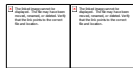


[Skip to main content](#)

Thank you for visiting nature.com. You are using a browser version with limited support for CSS. To obtain the best experience, we recommend you use a more up to date browser (or turn off compatibility mode in Internet Explorer). In the meantime, to ensure continued support, we are displaying the site without styles and JavaScript.

1. [nature](#)
2. [palgrave communications](#)
3. [comment](#)
4. [article](#)

[Menu](#)



[Search E-alert](#) [Submit My Account](#)

Comment | Open | [Published: 15 January 2019](#)

Prejudice and the Brexit vote: a tangled web

- [Paul B. Hutchings¹](#) &
- [Katie E. Sullivan¹](#)

Palgrave Communications volume 5, Article number: 5 (2019) | [Download Citation](#)

Subjects

- [Politics and international relations](#)
- [Psychology](#)

Abstract

The decision of the UK public in July 2016 to vote to leave the European Union was greeted with surprise within the UK and across the world. However, should we really have been surprised? Surveys of attitudes towards freedom of movement to the UK over the last 10 years have suggested an increasing negativity regarding immigration, and many debates before and after the vote have raised the issue of whether prejudice played a role in the outcome of the referendum. It is only within the last 12 months that a number of research

study findings have started to provide a more coherent, data-informed evidence-base suggesting that voting behaviour in the referendum may have correlates to prejudice personality styles, nationalism, Islamophobia, and implicit/explicit prejudice. We argue that recent evidence suggests that levels of prejudice towards “others”™ was a factor in the Brexit vote and that the attitudes underlying this vote must be explored in greater detail through cross-disciplinary scientific research, with legitimate concerns recognised and fallacies challenged.

Introduction

The referendum on membership of the European Union (EU) in June 2016, more commonly known by the portmanteau *Brexit* (Britain exit), highlighted deep divisions in the United Kingdom (UK). Regardless of the final overall outcome of the vote, campaigning before the referendum and discussions afterwards have raised issues relating to immigration, sovereignty, the economy, and particular representations of the cultural way of life in the UK. Many of these discussions, particularly in mainstream and social media, often tend to focus upon single issues whilst excluding others; immigration news stories may be separated from news stories about the economy or jobs and even when they are linked this tends to be at a fairly surface level. Whilst this paper is an informal opinion piece based upon empirical evidence, we argue that the intricate interplay between many of these issues, explored over decades of research in a number of related areas such as psychology, sociology, and political science, can help to explain people’s voting in the EU referendum and current prejudice attitudes that exist in the UK towards racial and cultural groups.

Whilst overt, blatant displays of prejudice have diminished over the last 50 years they still exist and sit alongside more covert, subtle forms of prejudice. These may take the form of unconscious biases, perceptions of cultural differences, and ethnocentrism. However, this must also be considered in the wider context of the rise in populism across the globe (Müller, 2017), dissatisfaction with supranationalism leading to support of radical left and right parties in the European Union (Akkerman et al., 2017; Beaudonnet and Gomez, 2016), and legitimate concerns that people may have regarding their national identities (Goodwin and Heath, 2016). Nonetheless, the ability to reduce prejudice against individuals whilst recognising and debating the wider potential causes of these prejudices is one that we hope to address in this paper. We have deliberately tried to avoid using the term “racism”™ in this paper where possible as we follow Brown’s (2010) belief that the term “prejudice”™ can be regarded as synonymous in the social psychological perspective with sexism, racism, homophobia, and so on.

Complexities of prejudice

An immense amount of research has been carried out over the last 100 years on attitudes towards members of same and other racial and cultural groups. Whilst the basic premise of the word prejudice is that a pre-judgement is formed about a person based upon their group membership (e.g., pre-judging a person purely based upon their ethnicity), theoretical advances have led us to the point where we understand that prejudice has a cognitive component (belief about a person or group), an affective component (feeling) and a conative component (an associated behavioural action). Therefore, moving beyond the original pre-judgement theory, we can consider prejudice to be an individual attitude (although it may be

held by a vast majority of group members) towards groups and/or their members which either creates or maintains hierarchical relations between groups (Dovidio et al., [2013](#)).

As well as improvements in theoretical understanding, methodological improvements have also allowed us to explore prejudice at a far more nuanced level. The ability to measure conscious attitudes toward groups (explicit prejudice) or examine behaviour in interactions has been added to with the ability to study subconscious attitudes (implicit prejudice) using tools such as the Implicit Association Test (Greenwald et al., [1998](#)) and functional magnetic resonance imaging (fMRI) to examine brain structure and function processes. Whilst questions exist regarding whether implicit prejudice predicts direct discrimination, and whether it reflects a lack of exposure to cultural knowledge rather than unconscious bias (Lamont et al., [2017](#)), these measures provide us with a greater ability to understand prejudices at an individual level than we previously had. However, to be able to tackle issues in society it is also important for us to be able to find broader categories of prejudice that, nonetheless, create sub-categories of the too-encompassing ‘prejudiced’ or ‘not prejudiced’. A model of prejudice that we use in much of our research is the two-dimensional model of Son-Hing et al., ([2008](#)) that takes scores on implicit and explicit prejudice to categorise people into four prejudice subtypes. This combination of conscious and unconscious attitudes provides a more comprehensive account of people’s prejudices than can be calculated separately, and helps to further explain some concepts that have existed for a number of years.

Those who score low on both implicit and explicit prejudice measures are classed as Truly Low Prejudiced in the Son Hing et al. ([2008](#)) model (we prefer the term *Egalitarian* as we feel it captures the true essence of these people); they show little bias towards favouring their ingroup over their outgroup, show empathy and understanding about issues that may affect outgroup members, and are the least likely to discriminate against outgroup members. Whilst one might hope that the majority in our society would act in this way, our findings consistently show that they make up between 23–30% of our participants (e.g., Sullivan and Hutchings, [2018a](#), [2018b](#)).

People scoring high on implicit (unconscious) prejudice but low on explicit (conscious) prejudice are classed as *Aversive Racists* (ARs)^{[Footnote 1](#)}. Research suggests that they may not consciously believe that they are prejudiced but their conative actions may betray subconscious attitudes that can result in forms of discrimination (Dovidio and Gaertner, [2004](#)). Kovel ([1970](#)), who coined the AR term, suggested that this type of person may not actively dislike people of other groups, and would likely be mortified if it were suggested that this were the case. However, they may feel uneasy around people of different groups, may avoid interactions and keep their distance so as not to feel uncomfortable. Whilst this may not involve conscious prejudice and discrimination it can lead to similar outcomes. Whether it be non-inclusion in interactions or uncomfortable interactions, being less likely to be hired for work positions due to awkwardness in the interview or even not being invited to interview in the first place, the impact upon the outgroup member is often the same as if old-fashioned prejudice had been at work. This group tends to be the largest of our groups in our studies, with 25–35% of our participants tending to fall into this category (Sullivan and Hutchings, [2018a](#), [2018b](#)).

Our third subgroup, *Principled Conservatives* (PC), are defined by scoring low on implicit prejudice but high on explicit prejudice. This may, at first, appear contradictory; why would someone consciously feel prejudice toward outgroups when their subconscious attitudes do

not match? The answer to this seems to be linked to attitudes regarding what people are entitled to from a society. PCs appear to have concerns regarding state or legal interference in what they believe should be an individual's responsibility. Affirmative action to help disadvantaged group members is seen as giving an unfair advantage at best, or discrimination against the ingroup at worst. Whilst this may seem reasonable on the face of it in that, if anything, no discrimination is being shown, this view tends to dogmatically ignore that not all groups are equal and that state and legal intervention is sometimes required to address historical, hierarchical, and changing issues in society. Because the conscious intention and actions will likely lead to negative outcomes for outgroup members it is easy to see why this could be construed as overtly prejudiced behaviour when viewed in isolation. This group tends to be marginally the smallest of our subtypes, with between 20%–26% of participants falling into this category (Sullivan and Hutchings, [2018a](#), [2018b](#)).

Our final prejudice subtype group are those who score high on both implicit and explicit prejudice; *Modern Racists* (MR). These people both feel subconsciously and report consciously that they hold prejudices towards outgroup members. In many ways this is the prototype group that people are likely to think of when hearing the words *prejudice* or *racist*. Between 25%–30% of our participants tend to fall into this category (Sullivan and Hutchings, [2018a](#), [2018b](#)); that may appear to be a surprisingly high number, but this has been supported across social surveys over a number of years with similar or even higher figures (NatCen Social Research, [2014](#)).

Both Egalitarians and Aversive Racists are argued to be on the 'left' spectrum of the political divide, with an interest in social justice and a shared society (Son-Hing et al., [2008](#)). Conversely, Principled Conservatives and Modern Racists are therefore considered to be on the 'right' of the political divide, with more of a focus upon personal responsibility and individualism (ibid). Whilst it is clear that a direct correlation cannot be drawn between political affiliation and prejudice subtype (right-wing supporting Egalitarians or Aversive Racists no doubt exist) it does provide us with a useful framework with which to examine some of the wider issues in our society relating to prejudice.

Complexities of the Brexit vote and prejudice

It is difficult to provide a clear narrative on how much prejudice attitudes played a role in the Brexit vote, largely because a multitude of social issues were caught up in a binary referendum question of whether to leave the EU or remain a member. However, there can be no doubt that issues relating to prejudice were paramount in many of the discussions leading up to the vote in 2016 (Berry, [2016](#); Geddes, [2016](#); Vasilopoulou, [2016](#)). Those that may appear to be straightforward, such as the focus upon immigration numbers, are tied to additional areas such as availability of jobs or funding of additional services such as in schools and hospitals. Even those issues that do not appear to have a direct link to individuals and groups, such as the argument that leaving the EU would allow the UK to maintain sovereignty and make its own laws, lean towards concepts of nationalism; 'we' will not be told what to do by 'others' from the continent. Despite having a proportional representation on all EU parliaments and committees, the discourse that 'they' are in charge of the EU and would be in control of our nation was a powerful rhetoric throughout the referendum campaign.

There can be little doubt that issues of immigration and border control played a role in the attitudes and subsequent decisions that many people made in casting their vote. The release

of migration statistics shortly before the referendum vote in May 2016 showed that for the year ending 2015 net migration of EU citizens to the UK was 184,000 whilst non-EU net migration was 188,000, both similar figures to the previous year (Office for National Statistics, [2016](#)). Within the overall figure, 308,000 were classified as migrating for work purposes and 130,000 of these (42%) arrived looking for work. There were also over 41,000 asylum applications from countries such as Iran, Pakistan, Iraq, Eritrea, Afghanistan and Syria, an increase of 30% on the previous year but still well below the 2002 figure of 103,000 applications (Office for National Statistics, [2016](#)). The argument that 400,000 people from outside of the UK would be added, annually, to the population was fertile data for those wishing to use this information to influence people's votes.

We have known for a number of years that attitudes toward immigrants and immigration have been changing. For example, Abrams and Houston ([2006](#)) found that attitudes toward legal migration in the 2005 National Survey were largely positive, with 48% of their respondents reporting being positive about legal migration and 19% negative (but see Meuleman et al. [2009](#), for differences across a wider European perspective). Less than 10 years later a Migration Observatory survey of the perceived costs and benefits of migration showed a dramatic reversal of this figure, with 53% reporting negativity and 21% being positive about immigration, although this appears to have softened somewhat since the referendum vote (Blinder and Richards, [2018](#)). During this time the UK has experienced, along with much of the world, the fallout from the global banking crisis of 2008. It has also experienced a number of years of "austerity measures" implemented by successive governments to balance the books as a result of that crisis. Whether expressly felt or simply perceived by people, there can be few in the UK who have not been aware of this over the last 10 years. Realistic conflict theory (Campbell, [1965](#)) suggests that, at a time when concern over jobs, wages, and resourcing of social facilities are seen as critical issues in society, competition with outgroups for resources will impact upon people's attitudes. It must also be recognised that this is not purely a UK issue, with these concerns being voiced across much of Europe (e.g., Ceobanu and Escandell, [2008](#); Ponce, [2017](#)).

The complexity of society, however, rarely fits a newspaper headline. Data from Joseph Rowntree Foundation found that, whilst the 20 areas reporting lowest educational attainment in the UK voted leave in the EU referendum and the 20 areas with highest educational attainment voted remain, it is not simply a case of educational attainment; rather, it is an issue of relative deprivation and a feeling of being "left behind" in society (Goodwin and Heath, [2016](#)). In a similar vein, Colantone and Stanig ([2016](#)) found that attitudes towards migration were better predicted by the effects of "import shock" of goods impacting manufacturing in an area than levels of migration to that area itself, although the Joseph Rowntree Foundation findings do suggest that a sudden influx into an area (5-10% of a local population change in 10 years) does correlate with percentage of leave voters in those areas. Interestingly, and in support of Allport's ([1954](#)) seminal work on prejudice and discrimination which examined how intergroup contact could work to reduce prejudice, a fascinating comparison by Kaufmann and Harris ([2015](#)) sheds light on why some of the areas with the highest levels of immigration voted remain in the EU referendum whilst other areas with little immigration voted leave and cited immigration as a major issue. They found that positive attitudes towards migrants tended to be greatest in a locale that contained the highest number of migrants in an area, but that views were more negative outside of this local area. The finding itself cannot be more than marginally explained by those who do not like migrants moving from the area, and appear to be better explained by Allport's ([1954](#)) assertion that contact between groups fosters better understanding and tolerance. Meanwhile,

those outside of this area may look with concern at these diverse neighbourhoods and fear that they may experience this next, not having had the opportunities for contact in their current residential area.

The context of the Brexit vote must therefore be considered in terms of economic and social worries, opportunities to get on in life, *and* prejudice towards outgroups. It may be too simplistic to say that Brexit was a result of prejudice, but it would also be foolish to deny the impact that it had, in many nuanced ways.

Contemporary prejudice in the UK

There are many arguments within the field of prejudice and discrimination regarding whether prejudice has truly reduced over time or whether it has merely turned into something else; to use the dual-process model as an example, are some Modern Racists of the past now Aversive Racists, not outwardly prejudiced but still uncomfortable around other groups? Certainly, what Pettigrew and Meertens (1995) called "hot, close and direct" blatant racism has declined; however, it may be that it has been replaced with a subtle prejudice that is "cool, distant and indirect" (Pettigrew and Meertens, 1995, p. 57). One of the problems that we do face, however, is that the language of the past literature can be restricting or confusing at best; at worst, it can be weaponised. Despite Muslims making up a small proportion of the EU population there is evidence that negative attitudes toward Muslims is increasing in the UK, and may have played a role in the Brexit vote (Swami et al., 2017). Yet accusations of racism are often met with a response of "Islam is not a race, it is an ideology, therefore I am not being racist". Whilst this may strictly be true, although it is currently unclear whether people psychologically associate being Muslim with being of an outgroup ethnicity and culture (cf. Nosek et al., 2010), it excuses the prejudice instead of addressing it. Similarly, it can be difficult to argue with someone that they are being racist when their ethnicity is similar to the person that they are discriminating against (e.g., a Caucasian British person being discriminatory towards a Caucasian person from another European country). Therefore, we argue that what we are faced with here is *othering* rather than racism. The threats to culture, way of life, prosperity and opportunities, come from various outgroups; but they are all "others".

Whilst it is now just over two years since the Brexit vote, data examining the role of prejudice in this vote and subsequent attitudes are now starting to appear and do not make good reading for the cohesiveness of UK society. Findings from a study by de Zavala et al., (2017) show that higher scores on Right-wing authoritarianism and Social dominance orientation measures correlate with negative attitudes toward immigration and that these attitudes, in turn, were linked to voting behaviour in the EU referendum in their sample. Similarly, increased scores on nationalism and authoritarianism measures have been found to correlate with right-wing voting intentions and to have been predictive of support for the Brexit leave vote and opposition to immigration and the European Union, particularly in relation to free movement of labour (Zmigrod et al., 2018). Our own research on just over 200 participants found that 80% of leave voters were from the Principled Conservative or Modern Racist sub-categories of the dual process model. Interestingly, those classified as Aversive Racists tended to vote to remain in the European Union in our study. At this stage it is unclear why they did so but it highlights the complexity of such a vote and suggests that we must go beyond a mere "racists dislike the European Union and those who dislike the European Union are racists" explanation of the Brexit referendum result that has dominated many discussions since the vote. Therefore, if Brexit brings nothing else, it

provides the data that must give fresh impetus for us to look honestly at ourselves as a society regarding prejudice and discrimination, and also at our explanations for behaviour. In addition, it is important to recognise that the issues underpinning Brexit are not isolated to the UK but appear to exist across Europe (MÅ¼ller, [2017](#)), and so should be addressed at a local and more global level.

What have we learnt about prejudice from the Brexit vote?

We fully realise the enormity of what we say when we state that over 70% of the UK population is prejudiced. ‘Surely not’, ‘not me’, ‘we are a tolerant society’ are all natural responses; but let us look back at what we have considered as prejudice. Only one of our four subtypes can be considered to be not prejudiced (Egalitarians), either consciously or subconsciously; however, only one of our four subtype groups *would* consciously consider themselves to be prejudiced, the Modern Racists. Aversive Racists would not want to be prejudiced and may discriminate inadvertently or may explain it away to themselves as avoiding discomfort. Principled Conservatives are not likely to consider themselves to be prejudiced, as they are merely insisting that people are treated according to their own abilities and what they have earned in society. However, each of these three subtypes can impact negatively upon outgroups in their own way. If we return to our widely supported definition of prejudice, each of the three groups in their own way are made up of individuals with attitudes towards groups and/or their members which either create or maintain the hierarchical relations between groups, as defined originally by Dovidio et al. ([2013](#)). We must move away from the idea of prejudice and discrimination as being hot, direct, in your face racism. No doubt this still exists but it is joined by a more ambiguous ‘life would be so much nicer without all these foreigners around’, ‘they’re getting more than me, it’s not fair’, ‘I don’t feel comfortable with people who aren’t like me’ othering. It all adds up.

So what have we learnt about prejudice from the Brexit vote? The issues that face us have been recognised, explored and set out many times, albeit in different contexts such as racial prejudice. The Brexit vote has not necessarily changed UK society, but it has certainly highlighted some of the divisions and attitudes that often lie beneath the surface. Therefore, Brexit provides us with an opportunity to engage with the public at a time when it is most apposite. The vote to leave the European Union highlighted some uncomfortable truths in the UK that many do not wish to acknowledge, let alone discuss. Prejudice exists in many forms, and Brexit has highlighted how intrinsic it has become within our society and how poorly we recognise it. Our role, as academics and practitioners across disciplines, and as individuals in society, must be to address prejudice and discrimination towards individuals whilst also encouraging healthy debate about the underlying systems that may underpin these prejudices. This will not be an easy task to carry out, but an evidence-based and holistic approach, recognising legitimate concerns across multiple issues and calling out those that are not legitimate, should be our way forward.

Additional information

Publisher’s note: Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Notes

1. 1.

In this paper we have used the terms from the prejudice literature, but we recognise that these terms need to be changed when engaging with the public. The term ‘Aversive Racist’™ for example, is rooted in the original 1970s definitions, but telling someone that they are an aversive racist when they do not consider themselves to be racist is likely to be counterproductive. However, discussion on use of terminology is beyond the scope of the current paper.

References

1. Abrams D, Houston DM (2006) Equality, diversity and prejudice in Britain: results from the 2005 national survey: report for the cabinet office equalities review October 2006. Project report. DTI London
 -
2. Akkerman A, Zaslove A, Spruyt B (2017) ‘We the people’™ or ‘We the peoples’™? A comparison of support for the populist radical right and populist radical left in the Netherlands. *Swiss Political Sci Rev* 23:377–403
 - - [Article](#)
 - [Google Scholar](#)
3. Allport GW (1954) *The nature of prejudice*. Addison-Wesley, Cambridge
 -
4. Beaudonnet L, Gomez R (2016) Red Europe versus no Europe? The impact of attitudes towards the EU and the economic crisis on radical-left voting. *West Eur Polit* 40:316–335
 - - [Article](#)
 - [Google Scholar](#)
5. Berry M (2016) Understanding the role of mass media in the EU Referendum. In: Jackson D, Thorsen E, Wring D (eds), *EU Referendum Analysis 2016: Media, voters and the campaign*. Bournemouth University: The Centre for the Study of Journalism, Culture and Community, pp. 14
 -
6. Blinder S, Richards L (2018) *UK public opinion toward immigration: overall attitudes and level of concern*. Migration Observatory: Oxford
 -
7. Brown R (2010) *Prejudice: Its social psychology*. John Wiley & Sons, Chichester
 -
8. Campbell DT (1965) Ethnocentric and other altruistic motives. In: Levine D (ed) *Nebraska symposium on motivation*. University of Nebraska Press, Lincoln, p. 283–301
 -
9. Ceobanu AM, Escandell X (2008) East Is West? National Feelings and Anti-immigrant Sentiment in Europe. *Social Sci Res* 37:1147–70
 - - [Article](#)

- [Google Scholar](#)
- 10. Colantone I, Stanig P (2016) Global competition and Brexit. Social Science Research Network. <ftp://ftp.repec.org/opt/ReDIF/RePEc/baf/papers/cbafwp1644.pdf>. Accessed 11 Aug 2018
 -
- 11. de Zavala AG, Guerra R, Simão C (2017) The relationship between the brexit vote and individual predictors of prejudice: collective narcissism, right wing authoritarianism, social dominance orientation. Front Psychol <https://doi.org/10.3389/fpsyg.2017.02023>
 -
- 12. Dovidio JF, Gaertner SL (2004) Aversive racism. Adv Exp Psychol 36:1–52
 -
 - [Article](#)
 - [Google Scholar](#)
- 13. Dovidio JF, Hewstone M, Glick P, Esses VM (2013) Prejudice, stereotyping and discrimination: theoretical and empirical overview. In: Dovidio JF, Hewstone M, Glick P, Esses VM (eds) The SAGE handbook of prejudice, stereotyping and discrimination. SAGE, London
 -
- 14. Geddes A (2016) The referendum and Britain’s broken immigration politics. In: Jackson D, Thorsen E, Wring D (eds) EU Referendum Analysis 2016: Media, voters and the campaign. Bournemouth University: The Centre for the Study of Journalism, Culture and Community, pp. 18
 -
- 15. Goodwin M, Heath O (2016) Brexit vote explained: poverty, low skills and lack of opportunities. Joseph Rowntree Foundation, York
 -
- 16. Greenwald AG, McGhee D, Schwartz J (1998) Measuring individual differences in implicit cognition: the implicit association test. J Personal Social Psychol 74:1464–1480
 -
 - [CAS](#)
 - [Article](#)
 - [Google Scholar](#)
- 17. Kaufmann E, Harris G (2015) “White Flight” or positive contact? Local diversity and attitudes to immigration in Britain. Comp Political Stud 48:1563–1690
 -
 - [Article](#)
 - [Google Scholar](#)
- 18. Kovel J (1970) White racism: a psychohistory. Pantheon, New York
 -
- 19. Lamont M, Adler L, Park BY, Xiang X (2017) Bridging cultural sociology and cognitive psychology in three contemporary research programmes. Nat Human Behav 1:866–872. <https://doi.org/10.1038/s41562-017-0242-y>
 -
 - [Article](#)
 - [Google Scholar](#)

20. Meuleman B, Davidov E, Billiet J (2009) Changing attitudes toward immigration in Europe, 2002–2007: a dynamic group conflict theory approach. *Social Sci Res* 38:352–365
- - [Article](#)
 - [Google Scholar](#)
21. Mållner JW (2017) *What is populism?* Penguin Books, St Ives
-
22. NatCen Social Research (2014) 30 years of British Social Attitudes self-reported racial prejudice data. <http://www.bsa.natcen.ac.uk/media/38110/selfreported-racial-prejudice-datafinal.pdf>. Accessed 10 Aug 2018
-
23. Nosek BA, Smyth FL, Hansen JJ, Devos T, Lindner NM, Ranganath KA, Banaji MR (2010) Pervasiveness and correlates of implicit attitudes and stereotypes. *Eur Rev Social Psychol* 18:36–88
- - [Article](#)
 - [Google Scholar](#)
24. Office for National Statistics (2016) Migration statistics quarterly report: May 2016. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/bulletins/migrationstatisticsquarterlyreport/may2016>. Accessed 1 Aug 2018
-
25. Pettigrew TF, Meertens RW (1995) Subtle and blatant prejudice in western Europe. *Eur J Social Psychol* 25:57–75
- - [Article](#)
 - [Google Scholar](#)
26. Ponce A (2017) Gender and anti-immigrant attitudes in Europe. *Socius* 3:1–17
- - [Google Scholar](#)
27. Son-Hing LS, Chung-Yan GA, Hamilton LK, Zanna MP (2008) A two-dimensional model that employs explicit and implicit attitudes to characterize prejudice. *J Personal Social Psychol* 94:971–987
- - [Article](#)
 - [Google Scholar](#)
28. Sullivan KE, Hutchings PB (2018a, May) Symbolic and realistic threat attitudes toward legal and illegal migration. Paper presented at British Psychological Society Annual Conference, Nottingham, UK
-
29. Sullivan KE, Hutchings PB (2018b, July) Prejudice and the Brexit vote. In: Andreouli E (Chair), *The Politics of Prejudice and Social Change*. Symposium conducted at the meeting of International Society of Political Psychology, San Antonio, Texas
-
30. Swami V, Barron D, Weis L, Furnham A (2017) To Brexit or not to Brexit: The roles of Islamophobia, conspiracist beliefs, and integrated threat in voting intentions for the United Kingdom European Union membership referendum. *Br J Psychol* 109:156–179
-

- [Article](#)
 - [Google Scholar](#)
31. Vasilopoulou S (2016) Campaign frames in the Brexit referendum. In: Jackson D, Thorsen E, Wring D (eds) EU Referendum Analysis 2016: Media, voters and the campaign. Bournemouth University: The Centre for the Study of Journalism, Culture and Community, pp. 114–115
-
32. Zmigrod L, Rentfrow PJ, Robbins TW (2018) Cognitive underpinnings of nationalistic ideology in the context of Brexit. PNAS
<https://doi.org/10.1073/pnas.1708960115>
-

[Download references](#)

Author information

Affiliations

1. School of Psychology, University of Wales Trinity Saint David, Swansea, UK
 - Paul B. Hutchings
 - Katie E. Sullivan

Authors

1. Search for Paul B. Hutchings in:
 - [Nature Research journals](#)
 - [PubMed](#)
 - [Google Scholar](#)
2. Search for Katie E. Sullivan in:
 - [Nature Research journals](#)
 - [PubMed](#)
 - [Google Scholar](#)

Competing interests

The authors declare no competing interests.

Corresponding author

Correspondence to [Paul B. Hutchings](#).

Rights and permissions



Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium

or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

About this article

Publication history

Received

13 August 2018

Accepted

17 December 2018

Published

15 January 2019

DOI

<https://doi.org/10.1057/s41599-018-0214-5>

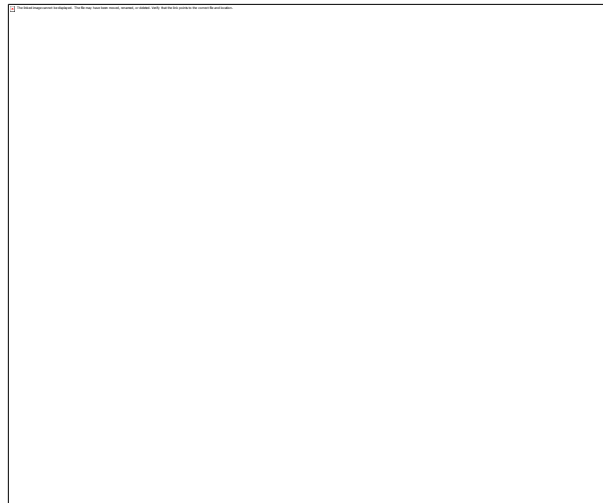
Article Tools

[Download PDF](#)

0 Citations

8 Altmetric

[Article metrics](#)



Palgrave Communications menu

- [News & Comment](#)
- [Research](#)

- [Browse Articles](#)
- [Browse Collections](#)

- [About the Journal](#)
- [For Authors](#)
- [For Referees](#)
- [Collections](#)
- [Publishing Partnerships](#)
- [Events](#)
- [Advocacy](#)
- [Contact](#)

Nature Research menu

Our Journals

- [Nature](#)
- [Nature Communications](#)
- [Nature Protocols](#)
- [Scientific Reports](#)
- [View all journals](#)

Subjects

- [Biological Sciences](#)
- [Scientific Community & Society](#)
- [Earth & Environmental Sciences](#)
- [Health Sciences](#)
- [Physical Sciences](#)
- [View all subjects](#)

More

- [Contact us](#)
- [Authors & Referees](#)
- [Librarians](#)
- [Advertisers](#)
- [Press](#)
- [About Nature Research](#)

Search

Article search
Search

[Advanced search](#)

Quick links

- [Explore articles by subject](#)
- [Find a job](#)
- [Guide to authors](#)
- [Editorial policies](#)


Palgrave Communications

ISSN 2055-1045 (online)

nature.com sitemap



- [About us](#)
- [Press releases](#)
- [Press office](#)
- [Contact us](#)

- 
- 
- 

Discover content

- [Journals A-Z](#)
- [Articles by subject](#)
- [Nano](#)

- [Protocol Exchange](#)
- [Nature Index](#)

Publish with us

- [Guide to Authors](#)
- [Guide to Referees](#)
- [Editorial policies](#)
- [Open access](#)
- [Reprints & permissions](#)

Researcher services

- [Research data](#)
- [Language editing](#)
- [Scientific editing](#)
- [Nature Masterclasses](#)
- [Nature Research Academies](#)

Libraries & institutions

- [Librarian service & tools](#)
- [Librarian portal](#)
- [Open research](#)

Advertising & partnerships

- [Advertising](#)
- [Partnerships & Services](#)
- [Media kits](#)
- [Branded content](#)

Career development

- [Nature Careers](#)
- [Nature Conferences](#)
- [Nature events](#)

Regional websites

- [Nature China](#)
- [Nature India](#)
- [Nature Japan](#)
- [Nature Korea](#)
- [Nature Middle East](#)



Â© 2019 Springer Nature Publishing AG

- [Privacy Policy](#)
- [Use of cookies](#)
- [Manage cookies](#)
- [Legal notice](#)
- [Accessibility statement](#)
- [Terms & Conditions](#)