for a Strong Leader (Study 1)

Note: The log likelihood of the model was -22,468.07 (28 parameters), and the Akaike information criterion was 44,992.14. The variance explained at the individual level was .04 for both anomie perceptions and wish for a strong leader. At the country level, the variance explained was .46 and .32, respectively, for anomie perceptions and wish for a strong leader. CI = confidence interval.

indicators of inequality and subjective perceptions may not always be aligned (e.g., Chambers, Swan, & Heesacker, 2014; Norton & Ariely, 2011), we found that they both predicted the outcomes of interest. We also found evidence for an effect of subjective inequality on the wish for a strong leader via perceptions of anomie, indicating that the effect of subjective economic inequality on the wish for a strong leader may partly be explained by a feeling that society is breaking down.

In this first large-scale study, we included a rather general measure of wishing for a strong leader, which did not explicitly measure support for a leader using nondemocratic means. Therefore, in our second study, we extended this measure by trying to capture the extent to which participants would be in favor of a strong leader who is willing to forgo democratic values, break the rules, or change the status quo to achieve desired outcomes.

Study 2

Method

Participants. As part of a larger survey, 515 Australian citizens were asked about their subjective inequality in Australia, their perceptions of anomie, and their wish for

a strong leader. Data were collected online via Qualtrics panels in 2017 (Qualtrics, 2005). The age of the participants ranged from 19 to 80 years (M = 43.47 years, SD = 16.41), and the sample consisted of 263 women and 252 men. The sample size was determined by financial considerations: Qualtrics charged AU\$11.50 per participant, and our budget allowed for 500 participants.

Measures.

Economic inequality. We measured perceived inequality in the same way as in Study 1. In this sample, the perceived-inequality index was, on average, .20 and ranged from .00 to .36, with higher scores indicating that the participant perceived higher levels of inequality in Australia.

Anomie and wish for a strong leader. Anomie was again measured using the 12-item scale (α = .80) developed by Teymoori, Jetten et al. (2016). Wish for a strong leader was measured with the same 3 items as used in Study 1, and we added 4 items that assessed more explicit support for a leader who is willing to be more authoritarian and less democratic. The additional items were prefaced with "Australia needs a strong leader . . ." followed by "who is willing to challenge democratic values and practices," "who is willing to break the rules," "who wants to change the status quo," and "who keeps

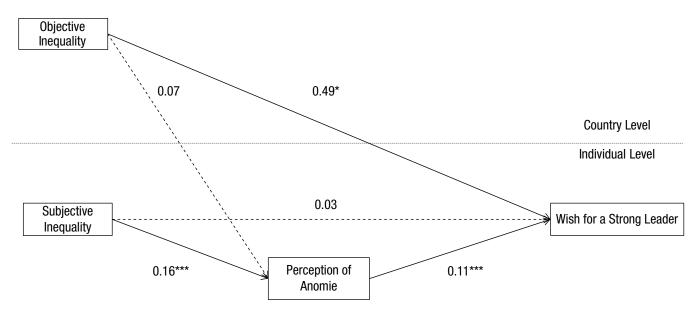


Fig. 1. Final model representing the relation among objective inequality, subjective inequality, and the wish for a strong leader, as mediated by the perception of anomie (Study 1). Standardized coefficients are presented. Solid arrows and asterisks indicate significant paths (*p < .05, ***p < .001), whereas dashed arrows indicate nonsignificant paths. See Table 2 for further statistical detail.

tight control over the country's decisions and activities." Participants indicated to what extent they agreed with the statements on a 7-point scale; a higher score denoted a greater wish for a strong leader ($\alpha = .89$).

Political orientation, gender, age, education, and income. We also measured political orientation (two items on a scale ranging from *left wing* to *right wing* and from *very liberal* to *very conservative*; r = .57, p < .001, 95% CI = [.51, .63]), gender, age, education, and personal annual income and controlled for these in our analyses.

Results

Descriptive results. As in Study 1, levels of anomie and wish for a strong leader were relatively high (see Table 3). As predicted, the key variables positively correlated with each other: Higher levels of subjective inequality were associated with greater wishes for a strong leader. Both measures also positively correlated with perceived anomie. Noteworthy, too, subjective inequality was also positively correlated with both dimensions of anomie separately (breakdown of the social fabric: r = .17, p < .001, 95% CI = [.08, .25]; breakdown of government: r = .27, p < .001, 95% CI = [.19, .35]). Furthermore, both breakdown of the social fabric and breakdown of government were positively related to the wish for a strong leader (r = .23, p < .001, 95% CI = [.15, .31], and r = .32, p < .001, 95% CI = [.24, .40], respectively).

Mediation model. We then examined whether anomie mediated the relation between subjective inequality and the wish for strong leadership. Mediation analyses were performed using the PROCESS macro for SPSS (Model 4) with bootstrapping for 5,000 resamples and 95% confidence intervals (Preacher & Hayes, 2008). We found a significant indirect effect of subjective inequality via perceptions of anomie on the wish for strong leadership: indirect effect: b = 1.37 (SE = 0.32), 95% CI = [0.81, 2.02]. The direct effect remained significant: direct effect: b = 1.52 (SE = 0.72), 95% CI = [0.11, 2.93] (see Fig. 2).

Discussion

Study 2 provided additional support for our hypothesized mediation model using a community sample of Australians. Akin to Study 1, subjective inequality (calculated in the same way as the Gini coefficient) was positively associated with the wish for a strong leader. Our expanded measure of wishing for a strong leader provides us with greater confidence that not only does perceived inequality enhance wanting a strong leader, but also this desire extends to a leader who is prepared to break rules or use undemocratic means to achieve his or her goals. We also again found that anomie perceptions mediated this relationship. This strengthens our reasoning that perceptions of economic inequality enhance the feeling that society is breaking down (in terms of its social fabric and government), fueling a desire for a leader who will restore order (by whatever means necessary).

,				
Variable	М	SD	1	2
1. Subjective inequality	.20	.07	_	
2. Anomie	4.43	0.82	.27***	—
3. Wish for a strong leader	5.32	1.10	.18***	.33***

Table 3. Means, Standard Deviations, and PartialCorrelations (Study 2)

Note: Partial-correlation analyses controlled for gender, political orientation, age, education, and personal annual income. ***p < .001.

Studies 3a and 3b

Studies 1 and 2 supported our predictions but were limited because they were cross-sectional. We therefore conducted two experimental studies—Study 3a using an undergraduate student sample and Study 3b using a U.S. online user sample—in which we manipulated economic inequality. This design allowed us to assess whether high inequality causes a greater wish for a strong leader.

Method

Participants. The sample of Study 3a consisted of 96 Australian undergraduate students who participated in return for course credit (63 women; age: M = 21.11 years, SD = 6.03). The study was conducted at the end of the academic year, and we finished data collection when the number of undergraduate students signing up to take part in the study dropped markedly. To contend with the possibility that the initial study was underpowered, we then conducted Study 3b with a sample of 296 U.S. residents recruited from Amazon's Mechanical Turk (161 women; age: M = 41.53 years, SD = 11.11). The size of the sample of Study 3b was calculated so that it provided a 90% chance of detecting an effect half the size of that obtained in Study 3a (i.e., d = 0.39, $\alpha = .05$, $1 - \beta > 0.90$; see Camerer et al., 2018). Study 3b was preregistered on the Open Science Framework (https://osf.io/wjad2).

Manipulation of inequality. The procedure in Studies 3a and 3b was identical. The experiment was conducted online. After participants granted their consent to

participate, they were asked to imagine that they were going to live in a fictitious society called Bimboola (Jetten, Mols, & Postmes, 2015; Sánchez-Rodríguez, Willis, Jetten, & Rodríguez-Bailón, 2018; for details, see the Supplemental Material). Participants learned that Bimboola consisted of three income groups, and all participants were instructed to think of themselves as belonging to the middle-income group, which earned 40,000 Bimboolean Coins (BC) per year. Each participant was then randomly assigned to the high- or low-inequality condition. In the high-inequality condition, the wealthiest group was presented as very wealthy (earning 77,000 BC per year) and the poor group as very poor (earning 3,000 BC per year). In the low-inequality condition, the income differences between the three income groups in Bimboolean society were less pronounced (i.e., the wealthy group earned 50,000 BC per year, and the poor group earned 30,000 BC per year).

To improve the realism of the procedure, we asked participants to imagine that they lived in Bimboola, and to get their life started, we invited them to pursue the essentials in life, such as a house, mode of transport, and vacation. Participants could choose only items that the middle-income group could afford, and the houses, cars, and vacations that they could choose from were identical in the low- and high-inequality conditions. However, the items that the poorest and the wealthiest groups in Bimboola could afford differed across the conditions. Although the houses, cars, and vacations open to the wealthiest group in Bimboola were only slightly more luxurious than those of the middle group in the low-inequality condition, the items that the wealthiest group could purchase in the high-inequality condition were much more luxurious and extravagant (large mansions, top-of-the-line sports cars, and expensive vacations). Likewise, although the items that people from the poorest group could purchase in the low-inequality condition were only slightly less luxurious than those of the middle group, the items they could afford in the high-inequality condition were of much poorer quality, including substandard houses and old and damaged motorcycles; they did not have the means to go on vacation.

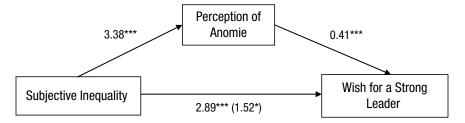


Fig. 2. Mediation model showing the effect of subjective inequality on the wish for a strong leader, as mediated by the perception of anomie (Study 2). Unstandardized coefficients are given. On the lower path, the value outside parentheses is the total effect, and the value inside parentheses is the direct effect. Asterisks indicate significant paths (*p < .05, ***p < .001).

Measures. The measures used in Studies 3a and 3b were identical. To check whether participants perceived the manipulation of objective economic inequality as intended, we asked them to respond to the following questions: "To what extent is Bimboola's economic distribution unequal?" (1 = not unequal at all, 7 = very unequal) and "To what extent is Bimboolean society equal?" (1 = not equal at all, 7 = very equal). The latter item was reverse scored, after which the two items were averaged; higher scores indicate higher inequality perceptions (Study 3a: r = .49, p < .001, 95% CI = [.32, .63]; Study 3b: r = .91, p < .001, 95% CI = [.89, .93]). We also checked whether participants correctly recalled which group they were assigned to with the item "Which income level have you been assigned to?"

Anomie was again measured with the 12-item scale from Teymoori, Jetten, et al. (2016; $\alpha = .91$ and .96), and the wish for a strong leader was measured using the 7 items described in Study 2 ($\alpha = .85$ and .93). These items were adapted slightly to be relevant to the Bimboolean context so they asked about participants' experience of anomie and wish for a strong leader in Bimboola. A number of other measures were included in this study (e.g., belief in conspiracy theories, perceived indispensability of one's own income group, collective angst) but are part of another program of research and will not be reported here.

Results

Manipulation check. All participants answered correctly that they were assigned to the middle-income group. In addition, an independent-samples *t* test on the economic inequality check showed that the manipulation

worked as intended: Participants assigned to the highinequality condition perceived higher levels of inequality in Bimboola than participants in the low-inequality condition in both Study 3a (M = 5.61, SD = 1.18 vs. M = 3.79, SD = 1.15), t(94) = 7.62, p < .001, 95% CI = [1.35, 2.29], d = 1.56, and Study 3b (M = 6.42, SD = 0.90 vs. M = 3.03, SD = 1.02), t(294) = 30.26, p < .001, 95% CI = [3.17, 3.62], d = 3.52.

Anomie and wish for a strong leader. An independentsamples t test on anomie perceptions showed a significant effect for inequality: Participants in the high-inequality condition perceived higher levels of anomie than participants in the low-inequality condition in both Study 3a (M = 4.64, SD = 0.85 vs. M = 3.58, SD = 0.88), t(94) = 6.03,p < .001, 95% CI = [0.71, 1.41], d = 1.23, and Study 3b (M = 4.67, SD = 1.04 vs. M = 2.67, SD = 0.84), t(294) =18.14, p < .001, 95% CI = [1.78, 2.21], d = 2.12 (see Fig. 3). Moreover, participants in the high-inequality condition reported a greater wish for a strong leader than participants in the low-inequality condition in both Study 3a (M = 5.28, SD = 0.97 vs. M = 4.49, SD = 1.01), t(94) = 3.90,p < .001, 95% CI = [0.39, 1.19], d = 0.80, and Study 3b (M = 4.61, SD = 1.37 vs. M = 3.14, SD = 1.30), t(294) = 9.50,p < .001, 95% CI = [1.17, 1.78], d = 1.10 (see Fig. 3).

Mediation analysis. We examined whether anomie mediated the relation between manipulated levels of inequality and the wish for strong leadership using the analytic approach described in Study 2. In Study 3a, we found a significant indirect effect of the inequality manipulation (coding: 0 = low, 1 = high) via perceptions of anomie on the wish for strong leadership, indirect effect: b = 0.55 (*SE* = 0.15), 95% CI = [0.29, 0.88], and the direct effect was no longer significant, direct effect: b = 0.24

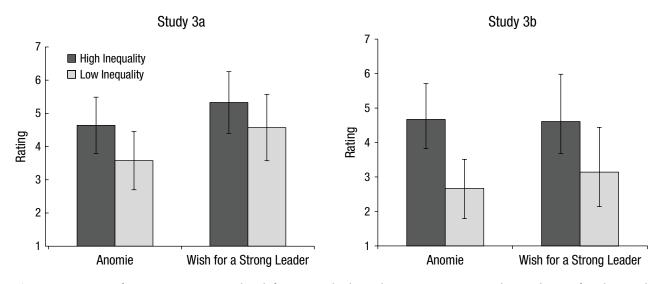


Fig. 3. Mean rating of anomic perceptions and wish for a strong leader in the two economic-inequality conditions of Study 3a and Study 3b. Error bars represent standard deviations.

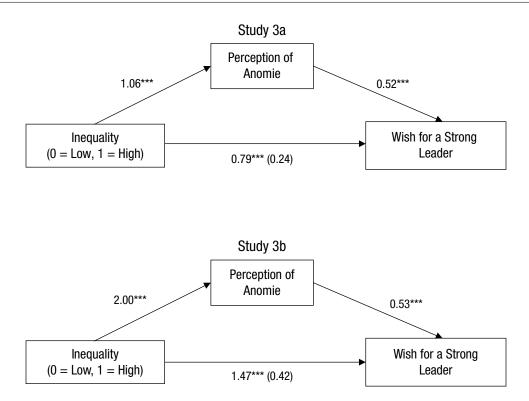


Fig. 4. Mediation model showing the effect of economic inequality on the wish for a strong leader, as mediated by the perception of anomic (Studies 3a and 3b). Unstandardized coefficients are given. On the lower paths, the value outside parentheses is the total effect, and the value inside parentheses is the direct effect. Asterisks indicate significant paths (p < .001).

(0.19), 95% CI = [-0.14, 0.62] (see Fig. 4). This pattern was similar in Study 3b, indirect effect: b = 1.05 (*SE* = 0.18), 95% CI = [0.69, 1.42]; direct effect: b = 0.42 (*SE* = 0.22), 95% CI = [-0.01, 0.85] (see Fig. 4).

Discussion

These two studies provide experimental evidence that high (compared with low) inequality causally increases participants' wish for a strong leader. Moreover, increased anomie perceptions help to explain this relation; inequality also causally enhanced perceptions of anomie, and these increased anomie perceptions, in turn, were related to the wish for a strong leader.

General Discussion

The topic of economic inequality has captured the eye of academics, the general public, and politicians alike. This is not surprising because economic inequality has pernicious effects on a range of outcomes: It is associated with increased criminality, poor mental and physical health, and lower levels of generalized trust (see Van de Werfhorst & Salverda, 2012; Wilkinson & Pickett, 2009). Yet much remains unknown about its effects on social behavior and political attitudes (see Jetten et al., 2017).

The current studies add to existing research by showing that perceived economic inequality also enhances individuals' wish for a strong leader. Using both correlational (Studies 1 and 2) and experimental (Studies 3a and 3b) designs, we showed that economic inequality is positively associated with a wish for a strong leader who is willing to use undemocratic means to achieve outcomes (Studies 2, 3a, and 3b). Particularly, we extended the correlational work of Solt (2012) in at least three ways: (a) by going beyond measures of preferences for obedience and respect for authority by showing that economic inequality impacts leadership preferences, (b) by finding that both objective and subjective inequality are related to the wish for a strong leader, and (c) by providing causal evidence for this link.

By investigating the mediating role of anomie, we were able to provide an initial explanation for why inequality is positively related to a wish for a strong leader: Perceptions of economic inequality (Studies 1 and 2) as well as objective economic inequality (Studies 3a and 3b) enhance the perception that society is breaking down, and an enhanced sense of anomie is associated with a greater wish for a strong leader who can take firm action and stop the (moral) erosion of society. This finding underscores the idea that inequality not only has pernicious effects on the health and well-being of people but also may affect people's perception of the health of society. In turn, this is consequential for the type of leader whom they feel their society needs to overcome its difficulties.

Implications, limitations, and directions for future research

Although the current research yielded novel results that help explain the conditions under which a society will desire a strong leader, some limitations of this research should be noted—limitations that point to promising avenues for future research. First, even though we believe our findings help to explain the resurgence of populism in many Western countries, we examined only a limited set of characteristics that define populist leaders (e.g., their willingness to break rules to achieve desired outcomes). In this research, we focused on economic inequality, but note that the historical origins of economic inequality and other forms of inequality (e.g., educational inequality) may affect outcomes in unique ways. Besides, inequality may also affect other features that characterize populist leaders (such as their antiimmigrant policies or aversion to globalization) as well as actual voting behavior. These questions are fruitful avenues for future research. To strengthen the case for mediation, researchers should also manipulate anomie perceptions and explore their moderating power.

Second, it may be tempting to place the current findings in the contemporary turbulent political landscape and, specifically, associate the rising levels of economic inequality with the success of populist leaders (e.g., Mols & Jetten, 2017; Mudde, 2013). Results are suggestive that these two trends are related: The apparent growth in support for strong leaders worldwide may partly be due to increasing levels of economic inequality. Presumably, this is because economic inequality may evoke perceptions of societal dysfunction (i.e., anomie). However, it is also clear that there is no automatic link between inequality and the appeal of populist parties and radical leaders (Mols & Jetten, 2016; Mudde, 2013). Future research should investigate possible differences between countries and focus on the explaining role of broader structural and historical factors that may trigger the collective wish for a strong leader.

Conclusion

Our research shows that both subjective and objective inequality are associated with a greater wish for a strong leader. This underlines the idea that analyzing sociopolitical behavior and attitudes through a social psychological lens is a fruitful exercise. It also underscores the notion that inequality (and in particular the perceptions of the levels of inequality in a society) may have more far-reaching consequences than have hitherto been recognized.

Action Editor

Ayse K. Uskul served as action editor for this article.

Author Contributions

S. Sprong and J. Jetten conceived and designed the studies. Data were analyzed by the first three authors. The first seven authors drafted the manuscript. All the authors were involved in data collection, provided input and feedback on the manuscript, and approved the final manuscript for submission.

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Declaration of Conflicting Interests

The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

Funding

This work was supported by an Australian Research Council Discovery grant (DP170101008), the Center for Social Conflict and Cohesion Studies (15130009), and the Center for Intercultural and Indigenous Research (15110006).

Supplemental Material

Additional supporting information can be found at http://journals.sagepub.com/doi/suppl/10.1177/0956797619875472

Open Practices



Data and materials for this study have not been made publicly available but can be obtained by e-mailing the corresponding author. The design and analysis plans for Study 3b, which was conducted in response to a reviewer's comment, were preregistered on the Open Science Framework (https:// osf.io/wjad2). The complete Open Practices Disclosure for this article can be found at http://journals.sagepub.com/doi/suppl/ 10.1177/0956797619875472. This article has received the badge for Preregistration. More information about the Open Practices badges can be found at http://www.psychologicalscience.org/ publications/badges.

Note

1. The data used in Study 1 were part of a larger data set. As part of the validation of the anomie scale, the relation between anomie and objective inequality was also examined and reported by Teymoori, Jetten, et al. (2016, Studies 3a and 3b).

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