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## “They’ve Put Nothing in the Pot!”: Brexit and the Key Psychological Motivations Behind Voting ‘Remain’ and ‘Leave’

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*In June 2016, the United Kingdom voted to leave the European Union. Voting followed a general trend: disadvantaged areas of the United Kingdom tended to vote “leave,” and more affluent areas tended to vote “remain.” This project investigates the psychological variables underlying this overall trend by distinguishing four psychological motivations: the need for justice, threat reduction needs, need to belong, and the need for control. Participants were recruited from different areas across Greater Manchester (N = 158). A survey assessed voting preference, socioeconomic status, collective relative deprivation (CRD), perceptions of threat from immigration, European and British identification, sense of control in life, and relative gratification. Discriminant function analysis showed that leave voting was characterized by greater realistic threat, symbolic threat, CRD, and British identification. Remain voting was characterized by strong European identification. Findings highlight that a need for justice, threat-reduction needs, and identity needs were key predictors of voting behavior.*

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**KEY WORDS:** relative deprivation, identity, intergroup threat, relative gratification, control, Brexit, voting, immigration

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... all these Syrian people, and asylum seekers, y’know, they come over and then they find ‘em a house, straight away near enough, give them benefits for three kids, ‘you get so much each week’. And they must be thinking, ‘bloody hell, I’m glad I moved here.’ They’ve not put nothing in the pot! I’ve been putting in the pot since I were fifteen, since I left school. Y’know, they’ll get family allowance for their kids, they’ll get free rent, free council tax, all them. They’ve not put nothing in the pot! (DR, Leave voter; interviewed by first author)

In June 2016, the United Kingdom voted by a 51.9% majority to leave the European Union. Much attention has been paid since then to understanding why this result came to pass. It is now recognized that voting “leave” was most prevalent in poorer areas of the United Kingdom

(Abrams & Travaglino, 2018; Darvas, 2016; O'Reilly et al., 2016) and in places where educational attainment and wages are lower (Resolution Foundation, 2016). This demonstrates an overall trend to voting in the EU referendum: Disadvantaged regions voted leave in greater proportions, and more affluent regions tended to vote remain.

There were, however, pockets of the United Kingdom that voted counter to this overall trend. For example, the Resolution Foundation (2016, p. 6) identified a negative overall trend between average hourly pay and the proportion of leave votes per voting constituency (i.e., less well-paid regions voted leave in greater proportions). Additionally, the authors highlight regions that deviate from this trend: relatively high-pay constituencies that voted leave in large proportions, and relatively low-pay constituencies that voted remain in large proportions. Thus, although overall the leave vote declined with increasing pay, some areas of the United Kingdom ran counter to this trend.

The current research examines key psychological motivations that may have played a role in guiding voting behavior during the EU referendum. There are two main objectives. A first objective is to investigate the overall trend: What psychological variables explain why disadvantaged individuals were more inclined to vote Leave, and why wealthier individuals were more inclined to vote remain? A second objective is to understand “countertrend” voting: Why did some disadvantaged individuals go against the grain by voting remain, and similarly, why did some wealthier individuals vote to leave? In identifying antecedents of voting behavior, we started from the assumption that voters are driven by several core psychological needs: first, the need for justice; second, the need to reduce feelings of threat to oneself or one's social group; third, the need to belong and identify with a social group; and fourth and finally, the need to feel a sense of control in life. In our approach, we therefore integrate several social psychological perspectives, outlined below.

#### *Explaining the Overall Trend: When Disadvantaged Individuals Vote Leave and More Affluent Individuals Vote Remain*

Research on collective action offers an explanation as to why disadvantaged individuals voted leave in greater proportions. Collective action refers to an individual acting according to the aims and ideals of a group to which he or she belongs. The goal of the action is to improve conditions for the group as a whole (Wright, Taylor, & Moghaddam, 1990). The motivation to engage in collective action can come from a need to counter perceived injustice. According to relative deprivation theory (RDT; Runciman, 1966), collective action is more likely when an individual feels unjustly treated. This sense of injustice could result from situations where individuals compare themselves, or their group, to higher-status individuals or other higher-status groups. In 1966, Runciman formally distinguished between two types of comparison: those made between the “individual self” and other individuals and those made between the “collective self” and other groups. He argued that the latter form, now known as *collective relative deprivation* (CRD), is a better predictor of collective action than its individual counterpart. Put simply, Runciman proposed that the injustice that individuals feel from comparing *themselves as group members* to other, higher-status *groups* is a stronger predictor of collective action than when they compare *themselves as individuals* to other *individuals*. This proposition has received support, for example, in a meta-analysis conducted by Smith and Ortiz (2002).

CRD is expected to play an important part in the context of the Brexit referendum. In the United Kingdom, individuals from disadvantaged communities could have felt lower in status when comparing their group (e.g., their family, community) to other groups that they feel society considers to be higher in status, or groups of immigrant heritage perceived to be taking advantages at the cost of residents with longer British lineages (exemplified by the quote at the start of this article). Those who feel a sense of injustice from this comparison would be more likely to vote in a way that benefits their own group. Of the two voting options during the referendum, voting leave was likely seen as

the more attractive option because, by comparison, voting to remain in the European Union promised little change to the status quo. RDT would predict that disadvantaged individuals would vote Leave; a normative action intended to change the conditions of the group. Therefore, in the current project, CRD is expected to underlie leave voting by disadvantaged individuals.

CRD alone, however, does not fully capture why disadvantaged individuals voted leave rather than remain. The topic of immigration was central to political and media debate prior to the referendum, and a key theme of the Vote Leave campaign (Leave Campaign, 2016). Jetten, Mols, and Postmes (2015) conducted a two-part study investigating the link between attitudes towards immigration and relative deprivation. Study 1 examined data from a similar circumstance to the United Kingdom's EU referendum; namely, a 2014 referendum in Switzerland, in which citizens voted in favor or against curbing levels of immigration. More deprived regions of the country voted in greater proportions to control levels of immigration. An experimental follow-up study revealed stronger opposition to immigration in a "lower-than-average wealth" condition compared to a "moderate wealth" condition. These findings suggest disadvantaged individuals feel most threatened by immigration. This conclusion has obvious applications to Brexit: We would expect disadvantaged individuals in the United Kingdom to feel most threatened by immigration and as a result vote to leave the European Union to reduce their feelings of threat.

The need to reduce feelings of threat is a second factor we propose was important in the Brexit vote. Two forms of threat can be distinguished: *symbolic threat* and *realistic threat* (Doosje, Loseman, & Van den Bos, 2013; Riek, Mania, & Gaertner, 2006). Specific to the U.K. context, symbolic threat may be defined as the perception that immigration threatens British culture in terms of norms and values. Indeed, using data from the Future of England Survey, Henderson and colleagues could show that immigration concerns played a major role in the Brexit referendum (Henderson, Jeffery, Wincott, & Wyn Jones, 2017). Realistic threat, however, is the threat that immigration is perceived to pose to more concrete aspects of life, such as jobs and housing. A meta-analysis by Riek, Mania, and Gaertner (2006) showed that both types of threat are associated with stronger negative attitudes towards outgroups. Additionally, Stephan, Renfro, Esses, Stephan, and Martin (2005) manipulated symbolic and realistic threat. Both types of perceived threat led to increased negative attitudes towards immigrant groups. Based on this research, we expect symbolic threat and realistic threat to underlie voting leave; particularly for disadvantaged individuals.

The need for a strong and positive identity is considered a third important dimension of the referendum. People have a strong need to belong to a social group (Baumeister & Leary, 1995), and social identity theory (SIT) predicts that collective action is more likely when identity concerns are salient (Tajfel & Turner, 1979). Indeed, in a meta-analysis Van Zomeren, Postmes, and Spears (2008) found that identity was a key predictor of collective action with greater ingroup identification being related to more support for collective action. In the context of Brexit, both British identity and European identity were called into question during the referendum. As such, many individuals may have voted in order to address identity concerns. First, let us consider British identity and voting leave. Applied to Brexit, voting to leave the European Union may have been an attempt by those who identify strongly as British to create distance from pertinent outgroups (e.g., Europeans, immigrant groups) and to emphasize who is British and who is not. Previous research has convincingly shown that nationalism is a strong component of Euroskepticism (i.e., Hooghe & Marks, 2005; Hooghe, Marks, & Wilson, 2002; Werts, Scheepers, & Lubbers, 2012). For example, a study by Werts et al. (2012) among 61,000 participants in 18 EU countries showed that those individuals who voted more right-wing extreme were also more Euroskeptic. Interestingly, in line with the Brexit trend, this study also showed that individuals with a lower education level and lower skilled jobs (i.e., unskilled vs. skilled jobs) were also more Euroskeptic.

In this realm, it is important to note that we do not predict that greater British identification necessarily is strongly related to an antipathy towards Europe, just as greater identification with Europe is not necessarily strongly related to an antipathy towards Britain. In other words, ingroup love is not necessarily outgroup hate (Brewer, 1999). Nevertheless, we would expect that in the context

of Brexit, those who are more nationalist and, therefore, Euroskeptic, are those who also strongly identify as British. Therefore, the extent to which individuals identify as British, known hereafter as *British identification*, is expected to underlie voting leave. As Euroskepticism is more common among lower socioeconomic status (SES) individuals (Werts et al., 2012), we expect British identification to be particularly relevant for predicting the leave vote among poorer voters.

The dynamics of SIT also apply to those who identify as European. SIT states that we are driven to maintain a positive social identity (Tajfel & Turner, 1979). Accordingly, SIT would predict that people who like being European, and identify as such, would have been strongly motivated to maintain their official European identity by voting remain. Thus, *European identification* is expected to underlie remain voting. As Euroskepticism is lower among higher SES individuals, we expect European identification to be particularly relevant for wealthier Remain voters.

A fourth psychological need that we propose influenced the overall voting trend is a *sense of control in life*. Having a sense of control over life's outcomes is considered a basic human need, and lacking control is generally experienced as aversive (Rutjens & Kay, 2015). Research on compensatory control theory considers the ways in which individuals deal with losing, or lacking, control. Landau, Kay, and Whitson (2015) found that people who lack a sense of control over one aspect of life can restore a general sense of control by asserting it in an entirely different, unrelated context.

This idea can be applied to Brexit and may explain why disadvantaged voters tended to vote Leave. The United Kingdom has particularly poor social mobility (Social Mobility Commission, 2016), meaning that disadvantaged individuals are less able to create better lives for themselves. In addition, the politics of austerity have hit the poor hardest, and evidence suggests a link between austerity and feelings of powerlessness among the disadvantaged (Psychologists Against Austerity, 2015). Notably, during the referendum the Leave campaign's slogan was "Vote Leave, take back control," which referred primarily to regaining control over laws made by the European Commission in Brussels (Leave Campaign, 2016). Indeed, the notion that Brussels held too much control over U.K. law was a view held by some factions of the U.K. electorate (BBC News, 2016). In a sociopolitical climate such as this, compensatory control theory would predict individuals who felt powerless in day-to-day life to see voting leave as an attractive opportunity, as a means of reinstating the sense of control that is lacking in daily life. Therefore, in this study lacking control in life was expected to underlie why disadvantaged individuals voted leave.

The opposite pattern can be expected for affluent individuals. By contrast, the Remain campaign focused on the uncertainty of leaving the European Union and the likelihood of economic instability following Brexit (Behr, 2016; Remain Campaign, 2016). Without the full burden of austerity and poor life opportunities, more affluent individuals likely had a more stable sense of control in everyday life. Accordingly, theory on perceptions of control would predict that, in order to maintain their sense of stability and control, more affluent individuals would vote for a continuation of the status quo. Thus, a higher sense of control is expected to characterize affluent individuals' decisions to vote remain.

To summarize so far, six variables are predicted to underlie the overall voting trend. Leave voting by disadvantaged individuals is expected to be characterized by feelings of CRD, perceptions of symbolic and realistic threat from immigration, strong British identification, and a low sense of control in life. In contrast, strong European identification and a greater sense of control are expected to underlie remain voting by affluent individuals.

However, as indicated before, some individuals voted against the overall trend. The following section presents a theoretical rationale for "countertrend voting."

#### *Explaining Countertrend Voting: When More Affluent Individuals Vote Leave and Disadvantaged Individuals Vote Remain*

Several voting constituencies deviated from the overall trend. For instance, Havering, an affluent borough of London, voted 70% in favor of leaving the European Union, whereas Glasgow City,

home to many deprived communities, voted 67% in favor of remain (Resolution Foundation, 2016). So far, our theoretical rationale cannot account for these instances.

The “V-curve” hypothesis offers an explanation for why wealthier individuals may have voted leave, rather than following the overall trend. In essence, the hypothesis makes two predictions regarding the strength of negative attitudes towards outgroups. The first prediction refers to the effects of CRD, outlined above: Individuals will show more opposition to outgroups when they feel that their group is unfairly worse off. The second prediction is that individuals may also oppose outgroups when they feel *better off* than others. This is known as *relative gratification* (for an overview, see Anier, Guimond, & Dambrun, 2016)—a concept that is theoretically orthogonal to relative deprivation, given that individuals cannot feel both better off and worse off to a social comparator. Jetten et al. (2015) found experimental evidence in support of the V-curve hypothesis. Participants showed stronger opposition to immigration in a lower-than-average wealth condition and also in a higher-than-average wealth condition (relative to a moderate wealth condition). This finding suggests that relatively deprived and relatively gratified individuals can feel threatened by immigration to a similar extent.

As such, relative gratification is expected to underlie leave voting by wealthier individuals in particular, as well as symbolic and realistic threat. We expect that relative gratification is less evident for poorer leave voters (compared to wealthier leave voters) for whom relative deprivation is more explanatory. At first, it may seem doubtful that more affluent people voted leave because they feel threatened economically (i.e., realistic threat). However, research has shown that relatively gratified individuals show stronger negative attitudes towards outgroups if they perceive their privileged status to be unstable (LeBlanc, Beaton, & Walker, 2015) or when they fear their wealth will decline in the future (Jetten et al., 2015). Finally, in addition to relative gratification, symbolic threat, and realistic threat, British identification is expected to underlie leave voting by wealthier individuals. As was the case for disadvantaged leave voters, more affluent individuals may have voted leave to emphasize British group membership.

It is likely that poorer leave voters and poorer Remain voters felt similar levels of group-based injustice (i.e., CRD); yet, poorer Remain voters acted counter to what RDT would predict. This suggests that injustice-based motivations were overridden by another, stronger motivation. In such a case, SIT would advocate identity concerns as the alternative explanation. This seems plausible in the context of Brexit. To give an example, all 32 voting constituencies in Scotland voted in favor of remaining in the European Union (Electoral Commission, 2016). This indicates that the motivation to vote remain cut across class boundaries and was unrelated to perceived differences in status. Thus, in Scotland—as well as other regions of the United Kingdom—the desire to preserve European identity may have taken precedence over the motivation to address group-based injustices. In the current study, therefore, European identification is expected to be the main variable that underlies remain voting by disadvantaged individuals.

### *The Present Research*

Based on the reviewed literature, three hypotheses are proposed (see Table 1 for summary):

*H1 (trend voting):* Collective relative deprivation, realistic threat, symbolic threat, British identification, European identification, and sense of control in life will distinguish leave voters from Remain voters overall, with high collective relative deprivation, realistic threat, symbolic threat, British identification, and a low sense of control in life characterizing leave voting, and high European identification and sense of control in life characterizing remain voting.

*H2 (countertrend leave voting):* Greater relative gratification, realistic threat, symbolic threat, and British identification will distinguish wealthier leave voters from wealthier Remain voters.

*H3 (countertrend remain voting):* Greater European identification will distinguish poorer Remain voters from poorer leave voters.



**Table 1.** Summary of Research Questions and Hypothesized Predictions

Research Question	Voting Group	Hypothesis (Direction)
1. <i>Trend voting</i> —Which psychological variables characterize the overall voting trend (i.e., poorer vote Leave, wealthier vote remain), and how?	Trend “leave” voters (poorer)	Collective relative deprivation (high) Realistic threat (high) Symbolic threat (high) British identification (high) Sense of control in life (low)
	Trend “remain” voters (wealthier)	European identification (high) Sense of control in life (high)
2. <i>Countertrend leave voting</i> —What variable(s) best explain why wealthier voters voted against the overall trend by voting “leave”?	–	Relative gratification (high) Realistic threat (high) Symbolic threat (high) British identification (high)
3. <i>Countertrend remain voting</i> —What variable(s) best explain why poorer voters voted against the overall trend by voting “remain”?	–	European identification (high)

## Method

### *Participants*

Survey data was collected using two approaches. The first took place in Greater Manchester, United Kingdom. Eighty-eight participants were recruited in public spaces (e.g., train stations, public libraries, shopping centers) in relatively affluent areas of Manchester city center and relatively disadvantaged areas of Wigan, Salford, Gorton, and Newton Heath. A further 70 participants were recruited via online forums to broaden the sample and ensure better representation of different social groups. In total, 158 participants were recruited (44% female, mean age: 40.3, age range: 18–79). Ninety-six percent of participants were born in the United Kingdom, and 19% of participants had at least one parent born abroad. Participants were recruited on a voluntary basis.

### *Design and Strategy*

Participants were asked two voting questions: (1) what they voted in the actual EU referendum (“remain,” “leave,” or didn’t vote) and (2) what they would vote if there was a second referendum now (remain or leave). Participants’ revote decision, rather than their original vote, was used in analysis. This approach was taken for three reasons.

First, data was collected 10 months after the original referendum, and since then people’s psychological perspective and/or voting preference may have changed. Using a revote ensured that voting behavior was measured at the same time as psychological variables, rather than many months apart. This means results represent a closer relationship in time between psychological motivations and voting behavior. Second, the authors expected only a small proportion of participants to have changed their vote since the referendum. Our results showed this to be true: Eight percent ( $N = 11$ ) of those who voted in the original referendum changed their decision at revote. Thus, no drastic changes in voting decisions occurred since the original referendum. Third, using a revote meant that individuals who did not vote originally ( $N = 18$ ) could take part. This had a practical advantage: All individuals approached for participation were eligible, unless

they indicated that they had no current voting preference. Furthermore, we saw no valid reason to exclude nonvoters: As long as participants had a voting preference, the theoretical arguments presented above would still apply. This study received ethical approval from the University of Amsterdam's Faculty of Social and Behavioral Sciences Ethical Review Board on March 8, 2017 (ID: 2017-SP-7764).

### *Materials*

The survey began with a paragraph that contextualized the EU referendum and introduced the research. Participants were asked to indicate their "revote decision" ("What would you vote if there was a second referendum now?"; answering options were: "Remain a member of the European Union" or "Leave the European Union") and their original voting decision (same options as revote, plus "I didn't vote"). Next, participants completed seven scales measuring the psychological constructs. The order of these scales, and the order of items within the scales, was randomized to control for order effects. Finally, participants' SES and demographic characteristics were assessed.

#### *Collective Relative Deprivation*

CRD was measured using an adapted four-item version of a scale used by Doosje et al. (2013). Example items are, "I think people like me don't get as many opportunities as other groups in the UK," and "I think people like me are less well off than other groups in the UK." Responses were given on a seven-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (7). Scale reliability was good (*Cronbach's*  $\alpha = .88$ ).

#### *Realistic Threat*

Realistic threat was measured using an adapted four-item version of that used by Doosje et al. (2013). An example item is, "Immigrants hold too many positions of power and responsibility in the UK," responded to as above. Scale reliability was good ( $\alpha = .88$ ).

#### *Symbolic Threat*

Symbolic threat was measured using a four-item version of that used by Doosje et al. (2013). An example item is, "Immigrants in the UK don't understand how my group views the world," responded to as above. Scale reliability was good ( $\alpha = .89$ ).

#### *Sense of Control in Life*

An individual's sense of control in everyday life was measured using a five-item version of the constraint subscale of Lachman and Weaver's (1998) Mastery and Constraint scale, as used by Clarke, Fisher, House, Smith, and Weir (2008). An example item is, "What happens in my life is often beyond my control," responded to as above. Scale reliability was good ( $\alpha = .85$ ).

#### *Relative Gratification*

A four-item scale was developed in a pilot study to measure relative gratification. A detailed report of the development process can be requested from the authors. An example item is, "I deserve



to feel satisfied with how my life is,” responded to as above. Scale reliability was satisfactory in both the pilot and main study (both  $\alpha = .73$ ). The scale demonstrated excellent divergent validity (relative gratification and CRD were orthogonal;  $r = .05$ ) and excellent convergent validity (positive and significant correlations were found between relative gratification and realistic threat,  $r = .28$ , and relative gratification and symbolic threat,  $r = .28$ ).

### *European Identification*

The extent to which participants identify as European was assessed using the Inclusion of Other in Self scale (IOS; Schubert & Otten, 2002). IOS asks participants to indicate their “closeness” with a target group (in this case “Europeans”) by choosing one of seven pictorial representations that increase in closeness.

### *British Identification*

IOS was also used to assess the extent to which participants identified as British (Schubert & Otten, 2002). The target group in this case was “The British.”

### *Socioeconomic Status*

Oakes (2016) recommends collecting as much socioeconomic data as reasonably possible. Accordingly, three indicators were measured, in order of primacy. First, household income (controlling for student status) was measured with seven income brackets (e.g., “£200–£399 weekly/£867–£1,732 monthly/£10,400–£20,799 annually”). Second, educational attainment was measured with seven options ranging from “no formal qualifications” to “additional qualifications including foreign qualifications” (as used by Office for National Statistics, 2011). Third, area of residence was also measured with: 26 voting constituencies of Greater Manchester were listed, plus an open field for those living outside of Greater Manchester.

### *Additional Demographic Measures*

Participants indicated their age and gender, their immigration background, including their own birthplace, mother’s birthplace, and father’s birthplace (response options were United Kingdom, India, Poland, Pakistan, and Republic of Ireland or an open field) and their political orientation (response options: The seven parliamentary parties were listed, plus an open field and “I spoil my ballot paper”).

### *Procedure*

The researcher followed a script when recruiting participants in person to mitigate bias during the initial interaction. Once participants agreed to be involved in the study, the survey was administered via the Qualtrics Offline application on an iPad. After giving consent electronically, participants filled in the survey alone and in their own time, taking nine minutes on average. On completion, participants were given a personalized, anonymizing code, and contact details to withdraw from the study if desired. Those who completed the survey online were asked to submit a personalized code of their choice and asked to write it down, together with the researcher’s contact details in case the participant should want to request withdrawal of participation at a later point.

## Results

Prior to analysis, participants were categorized into four voting groups; namely, poorer leave, poorer remain, wealthier leave, and wealthier remain. This was done based on participants' revote decision and their socioeconomic data. First, a median split of household-income data was used to classify individuals as "poorer" or "wealthier." This label (e.g., "poorer") was combined with participants' revote decision ("leave"), giving each participant a voting category ("poorer leave"). Some participants could not be categorized by a median split of household income, as income data was collected using seven income categories. In such cases, a median split of the secondary SES indicator, educational attainment, was used. If participants were unable to be categorized in this manner, area of residence data were used. Table 2 shows the number of participants in each voting category and descriptive statistics for each psychological variable. In addition, Table 3 gives correlations between the seven key psychological variables. Discriminant Function Analysis (DFA) was used to test each hypothesis. DFA is appropriate for designs that have a single, categorical outcome variable (with  $\geq 2$  levels) and several continuous predictors. DFA tests how useful predictor variables are for determining category membership and works by creating one, or several, "latent functions" from linear combinations of predictors. A partial coefficient is estimated for each predictor variable (equivalent to standardized betas in regression), which represent the contribution of each predictor towards determining participants' category membership.

Predictors included in each model are the seven psychological variables, with voting group as a categorical outcome variable.

**Table 2.** Sample Size of Each Voting Category, Group Means, and Standard Deviations for all Psychological Variables

	M <sub>PL</sub> (SD)	M <sub>PR</sub> (SD)	M <sub>WL</sub> (SD)	M <sub>WR</sub> (SD)
Psychological Variable	<i>N</i> = 22	<i>N</i> = 34	<i>N</i> = 22	<i>N</i> = 80
Col. rel. deprivation	3.89 (1.65)	3.33 (1.58)	2.82 (1.11)	2.35 (1.15)
Realistic threat	3.63 (1.76)	2.31 (1.29)	3.40 (1.47)	1.90 (.93)
Symbolic threat	3.32 (1.63)	2.21 (1.09)	3.03 (1.22)	1.92 (.90)
Sense of control <sup>a</sup>	4.99 (1.38)	5.04 (1.31)	5.78 (.54)	5.30 (1.01)
Relative gratification	5.02 (.98)	4.68 (1.12)	5.45 (.58)	4.96 (1.12)
European identification	2.31 (.99)	4.97 (2.04)	3.45 (1.87)	4.86 (1.63)
British identification	5.55 (1.65)	3.76 (2.05)	6.00 (1.54)	4.49 (2.09)

Note. PL = poorer leave, PR = poorer remain, WL = wealthier leave, WR = wealthier remain. Sample sizes displayed are subsequent to removing multivariate outliers.

<sup>a</sup>The sense of control scale was reverse coded so that lower values represent less perceived control in life.

**Table 3.** Intercorrelations for Key Psychological Variable Scales

	1.	2.	3.	4.	5.	6.
1. Col. rel. deprivation	–					
2. Realistic threat	.457**	–				
3. Symbolic threat	.432**	.773**	–			
4. Sense of control <sup>a</sup>	–.436**	–.292**	–.254**	–		
5. Relative gratification	.054	.277**	.275**	.046	–	
6. Euro. identification	–.141	–.486**	–.428**	.015	–.099	–
7. British identification	–.086	.132	.161*	.405**	.240**	–.171*

<sup>a</sup>The sense of control scale was reverse coded so that lower values represent less perceived control in life.

\*\* $p < .01$ ; \* $p < .05$ .

*H1 (The overall trend):* DFA1 used “voting group” as an outcome variable (with four levels: poorer leave, poorer remain, wealthier leave, wealthier remain) and the seven psychological variables as predictors. The model had three discriminant functions: The first explained 72.9% of the variance in voting group (canonical  $R^2 = .39$ ), the second 19.6% (canonical  $R^2 = .14$ ), and the third 7.5% (canonical  $R^2 = .06$ ). In combination, these discriminant functions significantly differentiated voting groups,  $L = .493$ ,  $\chi^2_{(24)} = 106.67$ ,  $p < .001$ . Removing the third function indicated that it did not significantly differentiate between groups,  $L = .939$ ,  $\chi^2_{(6)} = 9.45$ ,  $p = .150$ , and it was therefore disregarded. Additional calculations established function 1 as a factor that discriminates between voting leave and voting remain overall, irrespective of wealth, and function 2 as a factor that discriminates poorer groups from wealthier groups, irrespective of voting. Thus, although results of function 2 are presented in Table 4 for readers interested, function 1 is the function needed for evaluating Hypothesis 1. Several results shown by function 1 are consistent with Hypothesis 1: As predicted, European identification, realistic threat, collective relative deprivation, and British identification are variables that best discriminate leave voters from Remain voters overall. Moreover, the valences of their coefficients indicate that results follow the expected pattern; a negative valence for European identification indicates that it is key for Remain voters, whereas positive coefficients for realistic threat, collective relative deprivation, and British identification suggest that these variables are key for leave voters. In line with our predictions, British identification was found to be more relevant for poorer leave voters ( $\beta = .474$ ; see Table 6) compared to wealthier leave voters ( $\beta = .277$ ; see Table 5).

Symbolic threat was also predicted to be key for leave voters. Although its coefficient is positive as expected, its relatively small magnitude does not at first support the prediction. However, these coefficients represent the *unique* contribution made by each variable to the discriminating function. Given that symbolic threat and realistic threat correlate highly ( $r = .77$ ; see Table 3), it is likely that multicollinearity masks the effect of symbolic threat. To investigate this further, a second type of coefficient was examined, known as canonical variate correlation coefficients (CVCCs). CVCCs are comparable to factor loadings and therefore do not represent unique effects, but instead they signify the substantive nature of each predictor (Field, 2013). CVCCs show that symbolic threat is the third most important variable ( $r = .619$ ) behind the two largest contributors’ realistic threat ( $r = .707$ ) and European identification ( $r = -.701$ ). Together, these findings suggest that symbolic threat is indeed key to explaining why individuals voted leave, but not beyond that which is explained by realistic threat.

One finding is inconsistent with Hypothesis 1. Sense of control made a small contribution to function 1, but in an opposing manner to what was predicted. Contrary to expectation, leave voters were found to be characterized by a greater sense of control in life.

*H2 (Countertrend leave voting):* DFA2 used “voting group” as an outcome variable (with two levels: wealthier leave, wealthier remain) and the seven psychological variables as predictors. A single discriminant function significantly discriminated the two voting groups,  $L = .650$ ,  $\chi^2_{(8)} = 41.411$ ,  $p < .001$ . Table 5 shows the discriminant function coefficients for each psychological variable. As predicted by Hypothesis 2, realistic threat was most important in distinguishing between wealthier leave and wealthier Remain voters, suggesting that wealthier leave voters feel more threatened by immigrant groups in economic terms than wealthier Remain voters. As in DFA1, symbolic threat appears to have offered only a small contribution to differences between groups. However, symbolic threat showed the second largest CVCC ( $r = .645$ ) behind realistic threat, indicating that it is key when considered independently. Also consistent with Hypothesis 2, British identification offered a moderate contribution to the discriminant function: Wealthier leave voters identify as British to a greater extent than wealthier Remain voters.

**Table 4.** Contributions of Each Psychological Variable to Discriminating Leave Voters From Remain Voters Overall (Function 1) and Poorer Voters From Wealthier Voters Overall (Function 2)

Psychological Variable	Function 1	Function 2
European identification	-.516	-.071
Realistic threat	.414	-.262
Collective relative deprivation	.330	.769
British identification	.329	-.349
Sense of control	.235	-.147
Symbolic threat	.129	.034
Relative gratification	-.107	-.391

*Note.* Higher *positive* coefficients signify key variables for leave voters (function 1) or poorer voters (function 2); whereas, higher *negative* coefficients signify key variables for Remain voters or wealthier voters. Table ordered by absolute magnitude in function 1. Coefficients are standardized and partial.

**Table 5.** Contributions of Each Psychological Variable in Discriminating Between Wealthier Remain Voters and Wealthier Leave Voters

Psychological Variable	Function 1
Realistic threat	.582
Sense of control	.408
British identification	.277
European identification	-.230
Collective relative deprivation	.194
Symbolic threat	.193
Relative gratification	.072

*Note.* Higher *positive* coefficients signify key variables for wealthier leave voters; higher *negative* coefficients signify key variables for wealthier Remain voters. Table ordered by absolute magnitude. Coefficients are standardized and partial.

**Table 6.** Contributions of Each Psychological Variable in Discriminating Between Poorer Remain Voters and Poorer Leave Voters

Psychological Variable	Function 1
European identification	-.687
British identification	.474
Relative gratification	-.200
Realistic threat	.195
Collective relative deprivation	.124
Symbolic threat	.141
Sense of control	.030

*Note.* Higher *negative* coefficients signify key variables for poorer Remain voters, and higher *positive* coefficients signify key variables for poorer leave voters. Table ordered by absolute magnitude. Coefficients are standardized and partial.

Counter to predictions, relative gratification failed to discriminate the two wealthier voting groups. This conclusion is sustained by the observation that relative gratification has the second smallest CVCC ( $r = .273$ ). In addition, sense of control in life made an unexpected contribution: Wealthier leave voters' greater sense of control was key in discriminating between the two voting groups.

Our results do not support the prediction that relative gratification would explain countertrend leave voting among *wealthier*, but not *poorer*, leave voters ( $\beta = .072$  and  $\beta = -.200$ , respectively). In addition, relative deprivation does not play a larger role than relative gratification in explaining the poorer leave versus remain vote ( $\beta = -.124$  and  $\beta = -.200$ ).

To summarize, results of DFA2 offer mixed support to Hypothesis 2. Consistent with expectations, higher realistic threat, symbolic threat, and British identification were found in wealthier leave voters compared to wealthier Remain voters. However, contrary to expectations, relative gratification failed to discriminate the two wealthier voting groups. Moreover, high levels of perceived control found in the wealthier leave group contributed unexpectedly to differentiating the groups.

*H3 (Countertrend remain voting):* DFA3 used “voting group” as an outcome variable (with two levels: poorer leave, poorer remain) and the seven psychological variables as predictors. A single discriminant function significantly differentiated the two voting groups,  $L = .561, \chi^2_{(8)} = 28.914, p < .001$ . Table 6 shows the discriminant function coefficients for each predictor. Results offer full support to Hypothesis 3: European identification best differentiated poorer Remain voters from poorer leave voters.

## Discussion

The objective of this study was to establish key social psychological motivations that underlie decisions to vote to remain or to leave the European Union. The psychological variables were selected based on four key psychological motivations that voters may have had: the need for justice, the need to reduce feelings of threat, the need to belong (identity), and the need to feel in control. Results offer partial support to Hypothesis 1 regarding the overall voting trend. In line with the hypothesis, voting “leave” was characterized by higher levels of perceived realistic and symbolic threat from immigration, greater feelings of injustice-based CRD, and stronger British identification. As expected, British identification was more relevant for poorer leave voters than for wealthier leave voters (Werts et al., 2012). Voting “remain” was best explained by European identification. Contrary to predictions, leave voters showed a greater sense of control in everyday life. Results also offer partial support to Hypothesis 2. British identification, realistic threat, and symbolic threat distinguished wealthier leave voters from wealthier Remain voters. However, relative gratification failed to explain why wealthier voters went against the overall trend by voting to leave. In addition, relative deprivation did not play a stronger role than relative gratification among poorer leave voters. Finally, full support was found for Hypothesis 3, regarding countertrend remain voting: European identification best explained why poorer individuals went against the overall trend by voting remain.

Several findings are consistent with the basic-needs approach. First, in line with the need for justice, we build on relative deprivation theory (RDT; Runciman, 1966) which proposes that individuals may feel a sense of injustice when comparing their own group to other, higher-status groups and that this feeling may provoke behavior intended to improve conditions for that individual’s ingroup. In the current project, CRD was found to be a key variable underlying leave voting overall. Thus, leave voters could have voted as they did to improve circumstances and conditions for their own groups. This conclusion would apply most to disadvantaged leave voters, who scored highest on CRD, and may have been fueled by feelings of injustice to a greater extent than wealthier leave voters.

We predicted that the motivation to reduce feelings of threat from immigration would be a second important factor. Indeed, both realistic and symbolic threat were found to characterize leave voting. This suggests that leave voters felt threatened by immigration to a greater extent than Remain voters, both economically, on issues such as jobs and housing, and in terms of British culture and values. These findings harmonize with experimental and meta-analytic findings that reveal links between both realistic and symbolic threat and stronger negative attitudes toward immigrant groups (Riek et al., 2006; Stephan et al., 2005) and concur with work by Henderson et al. (2017) who reported that immigration concerns played a major role in the choice for to vote Leave. In the current

context, individuals may have been motivated to vote to leave the European Union in an attempt to control immigration levels and mitigate aversive feelings of threat.

We also found evidence supporting the identity need. Previous research has shown that greater nationalism is related to greater Euroscepticism (i.e., Hooghe & Marks, 2005; Hooghe et al., 2002). Based on this, we predicted that those identifying strongly as British would be more likely to vote Leave. Results reflect this: British identification was a key variable underlying leave voting. In contrast, voters identifying as European had a different kind of identity concern during the referendum. Findings demonstrate that European identification was a key variable underlying remain voting. European identification was also found to be the variable that best explained why some poorer individuals deviated from the overall trend by voting to remain. This supports SIT and the notion that individuals are motivated to maintain positive social identities (Tajfel & Turner, 1979). Findings suggest therefore that both remain and leave voters acted based on identity concerns. This is also in line with the findings of Van Zomeren et al. (2008) who found identity to be a key factor involved in collective action. Seeing voting as a form of collective action, those who identified more strongly as “British” acted more Eurosceptic than those who identified more strongly as “European.”

However, the role of identification in the Brexit context deserves more attention. As the most salient identities, British and European identification were studied as key identity-related factors in the current study. These factors are likely an oversimplification of the identity concerns that were implicated in deciding to vote remain or leave. For example, Henderson and colleagues (2016, 2017) found that an important predictor of voting leave was whether people in England identified themselves as English or British. Specifically, individuals who identified themselves as “English not British” were more likely to be skeptical towards the European Union and vote Leave. Individuals who identified themselves as “British not English” were more likely to vote remain. While the results of both Henderson and colleagues and the current study (see Table 2) suggest that “identity narrowness” is an important property for understanding sentiments towards the European Union, other authors recognize that nationalism operates differently within the constituent countries of the United Kingdom (e.g., stronger Scottish identification is linked to stronger support for European integration; Clarke, Goodwin, & Whiteley, 2017). It is therefore important to acknowledge the likelihood that voting preferences were determined by a much more complex set of identity factors than those offered by our results, at the level of British and European identification.

It is also interesting to question the extent to which it is possible for people to identify both with a subordinate (British) and superordinate (European) category. Self-categorization theory assumes a “functional antagonism” between different levels of categorization (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). From that perspective, in different contexts, different categorizations are perceived as more salient than others, and people tend to use the most salient level of categorization. The significant (but indeed moderate) *negative* relationship between British identification and European identification is in line with this argument. In addition, we observe a quite consistent pattern in terms of *opposite* effects of British identification and European identification on various outcome measures (e.g., discriminating between voting leave or remain, for both poorer and wealthier voters).

In line with our predictions, realistic threat, symbolic threat, and British identification also distinguished wealthier leave voters from wealthier Remain voters. Unexpectedly, relative gratification failed to discriminate these groups, which fails to support the V-curve hypothesis (Anier et al., 2016). This hypothesis would expect relatively gratified individuals to oppose outgroups such as “immigrants” and consequently vote to leave the European Union. The relative gratification scale demonstrated satisfactory psychometric properties, with good internal consistency in the pilot and the main study, excellent divergent validity on both occasions, and good convergent validity in the main study (manuscript of scale development available on request). However, null findings may be due to using an individual, rather than collective, relative gratification measure. The current authors chose to develop an individual-based measure due to the greater body of evidence on this type. However, it is



possible that the collective form of relative gratification was more important in influencing the voting behaviors of wealthy leave voters.

The final need—need for control—did not perform as expected. Leave voters were expected to feel less control in life compared to Remain voters. Results indicate that the opposite is true: Overall, leave voters were found to have a greater sense of control, especially the case for wealthier leave voters who could be differentiated from wealthier Remain voters by a particularly strong sense of control. A clear explanation for this null finding is that leave voters may have had an inflated sense of control following what was for them, a positive referendum result. Collecting data on this measure before and after the referendum may have shown an increase in leave voters' sense of control in everyday life. We cannot demonstrate this change with current data. However, such a shift would be in line with compensatory control theory (Landau et al., 2015) and the notion that voting leave was an attempt by those lacking control in their life to strengthen that feeling.

### *Policy Implications*

This study finds that voting behavior could be explained by a set of basic psychological motivations. The need to reduce feelings of threat was implicated in the referendum outcome. It would be useful to consider why these perceptions of threat exist in the first place. Darvas (2016) finds that regions of the United Kingdom with lower proportions of immigrant groups were more likely to vote Leave, suggesting that feeling threatened by immigration does not reflect the local situation or reality. It is possible that national media plays a role in constructing these perceptions of threat, a proposition that corresponds with the finding that readers of newspapers that have an anti-immigrant stance were more likely to vote Leave (Swales, 2016). But other findings show that regions experiencing the greatest *increases* in immigrant populations were those that voted leave in greater proportions (Resolution Foundation, 2016; The Economist, 2016). This in contrast would be a genuine basis for feelings of threat, corresponding with actual changes in local immigrant numbers. Although more work is needed to understand this situation, the truth likely lies somewhere in the middle. Therefore, policy could respond to genuine concerns over competition for jobs and housing, as well as encouraging media to represent trends in immigration more accurately.

The need for justice was also important to our findings. This outcome suggests links between the referendum outcome and socioeconomic inequalities in the United Kingdom. Tackling marked inequalities in the United Kingdom should therefore be a priority for policymakers. A first step would be to eliminate austerity policies that have a disproportionate, negative impact on the lives of disadvantaged individuals and communities (Psychologists Against Austerity, 2015). Improving social mobility should also be a top priority, first by promoting better educational outcomes for disadvantaged pupils, and second by linking working-age people from struggling communities to better employment prospects and ensuring good quality jobs with opportunities for progression.

### *Limitations and Future Directions*

This study has some limitations. Data were collected many months after the referendum. Several significant political developments and events occurred between the referendum and data collection (such as the “Islamist-related” terrorist attack in London on March 22, 2017, just prior to data collection). Results therefore may have been influenced by circumstances not present at the time of voting. However, findings offer strong indications of which variables may have guided voting decisions. Future research investigating the determinants of similar voting decisions should aim to collect data immediately prior to the event of interest.

Second, causal conclusions cannot be drawn from the findings. Unfortunately, this is difficult to avoid in applied research. Nevertheless, many current findings are consistent with previous

experimental research and therefore give a contextualized example of how factors such as immigration threat operate on a “real world” topic and sample.

Third, a limitation of our research design is the use of a median split to categorize participants into wealthier and poorer voting groups, which is advised against by some scholars (e.g., McClelland, Lynch, Irwin, Spiller, & Fitzsimons, 2015). This decision was taken due to concerns that requesting a precise household-income figure would be too invasive for participants, and as such participants were asked to provide approximate data on their income using seven possible categories. A more elegant design could employ multilevel logistic regression with, for example, individuals as level-one units, and neighborhoods as level-two units. Although requiring a significantly greater sample size (which was beyond the resources of the present study), this would allow SES to be added as a continuous predictor along with psychological variables of interest. As such, results should be interpreted with a degree of caution due to the possible reduced statistical power associated with employing a median split.

Fourth, it is possible that null findings on relative gratification were due to our use of an individually based, rather than a collective, measure. The relative-gratification literature would benefit from further conceptual elaboration on these different types and developing new measures for use in future studies. Fifth, our sample size is limited which allows for humble conclusions only. Finally, this project focused on a specific set of variables, derived from relevant literature. Other factors may be relevant and important. Other potential candidates may have been the “threat of Brussels” or the effects of globalization-related uncertainty on voting decisions (see, e.g., Arnett, 2002; Hermans & Dimaggio, 2007) and more elaborate measures of voters’ sense of control.

In addition to these suggestions, future research could investigate further the role of nationalism and identity (i.e., identifying as “British” or “English”) in examining leave or remain voting (i.e., Henderson et al., 2016, 2017). Another avenue of research could be the role of emotions in predicting leave or remain. Based on work by Frijda and colleagues (i.e., Frijda, 1993; Frijda, Kuipers, & ter Schure, 1989), how a certain situation is appraised determines how individuals react. Based on this appraisal theory of emotions, it could be predicted, for example, that individuals who feel anger are more likely to act against a threat by voting for change (i.e., leave) than individuals who experience anxiety or fear, who may be more inclined to vote for stability (i.e., remain). Research could also explore the influence of the media on the outcomes of political events such as Brexit—in particular, how right- and left-wing media shape the opinions of people from different socioeconomic backgrounds on issues such as immigration.

The current project examined key psychological motivations underlying decisions to vote to remain or leave the European Union. Voting leave was best explained by the need to reduce threat from immigration, both in terms of a concrete, economic aspects of U.K. society, but also in terms of British culture and values. Results also suggest disadvantaged individuals voted leave in order to counter unfairness that they feel. Furthermore, according to the need-to-belong approach, many leave voters identifying strongly as British saw an opportunity in the referendum to delineate who they consider to be British from non-British. In contrast, a priority for many Remain voters appears to be maintaining their European identities; this is especially true in the case of disadvantaged Remain voters, for whom concerns over remaining European outweighed feelings of unfairness. The need for control was found to be less important in predicting voting behavior. Our results demonstrate that feelings of injustice, threat, and belonging may have been important in shaping one of the most monumental events of recent British political history.

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