




Brexit: The influence of motivation to respond without prejudice, willingness to disagree, and attitudes to immigration

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Britain's unexpected vote to leave the European Union (Brexit) in June 2016 has proved divisive and damaging both within the United Kingdom and internationally. Across two correlational studies, the current research proposed a model to explain the Brexit vote, with attitudes to immigration and willingness to disagree (WD) as direct predictors of the referendum result, and internal (IMS) and external (EMS) motivation to respond without prejudice as indirect predictors. Study 1 ($N = 353$) and Study 2 ($N = 363$) both showed good fit with the model and, respectively, explained 48% and 46% of the referendum result. More positive attitudes to immigration predicted a vote to remain. Higher IMS and lower EMS predicted a vote to remain, fully mediated by attitudes to immigration. In Study 1, lower WD also predicted a vote to remain, both directly and indirectly via attitudes to immigration, although this was not replicated in Study 2. These results are discussed both in relation to the Brexit result, and the implications for motivation to respond without prejudice, WD, and political correctness more generally.

Following an acrimonious campaign, the United Kingdom (UK) decided to leave the European Union (EU) in a referendum on 23 June 2016 by the narrow margin of 51.9% voting leave (Leavers) against 48.1% voting remain (Remainers) on a turnout of 72% (The Electoral Commission, 2018). This largely unexpected result (BBC News, 2016; Greenslade, 2016) has proved to be one of the most divisive events of recent British history with potentially substantial economic and political impacts not just in the United Kingdom but across the EU (Bulmer & Quaglia, 2018; Chen et al., 2018). Together with the election of Donald Trump as US President and the growth of right-wing populist parties in Europe (Greven, 2016; Lewis, Clarke, Barr, Holder, & Kommenda, 2018), the UK's vote to leave the EU (Brexit) has also been seen as part of a wider backlash across Western democracies against globalism and the post-war liberal consensus (Inglehart & Norris, 2016). Understanding the causes of Brexit, therefore, has assumed a broader significance than simply domestic politics in Britain.

The Brexit result has been analysed from a number of perspectives: the demographic profile of Leavers and Remainers (Becker, Fetzer, & Novy, 2017; Goodwin & Heath, 2016), the key economic and political issues underlying the vote (Arnorsson & Zoega, 2016; Clarke, Goodwin, & Whiteley, 2017), distrust of politicians, experts, and the political

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establishment (Abrams & Travaglino, 2018; Hobolt, 2016; Ipsos MORI, 2016), and the role of the media and social media (Cushion & Lewis, 2017; Del Vicario, Zollo, & Caldarelli, 2016). Areas with the highest Leave vote were characterized by economic disadvantage, low average levels of education, and an older, White, working class population (Goodwin & Heath, 2016). Hobolt (2016) concluded that the Leave vote was motivated by anti-establishment and anti-immigration sentiments, fuelled by lack of economic opportunities and anger with the political class. Whilst the impact of immigration in the EU referendum vote has been widely acknowledged, the current research adds to the existing literature by exploring the role of motivation to respond without prejudice and willingness to disagree (WD).

Analysis of the referendum results revealed some stark socio-demographic divisions across the UK population (YouGov, 2016; $N = 5,455$). Amongst 18- to 24-year-olds, 71% voted to remain, compared with just 36% of those over 65. Of those whose highest level of education was GCSEs (General Certificate of Secondary Education; examinations normally taken at age 15–16 years), just 30% voted to remain compared with 68% of those with a university degree. By political orientation, 65% of those voting Labour and 68% of those voting Liberal in the 2015 UK General Election voted to remain compared with just 5% of those voting for the UK Independence Party (UKIP) and 39% of those voting Conservative. There was less of a split by gender with 47% of men and 49% of women voting Remain. The current research controlled for these socio-demographic variables in order to isolate the underlying effects of the psychological and attitudinal variables that contributed to the Brexit result.

Attitudes to immigration and Brexit

Concern in the United Kingdom over immigration was building in the years leading up to the referendum. Net immigration to the United Kingdom accelerated dramatically after the accession of eight new Eastern European members to the EU in 2004 (ONS, 2016; Watt & Wintour, 2015). More than 60% of British adults thought that the level of immigration had a negative effect on Britain, compared with less than 20% who thought it was positive (Ashcroft, 2013, $N = 20,062$; YouGov, 2012, $N = 1,715$). Public concern over immigration fuelled the rise of the UK Independence Party (UKIP) and persuaded Prime Minister David Cameron to promise a simple in–out referendum on EU membership should the Conservatives win the general election in 2015 (Mason, 2016). In a national poll immediately after the referendum, 33% of Leave voters cited ‘regaining control over immigration’ as their main motivation (Ashcroft, 2016, $N = 12,369$). Subsequent studies have confirmed that the threat of immigration predicted voting behaviour in the EU referendum (Abrams & Travaglino, 2018; Golec de Zavala, Guerra, & Simao, 2017). Meleady, Seger, and Vermue (2017) demonstrated that more positive and less negative contact by UK voters with (European) immigrants predicted more positive attitudes to immigration which in turn predicted an intention to vote Remain. Consistent with this research, we hypothesized that more positive attitudes to immigration would predict a vote to remain.

Motivation to respond without prejudice and attitudes to immigration

The concept of motivation to respond without prejudice was developed in response to the decline in explicit measures of racial prejudice (Plant & Devine, 1998). Traditionally, racism has reflected the belief that minority ethnic groups are biologically, intellectually,

or culturally inferior as a justification for prejudicial attitudes and discriminatory behaviour (Duckitt, 1992). However, whilst studies increasingly indicated a reduction in explicit expressions of racial prejudice (McConahay, Hardee, & Batts, 1981; Schuman, Steeh, & Bobo, 1985), psychologists asserted that racism had not gone away, merely gone underground (Pettigrew & Meertens, 1995; Sidanius, Pratto, & Bobo, 1996). Plant and Devine (1998) sought to understand the motivations that led people to suppress explicit racial prejudice. They identified a distinction between external motivation to respond without prejudice, driven by a desire to avoid social sanction for what had become normatively unacceptable views, and internal motivation where the desire to respond without prejudice had been internalized into the individuals' personal values. They developed and validated their External Motivation Scale (EMS) and Internal Motivation Scale (IMS) to measure these constructs. Whilst Golec de Zavala *et al.* (2017) explicitly associated measures of individual prejudice with the EU referendum vote, no research so far has tested the role of motivation to respond without prejudice in the result.

The growth in immigration in the 21st century (Hamilton, Medianu, & Esses, 2013) has been paralleled by increasing levels of anti-immigrant attitudes (Markaki & Longhi, 2013) that conflict with an anti-prejudice norm that is also prevalent across Western Europe (Ivarsflaten, Blinder, & Ford, 2010). Reflecting this dissonance, Blinder, Ford, and Ivarsflaten (2013) found that motivation to respond without prejudice is a key influence on political choices where outgroups are prominent. They found that higher IMS correlated with greater support for equal treatment of asylum seekers and less opposition to Islamic schools. This suggests that motivation to respond without prejudice might also have been a key variable in the EU referendum result. We hypothesized that higher IMS would predict more positive attitudes to immigration which would in turn predict a Remain vote.

Blinder *et al.* (2013) only examined the effect of IMS and disregarded EMS on the grounds that social pressures would be less relevant in the privacy of the ballot box. However, Plant and Devine (1998) demonstrated that IMS and EMS were discrete constructs and found a small inverse relationship between them (average $r = -.14$, $p < .001$) that has been replicated in subsequent studies (Klonis, Plant, & Devine, 2005; Ratcliff, Lassiter, Markman, & Snyder, 2006). Plant and Devine (1998) found that IMS was positively associated with the Modern Racism Scale (McConahay, 1983) and the Attitude Toward Blacks Scale (Brigham, 1993), whilst EMS was negatively associated with these measures. Externally motivated participants also scored more highly on implicit racial prejudice than those who were internally motivated (Devine, Plant, & Amodio, 2002; Hausmann & Ryan, 2004). These studies suggest that EMS might also have an independent and opposite effect to IMS on attitudes to immigration. We hypothesized therefore that that lower EMS would predict more positive attitudes to immigration.

Political correctness, willingness to disagree, and Brexit

Plant and Devine (1998) suggested that motivation to respond without prejudice was linked to the idea of political correctness (PC). They used non-adherence to prevailing college PC standards to validate their measures of IMS and EMS (Plant & Devine, 1998; studies 2 & 3). They suggested that EMS arose out of a growing anti-prejudice norm that was exemplified by PC standards. They established that there was an interaction between IMS and EMS in the way that participants reacted to what they termed 'politically correct pressure' (Plant & Devine, 2001, p. 490). Specifically, those who were both low IMS and high EMS were particularly likely to feel resentful of pressure to express positive views

towards Black people. We hypothesized that PC would vary directly with EMS, but only at low levels of IMS.

Political correctness has become an increasingly salient theme in Western politics. In the United Kingdom, 66% (Singh, 2018) and in the United States, 80% (Hawkins, Yudkin, Juan-Torres, & Dixon, 2018) of adults agree that PC 'has gone too far'. Populist politicians have exploited the widespread concern about PC to strengthen their appeal (Greven, 2016). Anti-PC sentiment was an important factor in the election of Donald Trump as US President in 2016; in an experimental study, Conway, Repke, and Houck (2017) showed that priming moderate US voters with politically correct stimulus actually *increased* support for Trump. In the run-up to the UK's EU referendum, the Express claimed that Leave voters felt 'bullied and unable to express their true feelings in the EU debate' because a culture of PC by the Remain campaign labelled discussion of immigration as racist (Maddox, 2016). The Guardian, on the other hand, defended PC (Ellen, 2016), claimed that it was a 'phantom enemy' invented by the Right (Weigel, 2016) and sought to re-brand it as 'political politeness' (Alibhai-Brown, 2016). Reflecting these opposing perspectives during the campaign, we hypothesized that high PC would predict a Remain vote in the EU referendum.

As far as we are aware, no previous research has directly explored the association of PC with attitudes to immigration. However, higher PC has been associated with lower right-wing authoritarianism (RWA) and social dominance orientation (SDO; Dickson, 2017) which have both been associated with more positive attitudes to immigration (Aichholzer & Zandonella, 2016; Esses, Hodson, & Dovidio, 2003). Lower RWA and SDO have also been associated with a Remain vote in the EU referendum, mediated by the perceived threat from immigration (Golec de Zavala *et al.*, 2017). We hypothesized, therefore, that higher PC would predict more positive attitudes to immigration and that attitudes to immigration would mediate the relationship between PC and the EU referendum vote.

A search for 'political correctness' on PsychINFO revealed nine potential measures of the construct. These adopted a range of different approaches to the definition and measurement of PC. Three were conference papers or posters for which we have been unable to track down the full transcripts (Brittan-Powell, 2000, 2001; Brittan-Powell, Bashshur, Pak, & Meyenburg, 1999). As Dickson (2017) emphasized, what is considered PC varies across time and between cultures, but all nine measures were developed and validated in North America and three are now somewhat outdated (Barker, 1994; Lalonde, Doan, & Patterson, 2000; Suedfeld, Steel, & Schmidt, 1994). Two recent measures, Andary-Brophy (2015) with 38 items and Dickson (2017) which required respondents to review 108 matched pairs of words, were not suitable for a short online questionnaire. The final measure (Strauts & Blanton, 2015), whilst only nine items, includes repeated references to PC which may result in a social desirability bias.

Reflecting these theoretical and practical issues, we selected four items from Dunton and Fazio's (1997) Motivation to Control Prejudiced Reactions Scale (e.g., 'I think it's more important to speak one's mind than worry about offending someone'), the wording of which remained culturally relevant to the United Kingdom in 2017. These were originally developed to reflect an individual's 'willingness to restrain from expressing thoughts, feelings and opinions that might offend others' (Dunton & Fazio, 1997, p. 318) and, in our view, represented a reasonable surrogate measure of PC. Nevertheless, reflecting the fact that these items have not been subject to any formal construct validation procedures, nor been used previously in this context, we have instead named the measure willingness to disagree (WD) throughout the current paper.

The current research

Across two studies, we tested a model that incorporated both proximal and distal predictors of the EU referendum result as shown in Figure 1. Immigration was a key issue in the referendum campaign, and several studies have already established that more positive attitudes to immigration predicted a vote to remain (Abrams & Travaglini, 2018; Golec de Zavala *et al.*, 2017; Meleady *et al.*, 2017). Following Blinder *et al.*'s (2013) finding that IMS was a key underlying influence in political choices where outgroups (such as immigrants) were salient, we hypothesized that high IMS would predict a Remain vote mediated by attitudes to immigration. Since Plant and Devine (1998) established that motivation to respond without prejudice had two discrete but inversely correlated components, internal and external, we hypothesized that EMS might also have an independent but opposite impact on the referendum result such that low EMS would predict a Remain vote, again mediated by attitudes to immigration. Accusations of PC were also prominent in the referendum campaign, with Leavers claiming that Remainers were trying to censor a legitimate debate over immigration. Plant and Devine (2001) showed that a combination of low IMS and high EMS could produce a backlash against politically correct pressure. Accordingly, we hypothesized that the interaction of IMS and EMS would predict our measure of willingness to disagree (WD; in effect a determination to resist such pressure), which in turn would impact the referendum result, both directly and mediated by attitudes to immigration, such that lower WD would predict a Remain vote. This is the first study to test the role of IMS, EMS, and WD in the EU referendum result.

STUDY I

Method

The questionnaires and SPSS data files for both studies are available on OSF (Dataset, 2020).

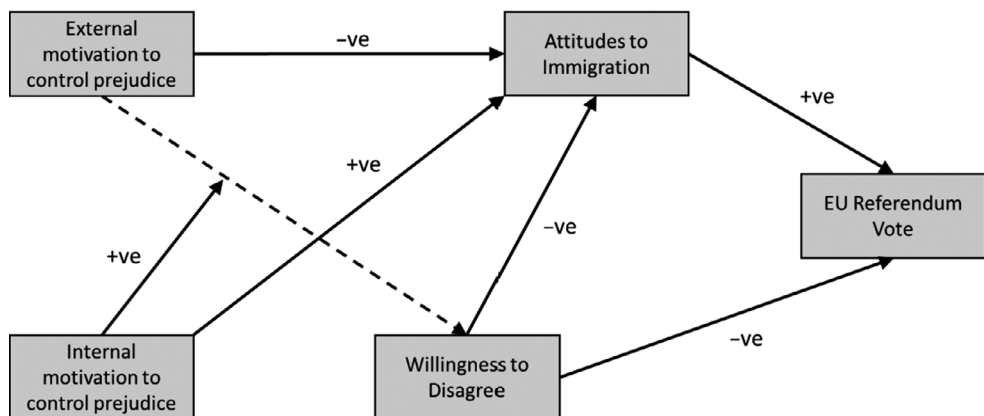


Figure 1. Path diagram illustrating hypothesized model of the effects of internal motivation to respond without prejudice, external motivation to respond without prejudice, willingness to disagree, and attitudes to immigration on the EU referendum vote.

Notes. Higher scores indicate higher internal motivation to respond without prejudice, higher external motivation to respond without prejudice, greater willingness to disagree, and more positive attitudes to immigration (scale 1–7). EU referendum vote; 1 = Leave, 2 = Remain.

Participants

Participants were recruited online via social media and through Prolific, a research participant panel, during the autumn of 2017. Of the 432 participants who completed the questionnaire, 79 were excluded because they did not vote in the EU referendum. The final sample was 353 participants (183 women; 169 men; 1 'prefer not to say') of whom 151 voted Leave and 202 voted Remain. Age ranged from 18 to 84 years ($M = 40$, $SD = 14.3$). Of the final sample, 88 were recruited via social media and 265 via Prolific.

The sample size reflected something of a compromise. It comfortably exceeded the minimum size of $104 + 8$ (the number of predictor variables) required to detect a medium effect size for a multiple regression (Tabachnick & Fidell, 2014). However, SEM is a large sample technique (Byrne, 2009). Kline (2016) offered a heuristic for calculating the necessary sample at between $10\times$ and $20\times$ the number of free parameters. In the case of our hypothesized model, there were 75 parameters to be estimated implying a sample of 750–1,500. However, most SEM studies use much smaller samples; a review of 74 studies by Westland (2010) indicated a mean sample size of 375.

Design

This was a correlational design with IMS, EMS, WD, and attitudes to immigration as predictor variables and EU referendum vote as the outcome variable. Additionally, gender, age, level of education, and political orientation were used as control variables.

Procedure and materials

Participants completed an online questionnaire, hosted by Qualtrics, entitled 'Perspectives on Immigration'. After giving their informed consent, they were asked how they voted in the UK General Election in July 2017 and in the UK referendum on EU membership in 2016. They were then asked to give their views across 12 items measuring IMS, EMS, and WD, and their attitudes to immigration across six items, all randomized, and followed by a range of socio-demographic questions. Finally, they were thanked and debriefed.

Measures

Internal motivation and external motivation to respond without prejudice were measured with 7-point Likert scales (1 = *strongly disagree*; 7 = *strongly agree*) using items from Plant and Devine's (1998) Internal Motivation Score (IMS) and External Motivation Score (EMS), respectively. In an effort to keep the questionnaire as short as practical and reflecting the fact that items from Plant and Devine's (1998) original scales sometimes appeared very similar, we used four items from each scale. These were adapted to reflect a generalized motivation to respond without prejudice, rather than a specific motivation to respond without racial prejudice against Black people. IMS was measured with the following four items ($\alpha = .78$): 'I attempt to act in non-prejudiced ways towards other people because it is personally important to me', 'According to my personal values, using stereotypes about other people is OK' (reversed), 'I am personally motivated by my beliefs to be non-prejudiced towards other people', and 'Being non-prejudiced towards other people is important to my self-concept'. EMS was measured with the following four items ($\alpha = .75$): 'I attempt to appear non-prejudiced towards other people in order to avoid

disapproval from others', 'I try to hide any negative feelings about other people in order to avoid negative reactions from others', 'Because of today's politically correct standards, I try to appear non-prejudiced towards other people', and 'I try to act non-prejudiced towards other people because of pressure from others'. Higher scores indicate higher levels of IMS and EMS.

Willingness to disagree was measured with 7-point Likert scales (1 = *strongly disagree*; 7 = *strongly agree*) using the following four items ($\alpha = .76$) from the Motivation to Control Prejudiced Reactions Scale (Dunton & Fazio, 1997): 'I always express my thoughts and feelings regardless of how controversial they may be', 'Going through life worried about whether you might offend someone is just more trouble than it's worth', 'I think it's more important to speak one's mind than worry about offending someone', and 'I'm not afraid to tell someone what I think even when they disagree with me'. These items reflect individual commitment to resist self-censorship despite the risk of social disapproval and were combined to create a WD scale with higher scores indicating higher levels of WD.

Attitudes to immigration were measured using the following six items ($\alpha = .93$) taken from the European Social Survey (2002) on 7-point Likert scales: 'Is Britain made a worse or a better place to live by people coming to live here from other countries? (1 = *worse*, 7 = *better*)', 'Would you say it was generally bad or good for the economy that people come here to live from other countries?' (1 = *bad*, 7 = *good*), 'Would you say that people who come here to live generally take jobs away from workers in Britain, or generally help to create new jobs?' (1 = *take jobs away*, 7 = *create new jobs*), 'On balance do you think people who come here to live take out more than they put in or put in more than they take out?' (1 = *take out more*, 7 = *put in more*), 'Are Britain's crime problems made worse or better by people coming to live here from other countries?' (1 = *better*, 7 = *worse*; reversed), and 'Would you say that Britain's cultural life is generally undermined or enriched by people coming to live here from other countries?' (1 = *undermined*, 7 = *enriched*). Higher scores indicate more positive attitudes to immigration.

A principal component analysis (direct oblimin rotation with Kaiser normalization) including all 18 items was run to confirm both the discriminant validity and internal reliability of the four continuous variables. The pattern matrix revealed four factors with Eigen factors greater than one corresponding to IMS, EMS, WD, and attitudes to immigration. However, one item ('According to my personal values, using stereotypes about other people is OK') was complex, loading primarily on IMS (.45) but also loading on EMS (-.37). Internal validity for IMS improved with this item removed ($\alpha = .83$), so the subsequent analysis used this 3-item scale. The revised 17-item model across the four variables accounted for 69% of the total variance with all factor loadings greater than .66. The four variables were discrete (all $r^2 < .18$).

Additionally, we wished to control for key socio-demographic variables: age, gender, level of education and political orientation. Participants confirmed their highest level of education on a scale from 1 ('no formal education') to 7 ('graduate studies, e.g., MSc, PhD'). A dichotomous political orientation measure was constructed based on participants' vote in the 2017 UK General Election; those who voted for right-leaning parties such as the Conservative or UK Independence Party (UKIP) were classified as conservative, whilst those who voted for left-leaning parties (Labour, Liberal Democrat, Green, Scottish National Party, and Plaid Cymru) were classified as liberal.

Results

Eight missing data values (Little's MCAR, $p = .301$) across the measures of IMS, EMS, WD, and attitudes to immigration were imputed using SPSS expectation-maximization (EM) based on other items in the same measure. Nine participants who failed to give their age were imputed with the mean age (39.8 years). Twelve outliers for IMS were transformed to the next lowest non-outlier value (3.25). One multivariate outlier was retained¹.

All but one of the 17 items used across the continuous variables displayed significant non-normality (either skewness and/or kurtosis > 2.0 SD). At a variable level, only WD was normally distributed. Transformations failed to correct these non-normal distributions, and bootstrapping was used whenever appropriate in subsequent analyses. Bootstrapping is one way of accommodating non-normal data by taking multiple subsamples with replacement from the original sample (Byrne, 2009; Zhu, 1997).

Correlations and descriptive statistics for all variables are shown in Table 1.

Predictors of the EU referendum result

A hierarchical multiple regression was run with the EU referendum vote as the outcome variable (see Table 2). The four socio-demographic control variables (age, gender, level of education, and political orientation) were entered as predictor variables in model 1 with IMS, EMS, WD, and attitudes to immigration added in model 2. Model 1 was significant, $F(4, 348) = 23.5, p < .001, R^2 = .213$, and accounted for 21% of the variance in the EU referendum vote. Model 2 was also significant, $F(8, 344) = 38.4, p < .001, R^2 = .472$, and accounted for 47% of the total variance in the EU referendum vote. The change between model 1 and model 2 was significant, $F(4, 344) = 42.1, p < .001, \Delta R^2 = .259$; IMS, EMS, WD, and attitudes to immigration explained an additional 26% of the variance over and above the socio-demographic variables. Lower WD ($\beta = -.12, p = .005, sr^2 = -.11$) and more positive attitudes to immigration ($\beta = .51, p < .001, sr^2 = .40$) both significantly predicted a Remain vote. The direct effect of both IMS ($\beta = .02, p = .72, sr^2 = .01$) and EMS ($\beta = -.02, p = .72, sr^2 = -.01$) on the EU referendum vote was not significant.

Validating the structural equation model

The path diagram shown in Figure 1 was evaluated using SPSS AMOS (version 23) with maximum likelihood (ML) estimation. Latent variables for IMS, EMS, WD, and attitudes to immigration were estimated based on the 17 items detailed in the methods section. To test the hypothesized moderation of IMS on the effect of EMS on WD, an interaction variable (IMS \times EMS) was constructed by multiplying the standardized versions of IMS and EMS. The error term of this interaction variable was allowed to co-vary with both IMS and EMS, from which it was derived. Age, gender, level of education, and political orientation were included as controls. Given the non-normality of the data, bootstrapping (1,000 samples) was used to assess the significance of the parameter estimates. West, Finch, and Curran (1995) found that non-normal data in SEM analyses may yield artificially high values of chi-square and may underestimate goodness-of-fit indices such as CFI. Nevertheless, the model was recursive and parsimonious (P-ratio = .79) and represented a good enough fit

¹ To check that these data cleaning approaches had not unduly influenced the results, we repeated the principle analyses removing those cases with missing data altogether (reducing the sample size to 338) and without adjusting the univariate outliers. For both the hierarchical multiple regression and the structural equation model, this made minimal difference to the results.

Table 1. Study 1: correlations and descriptive statistics for all variables (N = 353)

	M	SD	1	2	3	4	5	6	7	8	9
1. EU referendum vote	—	—	—								
2. Age	39.8	14.2	-.09	—							
3. Gender	—	—	-.14**	.04	—						
4. Level of education	4.70	1.34	.37***	.05	-.10*	—					
5. Political orientation	—	—	.28***	-.19***	-.10*	.12**	—				
6. IMS	5.48	1.17	.33***	.004	.06	.24***	.19***	—			
7. EMS	3.60	1.26	-.16***	-.09*	.05	-.10*	-.15**	-.06	—		
8. WD	3.72	1.24	-.24***	-.04	.12**	-.15**	-.01	-.14**	-.06	—	
9. Attitudes to immigration	4.35	1.51	.64***	.03	-.09*	.39***	.23***	.49***	-.24***	.24***	—

Notes. Gender: 1 = male, 2 = female, 3 = prefer not to say. Political orientation: 1 = conservative/right, 2 = liberal/left. IMS = internal motivation to respond without prejudice, EMS = external motivation to respond without prejudice, WD = willingness to disagree. Referendum vote: 1 = Leave, 2 = Remain. Att_Imm = attitudes to immigration (higher score = more positive).

* $p < .05$; ** $p < .01$; *** $p < .001$.

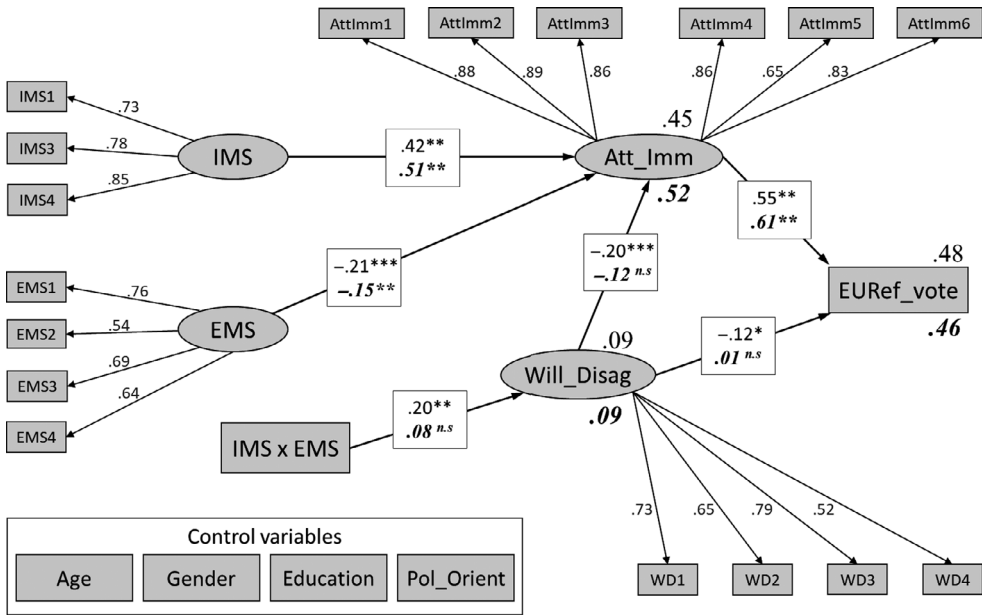


Figure 2. Structural equation model showing the effect of IMS, EMS, WD, and attitudes to immigration on the EU referendum vote with age, gender, level of education, and political orientation as controls. Notes. All coefficients standardized. Study 1 ($N = 353$) top number, not italicized; Study 2 ($N = 363$) bottom number, bold italicized. IMS = internal motivation to respond without prejudice. EMS = external motivation to respond without prejudice. Will_disag = willingness to disagree. Att_Imm = attitudes to immigration (higher score = more positive). EURef_vote = EU referendum vote (1 = Leave, 2 = Remain). Education = level of education. Pol_Orient = political orientation (1 = conservative/right, 2 = liberal/left). Factor loadings for latent variables apply to Study 1. * $p < .05$, ** $p < .01$, *** $p = .001$, n.s. = not significant (based on bootstrapped estimates).

for the data; $\chi^2(201, N = 353) = 439, p < .001, \chi^2/DF = 2.19, GFI = .90, CFI = .93, PCFI = .74, RMSEA = .058$. No post-hoc modifications were incorporated. The model with standardized coefficients is shown in Figure 2.

Overall, the model explained 48% of total variance in the EU referendum vote, 45% of variance in attitudes to immigration, and 9% of variance in WD. Non-normal data in SEM have been found to understate the standard errors (SE) of parameters resulting in inflated p -values (West *et al.*, 1995). However, even with more conservative bias-corrected bootstrapped p -values, all the hypothesized effects remained significant (see Table 3). Higher IMS ($\beta = .42, p = .004$), lower EMS ($\beta = -.21, p = .001$), and lower WD ($\beta = -.20, p = .001$) predicted more positive attitudes to immigration. More positive attitudes to immigration ($\beta = .55, p = .002$) and lower WD ($\beta = -.12, p = .014$) both predicted a Remain vote in the EU referendum. The interaction of IMS and EMS predicted WD ($\beta = .20, p = .004$). The indirect effects of IMS ($\beta = .23, LLCI = .16, ULCI = .30, p = .003$) and WD ($\beta = -.11, LLCI = -.19, ULCI = -.05, p = .004$) on the referendum vote were significant; higher IMS and lower WD predicted a Remain vote. Together with the direct effect, the total effect of WD on the EU referendum vote was negative and significant ($\beta = -.23, p = .002$); lower WD predicted a Remain vote. The indirect effect of EMS on the EU referendum vote was negative and significant ($\beta = -.12, LLCI = -.19, ULCI = -.05, p = .001$); lower EMS predicted a Remain vote. Removing the control

Table 2. Summary of hierarchical multiple regression analysis of variables predicting voting in the EU referendum vote

	Study 1 (N = 353)					Study 2 (N = 363)				
	β	sr^2	F	R^2	ΔR^2	β	sr^2	F	R^2	ΔR^2
Age	-.05	-.05				-.14**	-.14			
Gender	-.12*	-.12				.03	.03			
Education	.33***	.32				.19***	.18			
Pol_Orient	.25***	.24				.29***	.29			
Model 1			23.5***	.21	–			18.2***	.17	–
Age	-.08*	-.08				-.10*	-.10			
Gender	-.10*	-.09				.04	.04			
Education	.12**	.11				.04	.04			
Pol_Orient	.14**	.13				.09*	.08			
IMS	.02	.01				.05	.04			
EMS	-.02	-.01				-.02	-.02			
WD	-.12**	-.11				-.01	-.01			
Att_Imm	.51***	.40				.55***	.40			
Model 2			38.4***	.47	.26			34.0***	.43	.26

Notes. Att_Imm = attitudes to immigration, EMS = external motivation to respond without prejudice, IMS = internal motivation to respond without prejudice, Pol_Orient = political orientation, WD = willingness to disagree.

* $p < .05$; ** $p < .01$; *** $p < .001$.

variables individually from the model made minimal difference to the model fit and, in each case, still explained 47% of overall variance in the EU referendum vote. Excluding all four control variables at the same time reduced the overall share of the variance explained to 44%, with some deterioration in model fit compared with the full model; $\chi^2(145, N = 353) = 354, p < .001, \chi^2/DF = 2.44, GFI = .90, CFI = .94, PCFI = .79, RMSEA = .064$.

To further explore the interaction of EMS and IMS on WD, a Preacher–Hayes model 1 (Process version 3.1; Hayes, 2018) was run with IMS as the moderating variable (95% confidence interval, 1,000 bootstrap samples with age, gender, level of education, and political orientation as covariates). This confirmed our hypothesis that IMS does moderate the relationship between EMS and WD ($b_{\text{interaction}} = .13, p = .002$). EMS had no effect on WD for participants with mean IMS ($b = -.07, p = .18$) or high IMS ($b = .08, p = .26$). For those with low IMS, however, WD decreased significantly as EMS increased ($b = -.22, p = .002$) as shown in Figure 3.

Additional exploratory analyses

Given the impact of the four control variables (age, gender, level of education, and political orientation), representing 21% of total variance in the EU referendum result, we conducted additional exploratory analyses with a view to incorporating these into the structural equation model. All four socio-demographic variables were significant predictors of the EU referendum vote (see Table 3). However, level of education ($\beta = .12, p = .004, sr^2 = .11$) and political orientation ($\beta = .14, p = .001, sr^2 = .13$) had the strongest impact; more educated and more liberal participants were more likely to

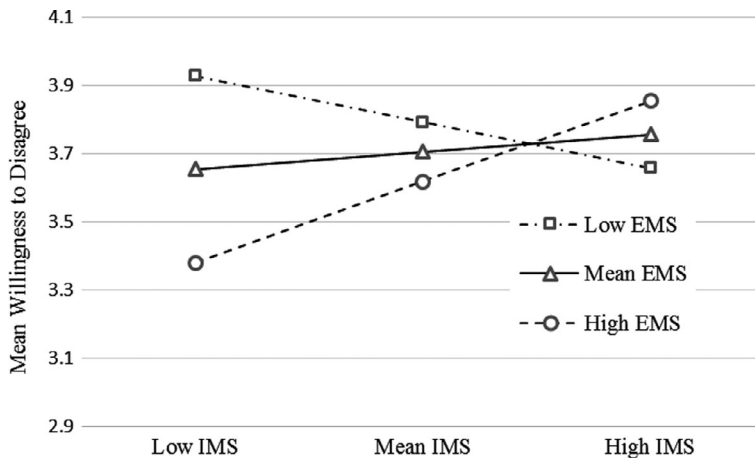


Figure 3. Mean willingness to disagree (scale 1–7) at low (–1 SD), mean, and high (+1 SD) levels of internal and external motivation to respond without prejudice.

Notes. IMS = internal motivation to respond without prejudice (scale 1–7). EMS = external motivation to respond without prejudice (scale 1–7).

vote Remain. Correlations also suggested that level of education and political orientation might mediate the relationship between other predictor variables and the EU referendum vote. A series of analyses using Preacher–Hayes model 4 with age and gender as covariates (95% confidence interval and 1,000 bootstrap samples; Hayes, 2018) confirmed several significant mediations (see Table 4). The effect of education on the EU referendum vote was mediated by IMS ($R^2 = .06$, $F = 8.0$, $p < .001$), WD ($R^2 = .04$, $F = 5.1$, $p = .002$), and attitudes to immigration ($R^2 = .15$, $F = 21.2$, $p < .001$). The effect of political

Table 3. Bias-corrected bootstrapped estimates for the hypothesized direct, moderated, and mediated effects on the EU referendum vote

Parameter	Study 1 (N = 353)					Study 2 (N = 363)				
	SE	β	LLCI	ULCI	p	SE	β	LLCI	ULCI	p
Direct effects										
IMS → Att_Imm	.089	.42	.31	.52	.004	.096	.51	.39	.61	.003
EMS → Att_Imm	.087	-.21	-.33	-.09	.001	.088	-.15	-.26	-.04	.007
WD → Att_Imm	.134	-.20	-.33	-.09	.001	.133	-.12	-.25	.01	.070
Att_Imm → EURef_vote	.016	.55	.45	.63	.002	.015	.61	.52	.69	.003
WD → EURef_vote	.030	-.12	-.21	-.03	.014	.030	.01	-.09	.11	.900
Moderated effects										
IMS × EMS → WD	.043	.20	.07	.32	.004	.053	.08	-.06	.21	.287
Mediated effects										
IMS → EURef_vote	.018	.23	.16	.30	.003	.021	.31	.23	.39	.002
EMS → EURef_vote	.015	-.12	-.19	-.05	.001	.018	-.09	-.17	-.02	.007
WD → EURef_vote	.024	-.11	-.19	-.05	.001	.025	-.07	-.15	.004	.062

Notes. Att_Imm = attitudes to immigration, EMS = external motivation to respond without prejudice, EURef_vote = EU referendum vote, IMS = internal motivation to respond without prejudice, WD = willingness to disagree.

Table 4. Study 1: exploratory mediations between level of education and political orientation on the EU referendum vote with age and gender as covariates

Mediator	Total model			Direct effect		Indirect effect		
	R^2	F	p	b	p	b	LLCI	ULCI
Level of education → EU referendum vote								
IMS	.064	8.02	<.001	.577	<.001	.132	.070	.220
EMS	.019	2.22	.086	.647	<.001	.023	-.004	.059
WD	.042	5.12	.002	.624	<.001	.065	.021	.130
Att_Imm	.154	21.25	<.001	.430	.001	.548	.387	.786
Political orientation → EU referendum vote								
IMS	.041	5.00	.002	.983	<.001	.270	.101	.511
EMS	.043	5.28	.001	1.07	<.001	.088	.009	.206
WD	.017	2.03	.11	1.24	<.001	.007	-.103	.133
Att_Imm	.074	9.33	<.001	.719	.004	.889	.529	1.385

Notes. Att_Imm = attitudes to immigration, EMS = external motivation to respond without prejudice, IMS = internal motivation to respond without prejudice, WD = willingness to disagree.

orientation on the EU referendum vote was mediated by IMS ($R^2 = .04$, $F = 5.0$, $p = .002$), EMS ($R^2 = .04$, $F = 5.3$, $p = .001$), and attitudes to immigration ($R^2 = .07$, $F = 9.3$, $p = <.001$).

Incorporating these mediations into the structural equation model, the direct paths from IMS ($b = -.02$, $p = .87$) and EMS ($b = .001$, $p = .94$) to the EU referendum vote remained non-significant and were excluded. The percentage of total variance in the EU referendum vote explained by the revised SEM increased slightly to 49%. Whilst the revised model was more complex, the P -ratio (.80) was similar and fit indices were only slightly worse than the original hypothesized model; $\chi^2(202, N = 353) = 470$, $p < .001$, $\chi^2/DF = 2.33$, $GFI = .90$, $CFI = .92$, $PCFI = .74$, $RMSEA = .061$. A simplified version of the revised model with standardized coefficients and bias-corrected bootstrapped probabilities is shown in Figure 4.

Discussion

Study 1 supported all our hypotheses. Positive attitudes to immigration and lower WD directly predicted a Remain vote in the UK 2016 EU referendum. Indirectly, mediated by attitudes to immigration, higher IMS and lower EMS also predicted a Remain vote. EMS positively predicted WD, but only at lower levels of IMS. A structural equation model reflecting these relationships (with age, gender, education, and political orientation as covariates) explained 48% of the EU referendum result.

STUDY 2

The primary purpose of Study 2 was to conduct a complete replication of Study 1 confirming the goodness of fit both to the original model and to the revised model which included two of the control variables, education and political orientation. Second, we wished to explore how our measure of WD related to an existing measure of PC. Strauts and Blanton (2015) developed the concern for political correctness (CPC) scale with two subscales. The emotion subscale (PC-E) measured the emotional reaction to non-PC

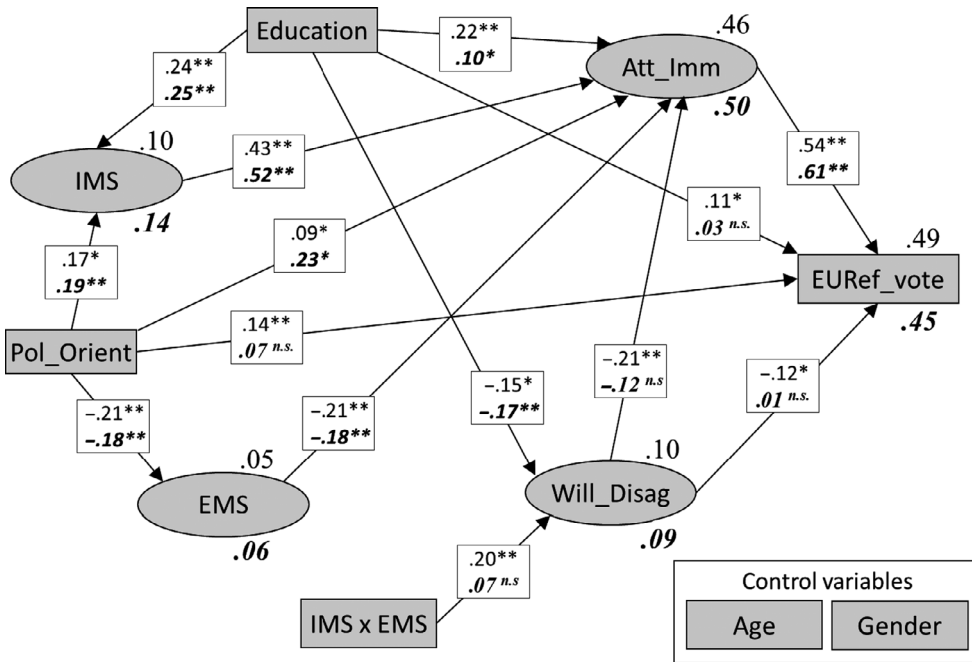


Figure 4. Simplified path diagram of a revised structural equation model showing the effect of level of education, political orientation, IMS, EMS, WD, and attitudes to immigration on the EU referendum vote with age and gender as controls.

Notes. All coefficients standardized. Study 1 ($N = 353$) top number, not italicized; Study 2 ($N = 363$) bottom number, bold italicized. IMS = internal motivation to respond without prejudice. EMS = external motivation to respond without prejudice. Att_Imm = attitudes to immigration (higher score = more positive). EURef_vote = EU referendum vote (1 = Leave, 2 = Remain). Education = level of education. Pol_Orient = political orientation (1 = conservative/right, 2 = liberal/left). * $p < .05$, ** $p < .01$, *** $p = .001$, n.s. = not significant (based on bias-corrected bootstrapped estimates).

language, whilst the activism subscale (PC-A) measured propensity to confront non-PC language. WD, originally intended as a surrogate measure of PC, is a unipolar scale such that high WD implies resistance to politically correct pressure. The CPC is also a unipolar scale, such that high PC implies adherence to politically correct norms. It was possible that these two scales simply reflected opposite ends of the same construct. Finally, we wished to test whether the CPC produced a better fit if it replaced WD in the model.

Methods

The study was pre-registered: <https://aspredicted.org/blind.php?x=9ei3ys>

Participants

Participants were recruited during 19-21 August 2019 exclusively through Prolific. Of the 398 participants who did the survey, 29 were excluded because they did not vote in the 2016 EU referendum. Six entries were duplicated; their first submission was retained. The final sample was 363 (267 women; 96 men) of whom 172 voted Leave and 191 voted

remain. Age ranged from 21 to 67 years ($M = 35.7$, $SD = 11.1$; minimum age was 21 below which participants would not have been eligible to vote in the 2016 EU referendum).

Design

As for Study 1, this was a correlational design with the EU referendum vote as the outcome variable, IMS, EMS, WD, and attitudes to immigration as predictor variables, and age, gender, education, and political orientation as covariates.

Procedure and materials

Procedure and materials were exactly as for Study 1, except for the inclusion of a measure of PC.

Measures

All measures were as for Study 1: IMS (3 items, $\alpha = .85$), EMS (4 items, $\alpha = .73$), WD (4 items, $\alpha = .77$), and attitudes to immigration (6 items, $\alpha = .91$).

Additionally, we included all nine items ($\alpha = .95$) from the concern for PC scale (Strauts & Blanton, 2015): four items from the emotional subscale ($\alpha = .92$; e.g., 'I feel angry when a person says something politically incorrect') and five items from the activist subscale ($\alpha = .94$; e.g., 'when a person uses politically incorrect words, I point it out to them and help educate them about the issues') on 7-point Likert scales (1 = *extremely disagree*; 7 = *extremely agree*). Higher scores imply greater PC. Whilst we had concerns about this measure (see the introduction), it was the best extant measure of PC.

Results

Thirteen missing data values (Little's MCAR, $p = .98$) across the continuous measures were imputed using SPSS expectation-maximization. Two outliers for IMS were transformed to the next lowest non-outlier value (2.33). Four multivariate outliers were retained. Whilst EMS and WD were approximately normally distributed, IMS, attitudes to immigration, and CPC all showed skewness and/or kurtosis greater than two standard deviations. All statistical analyses exactly replicated those used in Study 1 unless otherwise stated.

Correlations and descriptive statistics for all variables are shown in Table 5.

Predictors of the EU referendum result

A hierarchical multiple regression confirmed that IMS, EMS, WD, and attitudes to immigration explained an additional 26% of the variance over and above the control variables (age, gender, education, and political orientation); $F(4, 354) = 41.5$, $p < .001$, $\Delta R^2 = .26$. Together with the control variables, the overall model explained 43% of the total variance in the EU referendum vote (c.f. 47% in Study 1), $F(8, 354) = 34.0$, $p < .001$, $R^2 = .43$ (see Table 2). As in Study 1, more positive attitudes to immigration ($\beta = .55$, $p < .001$, $sr^2 = .40$) significantly predicted a Remain vote and the effect of both IMS ($\beta = .05$, $p = .37$, $sr^2 = .04$) and EMS ($\beta = -.02$, $p = .65$, $sr^2 = -.02$) on the EU

Table 5. Study 2: correlations and descriptive statistics for all variables (N = 363)

	M	SD	1	2	3	4	5	6	7	8	9	10
1. EU vote	—	—	—	—	—	—	—	—	—	—	—	—
2. Age	35.7	11.1	-.19***	—	—	—	—	—	—	—	—	—
3. Gender	—	—	.07	.002	—	—	—	—	—	—	—	—
4. Level of education	4.75	1.27	.24***	-.12*	.10	—	—	—	—	—	—	—
5. Political orientation	—	—	.38***	-.09	.06	.11*	—	—	—	—	—	—
6. IMS	5.50	1.17	.41***	-.09	.14**	.27***	.22***	—	—	—	—	—
7. EMS	3.83	1.19	-.19***	-.08	.13*	-.09	-.17***	-.16**	—	—	—	—
8. WD	4.04	1.20	-.20***	.09	-.17***	-.18***	-.11*	-.31***	-.07	—	—	—
9. Att_Imm	4.41	1.41	.64***	-.13*	.03	.29***	.38***	.58***	-.28***	-.28***	—	—
10. CPC	4.04	1.42	.41***	-.11*	.18***	.25***	.25***	.54***	-.14*	-.23***	.59***	—

Notes. Gender: 1 = male, 2 = female, 3 = prefer not to say. Political orientation: 1 = Conservative/right, 2 = Liberal/left. Att_Imm = attitudes to immigration (higher score = more positive), CPC = concern for political correctness, EMS = external motivation to respond without prejudice, IMS = internal motivation to respond without prejudice, Referendum vote: 1 = Leave, 2 = Remain, WD = willingness to disagree.
 * $p < .05$; ** $p < .01$; *** $p < .001$.

referendum vote was not significant. Unlike Study 1, however, the effect of WD on the EU referendum vote ($\beta = -.01, p = .92, sr^2 = -.01$) was not significant.

Validating the structural equation model

A replication of the original structural equation model resulted in levels of fit with the data that were only marginally inferior to Study 1, but still acceptable, χ^2 (201, $N = 363$) = 471, $p < .001$, $\chi^2/DF = 2.35$, GFI = .90, CFI = .92, PCFI = .73, RMSEA = .061, and accounted for 46% of the EU referendum result (c.f. 48% in Study 1; see Figure 2). However, three paths that were significant in Study 1 ceased to be significant in Study 2 (see Table 3). First, the interaction between IMS and EMS did not predict WD ($\beta = .08, p = .29$). Second, there was no direct effect of WD on the EU referendum vote ($\beta = .01, p = .90$). Finally, there was no direct effect of WD on attitudes to immigration ($\beta = -.12, p = .07$) and the indirect effect of WD on the EU referendum vote was also non-significant ($\beta = -.04$, LLCI = $-.10$, ULCI = $.003, p = .07$).

We also replicated the revised version of the model (with education and political orientation included in the model itself, rather than as control variables). Once again, model fit was only slightly worse than Study 1, χ^2 (202, $N = 363$) = 490, $p < .001$, $\chi^2/DF = 2.43$, GFI = .89, CFI = .92, PCFI = .73, RMSEA = .063, and accounted for 45% of the EU referendum result (c.f. 49% in Study 1; see Figure 4).

Political correctness, willingness to disagree, and motivation to respond without prejudice

Participants who scored highly on the 9-item CPC scale were more likely to be younger ($r = -.11, p = .04$), more highly educated ($r = .25, p < .001$), politically left-wing ($r = .25, p < .001$), and female ($r = .18, p = .001$). CPC correlated positively with IMS ($r = .54, p < .001$) and attitudes to immigration ($r = .59, p < .001$), and negatively with EMS ($r = -.14, p = .01$) and WD ($r = -.23, p < .001$).

A principal component analysis (direct oblimin rotation with Kaiser normalization) revealed that all nine items of the CPC loaded onto only one factor, which suggested that the emotional and activist subscales identified by Strauts and Blanton (2015) were not discrete. A further principal component analysis was run including all 20 items across IMS, EMS, WD, and CPC. This revealed four factors with eigenvalues greater than one which exactly corresponded to the four variables, with all loadings greater than .61 and no cross-loadings greater than .32. Once again, the nine items of the CPC all loaded onto the same factor and did not separate the two subscales.

Replacing WD with the 9-item CPC in the hierarchical multiple regression made minimal difference to the result; the total model explained 44% of the total EU referendum result, $F(8,354) = 34.0, p < .001, R^2 = .44$. Consistent with WD in Study 2, CPC did not have a significant effect on the EU referendum vote ($\beta = .03, p = .64, sr^2 = .02$).

Replacing WD with the 9-item CPC in the original structural equation model materially impaired the fit to the data, χ^2 (321, $N = 363$) = 1,092, $p < .001$, $\chi^2/DF = 3.40$, GFI = .79, CFI = .87, PCFI = .74, RMSEA = .081, but still accounted for 44% of variance in the EU referendum vote. Consistent with WD, the interaction between IMS and EMS did not significantly predict CPC ($\beta = -.07, p = .18$) and there was no significant direct effect of CPC on the EU referendum vote ($\beta = -.01, p = .79$). However, unlike WD, the direct effect of CPC on attitudes to immigration ($\beta = .38, p < .001$) was significant as was the indirect effect of CPC on the EU referendum ($\beta = .23$; LLCI = $.16$, ULCI = $.34, p = .001$).

Discussion

Study 2 confirmed the key proximal influence of attitudes to immigration in the EU referendum result and the indirect effects of IMS and EMS. However, WD ceased to have any direct or indirect effect on the EU referendum result, although the indirect effect ($\beta = -.07, p = .06$) was only marginally non-significant even when using the more conservative bias-corrected bootstrap estimate. The moderating effect of IMS on the relationship between EMS and WD also ceased to be significant. Nevertheless, the structural equation model had acceptable fit with the data and still explained 46% of the EU referendum result.

The additional measure of political correctness (CPC; Strauts & Blanton, 2015) was discrete from WD, IMS, and EMS. The hierarchical multiple regression explained slightly more of the EU referendum vote with CPC instead of WD, although CPC itself did not significantly predict the result. However, goodness of fit declined when CPC replaced WD in the structural equation model.

GENERAL DISCUSSION

Across two correlational studies, we explored the roles of motivation to respond without prejudice, willingness to disagree, and attitudes to immigration in the UK's vote to leave the EU. Our results are largely compatible with and complementary to the previous psychological research on the Brexit result and underscored the central role of immigration in the EU referendum vote. Meleady *et al.* (2017) showed that positive contact with immigrants predicted pro-immigrant prejudice which in turn predicted an intention to vote Remain. Van de Vyver, Leite, Abrams, and Palmer (2018) showed that a dangerous worldview and conservatism predicted voting in the referendum, mediated by perceived intergroup threat from (European) immigrants. Golec de Zavala *et al.* (2017) showed that the perceived threat from immigrants mediated relationships between collective narcissism, RWA and SDO, respectively, with the EU referendum vote. Whilst previous research emphasized the role of various measures of prejudice on the Brexit vote, our results reflected the influence of motivation to respond without prejudice.

The current research supports Plant and Devine's (1998) assertion that IMS and EMS were discrete. This contrasted with Dunton and Fazio (1997) who identified two very similar constructs, Concern with Acting Prejudiced and Restraint to Avoid Dispute, which were subscales of a single Motivation to Control Prejudiced Reactions scale. In our research, both Study 1 ($r = -.06, p = .14$) and Study 2 ($r = -.16, p = .002$) found a small inverse relationship between IMS and EMS, consistent with that found originally by Plant and Devine (1998; $r = -.14$). Plant and Devine (2001, 2009) showed that EMS and IMS generated very different affective, attitudinal, and behavioural responses. People with a high IMS were likely to maintain an active commitment to live up to those non-prejudicial values (Monteith, 1993; Plant & Devine, 2009) that may ultimately lead to the reduction or elimination of implicit prejudice (Monteith, Sherman, & Devine, 1998). Conversely, those with high EMS (and low IMS) had little interest in changing their prejudicial attitudes and were primarily concerned with avoiding any social sanction (Crandall, Eshleman, & O'Brien, 2002; Plant & Devine, 2009).

This inverse relationship between IMS and EMS was evident in the Brexit vote. Our finding that high IMS predicted a Remain vote is consistent with Blinder *et al.*'s (2013) conclusion that motivation to respond without prejudice was an important variable in political choices where outgroups (such as immigrants) were prominent. However, both

our studies also highlighted the independent effect of EMS. Whilst not as great as IMS, EMS had a significant and opposite influence on the EU referendum; higher EMS predicted a vote to leave.

Blinder *et al.* (2013) also suggested that anti-immigrant political choices were consistently mitigated when the anti-prejudice norm was made more salient. Arguably, the high-profile accusations during the EU referendum campaign that Leave supporters were racist (Durrheim *et al.*, 2018; Gidda, 2016; ITV News, 2016) did make the anti-prejudice norm salient. However, the effect may have been to polarize voter opinion, reinforcing pro-immigrant views amongst Remainers and anti-immigrant sentiment amongst Leavers. Given a strong anti-prejudice norm in Britain (Blinder *et al.*, 2013; Ford, 2008), the accusation of racism by some Remain supporters might be construed as an attempt to apply normative pressure (Moscovici, 1976) on Leave sympathizers by stigmatizing the issue of immigration. However, the effort required to hide prejudice may fuel frustration and resentment (Monteith, Spicer, & Tooman, 1998) and provoke a backlash that further exacerbates prejudicial views (Gaertner & Dovidio, 1986; Legault, Gutsell, & Inzlicht, 2011; Wyer, 2007). Although the current research did not test this hypothesis, it seems plausible that such a backlash may have been reflected in the vote to leave the EU.

We also explored the role of PC in the EU referendum vote. In a series of three experiments (Plant & Devine, 2001), participants with low IMS and high EMS experienced a dissonance between their internal views and the requirement to hide these externally. They expressed frustration when faced with politically correct pressure, responded defensively, exhibited more prejudicial attitudes, and reacted with more defiant behaviour. Such an effect may have been at play in the 2016 US presidential election; Conway *et al.* (2017) demonstrated that priming moderate voters with politically correct stimuli increased support for Donald Trump. In Study 1, we found a significant effect of willingness to disagree with such politically correct pressure, both directly on the EU referendum result and indirectly via attitudes to immigration; those with a low willingness to disagree were more likely to vote Remain.

Finally, we tested a further iteration of our original hypothesized model by incorporating two of the initial control variables into the main path model. This revealed the mechanisms whereby education and political orientation influenced the EU referendum result. Greater education predicted a Remain vote, mediated by more positive attitudes to immigration, higher IMS, and lower WD. A liberal/left-wing political orientation predicted a Remain vote mediated by more positive attitudes to immigration, higher IMS, and lower EMS. Whilst the fit of the data was not as good for this revised model compared with the original, it still explained 49% of the variance in Study 1 and 45% in Study 2.

Limitations and future research directions

Whilst the current research involved two large and broadly based samples, they were not fully representative of the UK population. They were more female, more highly educated, and politically more left-wing. However, there was no evidence of systematic bias and key socio-demographic variables were controlled for in the analysis. There were discrepancies in some of the results, most notably over the role of WD, which showed a significant direct and indirect effect on the EU referendum in Study 1 but failed to do so in Study 2. Additionally, our hypothesis that IMS would moderate the effect of EMS on WD was supported in Study 1 but not in Study 2. Nevertheless, our model showed good enough fit

with the data in both studies. It should be stressed that these were correlational studies. Whilst we believe that the hypothesized model is plausible and consistent with existing theory, no experimental tests were employed to validate the direction of causality.

There is a lack of consensus on PC as a construct in the psychological literature. Past researchers have conceptualized PC variously as a presentation management device (Barker, 1994), as a process of self-censorship (Suedfeld *et al.*, 1994) and as an emotional reaction to, or willingness to confront prejudicial behaviour (Strauts & Blanton, 2015). Lalonde *et al.* (2000) identified two opposing groups that they called PC ‘crusaders’ and PC ‘bashers’. Andary-Brophy (2015) drew a distinction between politically correct beliefs, motivated by political ideology, and politically correct language, motivated largely by a concern for impression management. Dickson (2017) described PC as an ‘ism’ (similar to sexism or racism) composed of cognitions, affect, and behaviours. Given its prominence in the Brexit debate, and more broadly in political dialogue in the United Kingdom and the United States, PC deserves greater investigation as a psychological construct.

The current research measured willingness to disagree (WD), originally intended as a surrogate for PC. In Study 2, we compared WD with the concern for political correctness scale (CPC; Strauts & Blanton, 2015) to test whether these two measures might reflect opposite poles of the same construct. Whilst WD and CPC are inversely correlated ($r = -.23$, $p < .001$), a principal component analysis showed that they are discrete. Subsequent to our fieldwork, a more recent study (Smith & Percy, 2019) has used an adapted version of the CPC, which included six items each for high PC and low PC. Nevertheless, the Smith and Percy (2019) measure still refers explicitly to PC raising the potential for a social desirability bias. There remains a need to develop a measure of PC that is both robust and pragmatic.

More broadly, the current research cannot pretend to give a comprehensive explanation of the EU referendum result. Our findings represent a complementary perspective to the other social psychology research so far published, but future research might explore how the various psychological variables now associated with the EU referendum result might be integrated into a single overall theoretical picture. To date, social psychologists have focused on the immigration aspect of the Brexit result, to the exclusion of the economic dimension. The current divide between economic/demographic explanations of Brexit on the one hand and cultural/psychological explanations on the other seems artificial. More interdisciplinary research would help to give a full account of the causes of Brexit.

Finally, future research might usefully explore the post-Brexit psychological landscape in the United Kingdom. The result seems to have exposed a highly divided society (Corbett, 2018; Hobolt, 2016) underpinned by powerful negative stereotypes between Leavers and Remainers. This seems to have become a battle of different worldviews: inward looking versus outward looking, neo-liberal versus neo-conservative, globalism versus xenophobia, metropolitan versus rural, and educated versus less educated. These divisions may prove highly corrosive of social cohesion and political debate. Applied social and political psychology should address the growing gulf within UK society, and suggest means of repairing it.

Conclusions

The current research identified motivation to respond without prejudice as a key, but indirect, determinant of the UK’s referendum vote in June 2016 to leave the EU (Brexit). Immigration was a highly emotive issue during the referendum campaign, with Remain

voters accusing Leavers of racism and Leave voters accusing Remainers of stifling free speech. Remainers had higher internal motivation, borne out of personal commitment, to respond without prejudice. Leave voters, by contrast, had higher external motivation to respond without prejudice, reflecting a desire to avoid social disapproval. We also explored the role of PC in the Brexit result. In Study 1, those voters with a high willingness to resist politically correct pressure were more likely to vote Leave. Our results suggested a backlash amongst some voters, who feel that PC has ‘gone too far’, that may have reinforced the Leave vote. In a society where the anti-prejudice norm has become prevalent, motivation to respond without prejudice may determine key political choices such as Brexit.

Conflicts of interest

All authors declare no conflict of interest

Author contributions

Jonathan W. P. Bowman (Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Project administration; Resources; Software; Validation; Visualization; Writing – original draft; Writing – review & editing) Keon West (Supervision).

Data availability statement

The data that support the findings of this study are openly available in OSF at https://osf.io/7nj25/?view_only=b312da691dc94c06937704ad164de6ca, reference number osf.io/7nj25.

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