Information, Communication & Society

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/rics20

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To cite this article: Shota Gelovani, Yannis Theocharis, Karolina Koc-Michalska & Bruce Bimber (11 Jul 2024): Intergroup ethnocentrism and social media: evidence from three Western democracies, Information, Communication & Society, DOI: 10.1080/1369118X.2024.2375259

To link to this article: https://doi.org/10.1080/1369118X.2024.2375259

INFORMATION, COMMUNICATION & SOCIETY
https://doi.org/10.1080/1369118X.2024.2375259

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Intergroup ethnocentrism and social media: evidence from three Western democracies

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ABSTRACT

Mass media have long been known to be deeply linked to ethnocentrism and its consequences. Attitudes towards ethnic outgroups are shaped by news agendas, framing, and tone at least as much or more than by the realities of immigration. By contrast, comparatively little is known about social media and interethnic contact. Unlike mass news, the interactive features of social media use can combine information with a direct interethnic contact. This creates an online public sphere which has the potential of being ethnically more diverse than the offline public sphere. By reviewing and connecting the literature on intergroup contact and online political communication, the given study attempts to connect the optimal intergroup contact theory by Gordon Allport to the realities and affordances of social media. The empirical analysis relies on a three-country survey with 4532 respondents in France, the United Kingdom, and the United States. Mindful of the endogeneity problem in our cross-cutting data, we perform propensity score matching and find that spending more time on X (formerly Twitter) is correlated with lower intergroup ethnocentrism under randomized conditions. No such effect was found for Facebook. We also find that people who discuss politics with those that have different ethnicity or race via social media (or offline) are less ethnocentric.

ARTICLE HISTORY
Received 20 June 2023
Accepted 8 June 2024

KEYWORDS
ethnocentrism; social media; platform affordances; Facebook; Twitter

For decades, attitudes toward ethnic diversity have been an important issue of contention in Western democracies. Hostility directed at the flow of refugees arriving in Europe has played a major role in country-level and EU-level politics in Europe. We situate this anti-immigrant sentiment in the context of general ethnocentrism prevalent in the Western societies. Hooghe (2008) defines ethnocentrism as 'a basic attitude expressing the belief

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Supplemental data for this article can be accessed online at https://doi.org/10.1080/1369118X.2024.2375259.

that one's own ethnic group or one's own culture is superior to other ethnic groups or cultures, and that one's cultural standards can be applied in a universal manner.' Ethnocentrism is implicated in people's attraction to right-wing populist parties with nationalistic agendas, in the Brexit vote, in 'cultural backlash', and in opposition to multiculturalism more generally (Brubaker, 2017; Chouliaraki & Zaborowski, 2017; Heidenreich et al., 2019; Hobolt, 2016; Norris & Inglehart, 2019). Across the Atlantic, it plays its role in the appeal of Donald Trump and his supporters on the right (Bizumic et al., 2021; Thompson, 2021).

An important line of research into ethnocentrism has examined the influence of media (Farris & Silber Mohamed, 2018; Valentino et al., 2013). In contrast to what is known about ethnocentrism and mass media, relatively little is known about social media. Considering how distinct the affordances of social media are compared with those of mass media, an important question emerges: Do social media matter for ethnocentrism also? If so, how? Our goal in this paper is to tackle this problem. Our starting point is the observation that social media use exposes people to political content both intentionally and inadvertently (Fletcher & Nielsen, 2018; Vaccari & Valeriani, 2021). This variously leads to exposure to ingroups and outgroups as well as interactions with others that can be either attitude-reinforcing or attitude-challenging (Silver et al., 2019). Social media use supports both strong and weak social ties, especially in political contexts (Sajuria et al., 2015; Valenzuela et al., 2018). We argue that these features of social media use should be relevant to ethnocentric attitudes. An important part of our argument is that social media tools themselves differ in their political and cultural consequences, and we develop expectations about differences among social media platforms. We test our expectations using survey data we collected in France, the United Kingdom, and the United States. We measured people's use of Facebook and X (formerly Twitter), their ethnocentrism, and a variety of other variables associated with interethnic contact. While the survey design does not allow us to draw causal inferences, we exploit the fact that social media tools are widely used, to the point of near-ubiquity, for reasons that are primarily non-political and conduct propensity score matching to randomize the allocation of the 'treatment': using X, as opposed to not using it. We show that social media use can be negatively associated with ethnocentric attitudes, as a function of how their specific platform affordances affect the nature of social experiences and political conversations. In line with other work showing that Facebook and X differ in their political consequences (Bossetta, 2018; Bossetta et al., 2017), we find that differences include ethnocentric attitudes.

Intergroup ethnocentrism and the (social) media environment

While the ways that *news* media affect intergroup ethnocentrism centrally involve agenda and framing effects, the ways that social media may do so are likely to be through mechanisms associated with networks. Especially important is the extent of ethnic homogeneity that people experience in their social networks, and the extent to which political conversations occurring on social media reinforce or challenge attitudes. A considerable body of research finds that more frequent contact with an ethnic outgroup tends to reinforce ingroup identity and reduce trust in the outgroup (Fossett & Kiecolt, 1989; Quillian, 1995). Ethnic heterogeneity in working and home environments has been

found to be associated with lower cohesion, lower satisfaction, and higher workplace turnover (Cohen & Bailey, 1997; Jackson et al., 1991; Keller, 2001). It may also lead to lower social trust (Alesina & La Ferrara, 2002; Delhey & Newton, 2005), lower cooperation levels and fewer manifestations of altruism towards outgroups as compared to ingroups (Putnam, 2007). Taken by itself, these studies would seem to have poor implications for social media, suggesting that social media use might exacerbate intergroup ethnocentrism by facilitating people's ingroup interactions and by occasionally bringing people into *aversive* contact with outgroups.

The literature on ethnicity and digital media show that there is more to the theoretical picture than aversive contact. Interethnic interaction can result in the opposite effect, eroding the perceived distinctions between the ingroup and the outgroup, and creating opportunities for strengthening cross-group ties as well as for the accumulation of bridging social capital (Allport, 1954; Hamberger & Hewstone, 1997; Laurence et al., 2018). Exposure to outgroups can reduce prejudice and promote political tolerance when four conditions are met: *support from authority* exists, there are *common goals*, opportunities for *intergroup cooperation* occur, and groups enjoy *equal status* in the context of the interaction (Allport, 1954). Social media experiences are too heterogeneous to permit a precise or consistent mapping of these conditions, but we believe that on the whole social media have the capacity to fulfill some of Allport's criteria in some circumstances.

Ample evidence suggests that social media may be platforms for a public sphere, where selective exposure is counterweighed with a crosscutting one (Barberá et al., 2015; Kim, 2011; Lee et al., 2014). An experiment that asked participants to deactivate Facebook for a week found a higher polarization in the period when the participants did not use Facebook (Asimovic et al., 2021). Finally, a more frequent direct intergroup contact is associated with better attitudes towards the outgroup (Wojcieszak & Warner, 2020).

Ethnocentric attitudes reflect a complex mix of deep-seated ingroup and outgroup biases, cultural norms, and situational responses to past and current political circumstances. All of these vary across countries and pose challenges to replicability (Arceneaux et al., 2023; Asimovic et al., 2023). Yet the affordances of social media that are important to our expectations are the same across countries. This raises the question of whether our theoretical model works in countries with variation in the specifics and the context of ethnocentrism.

RQ1: How do the relationships of X and Facebook use and interethnic communication to intergroup *ethnocentrism vary between countries?*

Mainstream social media firms generally impose content moderation policies that include rules about hostility, racism, and threats. These are enforced by a credible threat of expulsion from the social media platform, although clearly a range of hostility, racism and threats survive. Content moderation can represent *support from authority* for pro-social attitudes and non-hostile behavior toward outgroups. A peripheral market of social media platforms such as Gab and 8kun exist specifically for people who have been expelled from Facebook, Twitter (before the Musk takeover), and other commercially successful social media tools over terms of service violations. Peripheral social media tools explicitly tolerate intergroup ethnocentrism and related attitudes which illustrates that some degree of *support from authority* for political tolerance and pro-social communication exists on mainstream social media.

The extent to which *common goals* exist among users of social media is less clear. Without question, entertainment, social interaction, and information-seeking dominate most people's purposes for using social media, but each of these categories is imprecise. The more ubiquitous social media have become in people's lives, the more their use has come to reflect the full range of human goals and activities. Users of some social media tools, such as X, likely have few or no goals in common. Other tools, such as Reddit, are organized around common themes and interests, such that goal-sharing is probably higher. Forums where people share advice or interests in activities may also feature some degree of common goals. Facebook can be thought of as occupying an intermediate ground, where a widely shared goal is maintaining ties of friendship among known others, but where groups of various kinds may be organized explicitly around common interests or goals. However, even if one were to define common goals as broadly as diverse users using an online platform for a public sphere-like communication, this would align with the prior research showing that even an indirect (Wright et al., 1997) or imagined contact (Crisp & Turner, 2009) improves intergroup relations.

Where *intergroup cooperation* is concerned, social media use is related to higher heterogeneity in social connections (Lee et al., 2014), in discussion networks, and in civic engagement (Kim et al., 2013). A virtual interethnic contact on two Facebook pages, aiming at improving relations between Iranians and Israelis, was found to be correlated with a reduced prejudice towards the ethnic outgroup (Schwab et al., 2019). In addition, social media provide necessary tools (e.g., groups, chats, events) for creating cooperation, which may include political discussions. While social media tools are infamous for uncivil and uncooperative behavior, they can also facilitate cooperation that cuts across the group lines.

The fourth Allport criterion, *equal status*, is intriguing on social media. Social media are generally free to use for people who have born the cost of an electronic device such as a computer or a mobile phone, which are nearly ubiquitous. Income-dependent or education-dependent status signals or communication opportunities are generally not present: anyone can engage with social media, there are generally no formal tiers of membership or built-in status distinctions – at least as far as Facebook and Twitter in 2017 are concerned, which is the focus of this paper. In addition, the opportunity to use pseudonyms and to conceal appearance can provide an equalizing influence by removing status cues (Amichai-Hamburger & McKenna, 2006). To be sure, not all people enjoy equal treatment by others, or are free of the inhibiting and harmful effects of racism, sexism, and other forms of social bias, including ethnocentrism. However, social media provide opportunities for a degree of equality that matches or exceeds many face-to-face contexts.

Theory and hypotheses

The proposition that social media use can, under the right circumstances, facilitate tolerance toward outgroups is supported by research showing that users who are exposed to crosscutting information are less likely to derogate outsiders (Parsons, 2010; Sheagley, 2019). This may be partly due to the fact that exposure to outgroups on social media occurs under conditions meeting some of the Allport criteria. Social media, especially X (Phua et al., 2017), contribute to the accumulation of bridging

social capital (Gil de Zúñiga et al., 2012). Social media afford the large majority of people a substantial degree of crosscutting exposure, often inadvertent in nature (Fletcher & Nielsen, 2018; Lu & Lee, 2019; Min & Wohn, 2018). This suggests that *to the extent social media use facilitate crosscutting interactions*, it may be associated with lower intergroup ethnocentrism. Especially considering the empirical debunking of the 'echo-chamber' theory, we expect that on the whole social media use tends to work against intergroup ethnocentrism. We state this expectation of a net effect in terms of the frequency of using Facebook and X. In formulating this expectation, we rest on the important assumption that the reasons people adopt and use social media are unrelated to pre-existing ethnocentric attitudes. For instance, evidence from the US demonstrates that the population of Facebook users is not too dissimilar from the general population in terms of the left-right political orientation (Ribeiro et al., 2020), so it is unlikely that less ethnocentric people 'self-select' into active social media usership. With this in mind, we formulate our first hypothesis:

H1: The more one uses social media the lower their intergroup ethnocentrism.

Social media platforms vary in the extent to which they promote crosscutting interactions (O'Riordan et al., 2012). Facebook's main affordance is symmetrical networks of users. Both parties must consent to a relationship, and the result is a tendency toward communication with people in the context of comparatively strong ties (Valenzuela et al., 2018). Users take more time to read elaborated posts or comments on Facebook, as they are usually written by people they know relatively well. This facilitates affinity and more frequent interaction (Koroleva & Kane, 2017). All else equal, we expect more ethnic and political homogeneity in Facebook networks because these are based on friendship and acquaintance ties that are typically extant outside of Facebook.

X is different because its main affordance is asymmetric networks. Users are not directed into two-way connections, and weak ties are oriented toward interests rather than relationships. The non-reciprocal follower-followee structure facilitates more diverse flows of information, more novel interactions, and a lower ratio of familiar to unfamiliar contacts (Valenzuela et al., 2018). The information and the opinions circulating in a weak-tie network should be more heterogeneous than those in a strong-tie network (Bakshy et al., 2012; Min & Wohn, 2018). Compared to Facebook, this means more crosscutting interactions and more exposure to diverse news. This suggests that our expectation in H1 should be stronger for X than for Facebook.

H2: X users demonstrate lower intergroup ethnocentrism than Facebook users.

Optimal interethnic contact can take place both in real life and on social media. Our theoretical expectation is that such contact, under both conditions, would be associated with lowered intergroup ethnocentrism. As there is no meaningful way to reliably measure the frequency and the optimality of such a contact with a survey, we take the closest proxy available – the frequency of discussing politics with people of different ethnicity or race. As our theoretical expectations only concern the social media, we

formulate our third hypothesis only for social media, but we keep the offline discussions as a control variable in the analysis.

H3: The more frequent the interethnic political talk on social media, the lower the intergroup ethnocentrism.

Data and methodology

Data

Our study employs a three-country survey administered by Lightspeed Kantar Group to an online panel in 2017 in France, the United Kingdom, and the US (16–30 May, in France and June, 9–30 in the UK and the US). The combined sample had 4532 respondents as follows: France ($N = 1521$), the UK ($N = 1501$), and the USA ($N = 1510$).[1] The survey was conducted in French, British English, and American English. In France and the UK, the data was collected after the elections (Presidential and General), alleviating, at least partially, the possible risks associated with collecting political attitudes in the pre-election period (Clinton et al., 2022; West & Andridge, 2023). The quota design in the online panel was balanced on gender, age, and education against census data for each country. The three countries are very similar in terms of Facebook use – approximately 70-80% of the population over the age of 13 has a Facebook account in each of the countries (US – 79%, France – 74%, UK – 70%) – with a little more variation in X use (UK – 33%, US – 32%, France – 20%).[2]

Measurement and operationalization

Dependent variables

***Intergroup* ethnocentrism.** In line with the prior empirical research on ethnocentrism (Bizumic et al., 2009; Bizumic & Duckitt, 2012), we asked our respondents the following question: 'How much you favor or oppose each idea below by selecting a number from 1 to 7 (1 – 'strongly oppose', 7 – 'strongly favor').' We then exposed them to six items measuring intergroup and intragroup ethnocentrism (the list of all six items can be found in Appendix E). In the present study we are interested in *intergroup* ethnocentrism that is measured with the following statements (Bizumic & Duckitt, 2012):

- 'I would be very happy for a member of my family marrying a person from a different cultural or ethnic group' (Purity).
- 'Our cultural or ethnic group is not more deserving and valuable than others' (Superiority).
- 'I do not prefer members of my own cultural or ethnic group to others' (Preference).
- 'In dealing with other ethnic groups our first priority should be that we make sure that we are the ones who end up gaining and not the ones who end up losing' (Exploitativeness).

At the data collection stage, response scales were reversed for three out of four intergroup ethnocentrism items (purity, superiority, preference), while two intragroup ethnocentrism items (group cohesion, preference) and one intergroup ethnocentrism item

(exploitativeness) were worded in a manner that a higher agreement corresponded to higher ethnocentrism. All six items were randomly presented to respondents to minimize directional influence. For our exploratory factor analysis, we recoded the responses to the latter three items so that the higher values would also correspond to a higher ethnocentrism. Next, we ran an exploratory factor analysis and compared the internal consistency (Cronbach's alpha) of different item combinations. The results indicated that intergroup ethnocentrism is captured by the three items – purity, superiority, and preference – which goes against the taxonomy, pointed out by previous research (Bizumic & Duckitt, 2012), which attributed exploitativeness to intergroup ethnocentrism. We decided to drop exploitativeness based on the results of the factor analysis and the correlations between variables and operationalize intergroup ethnocentrism as an average score of respondents across the three following items: purity, superiority, and preference. A more detailed description of coding the dependent variable can be found in Appendix E.

Independent variables[3]

Time spent on Facebook/X. We asked our respondents how many hours per day they used Facebook and/or X. Those who did not have an account were coded among those that indicated having spent zero hours. Those who indicated at least 20 hours (33 respondents), were recoded to missing, as the values seemed unrealistic. Among the 4532 respondents, 2280 respondents (50%) only had a Facebook account, 111 (2%) only had an X account, 1080 (24%) had accounts on both Facebook and X, and 1061 respondents (24%) did not have an account on either of the two platforms.

Interethnic political talk on social media was measured by asking: 'In the past 12 months, how often have you talked about politics with people of a different race or ethnicity via social media'. The response options included *never, rarely, from time to time,* and *often,* which correspond to values from 0 to 3, respectively. For analysis, the respondents who did not have Facebook or X accounts were recoded together with those who answered '*never*'.

Control variables

Interethnic political talk offline controlled for political discussions offline with people of different race or ethnicity by asking: 'In the past 12 months, how often have you talked about politics with people of a different race or ethnicity not taking into account discussions online or through social media.'

Ideologically crosscutting political talk (offline and online) was measured by including two additional items: 'In the past 12 months, how often have you talked about politics with people whose political views are different from yours and who generally disagree with you (1) via social media and (2) not taking into account discussions online or through social media.' The response options varied between *never (0)* and *often (3).*

In addition, previous research on ethnocentrism has revealed that several attitudes and characteristics may affect ethnocentrism. Right-wing ideology has been linked to more negative attitudes toward various groups such as 'homosexuals' (Haddock et al., 1993), foreigners (Altemeyer, 1996), and Black Americans and Jews (Peffley & Hurwitz, 2001). Authoritarianism and intolerance of deviation, an integral part of far-right ideology, was tied with higher levels of intergroup ethnocentrism (Raden, 2003). Protestant

ethic has been found to be associated with anti-black sentiments (Katz & Hass, 1988). Religious upbringing and growing up in a religious environment are associated with ethnocentrism (Altemeyer, 1998).

Several demographic indicators, such as being educated, older, and female are associated with a higher ethnocentrism (Gerritsen & Lubbers, 2010; Nguyen et al., 2008; Raden, 2003), although these relationships vary by country (Good & Huddleston, 1995; Upadhyay & Singh, 2006). A more recent study, carried out in the context of social media, however, found that being male is associated with bonding social capital, meaning that they are more skeptical of the outgroups (Shane-Simpson et al., 2018).

Finally, the ethnic background of respondents may predict the difference between ingroup and outgroup evaluations. In the US, both White and Black respondents rate ingroup members higher than outgroup members, with the difference being larger for Blacks (Ryan et al., 2007). While no direct evidence of diverging ethnocentrism levels among Blacks and Whites in the UK exists, a study by Eller et al. (2007) shows that more frequent contact with the police is associated with more negative views for Blacks but not Whites.

Considering this literature, we include the following measures as controls in our study.

Ideological self-placement. Measured by asking 'In politics people sometimes talk of left and right. Where would you place yourself on this scale (0–10)?'

Ethnic or family background is measured as ethnic/race origin in the UK and US and as migratory background in France. In the UK and US, the question asked: 'Please indicate your ethnic background' and the respondents could choose from 'Caucasian (Western, European)' and other ethnic groups which we re-coded as non-Caucasian. We did not ask about ethnicity in France due to legal restrictions. Instead, we asked respondents if any of their parents or grandparents were born abroad. If the answer was positive, we categorized them as having a migratory background.

Gender. Females and males are distributed evenly in our sample. In the analysis, male is the reference category.

Age. Age of the respondent, a continuous variable. Only the respondents that were 18 or older at the time were surveyed.[4]

Education. Our education variable has four levels, standardized across countries: High school degree, college degree with a 2-year degree, college graduate with a 4-year degree, and advanced degree.

Religion. For religion we used a binary variable standardized across the countries: Believers of any religion (reference category) and atheists.

Results

We analyzed our data using an OLS model predicting intergroup ethnocentrism. The OLS assumptions were checked, and no significant violations were identified (Appendix B). Our first hypothesis predicted lower intergroup ethnocentrism as the use of social media increases. H1 only finds partial support, as, all else equal, more frequent use of Facebook is not correlated with intergroup ethnocentrism, whereas the frequency of using X is negatively correlated (Table 1, model 1). H2 predicted that intergroup ethnocentrism would be lower among X users than Facebook users. To test it, we conducted an unpaired two-samples Wilcoxon test and found a statistically significant difference

Table 1. OLS regressions with the unmatched data (models 1–3) and with the data matched via propensity score matching (model 4).

	Dependent variable:			
	Ethnocentrism			
	Unmatched data: time spent (1)	Unmatched data: X vs other (2)	Unmatched data: non-users only (3)	Matched data: X vs other (4)
Time spent on Facebook	−0.005			
	(0.010)			
Time spent on X	−0.076***			
	(0.016)			
Having an X account		−0.165***		−0.203***
		(0.044)		(0.047)
Interethnic political talk via social media	−0.095*	−0.106**		−0.105*
	(0.040)	(0.040)		(0.043)
Interethnic political talk offline	−0.275***	−0.275***	−0.284***	−0.250***
	(0.028)	(0.028)	(0.056)	(0.036)
Ideologically crosscutting political talk via social media	0.053	0.053		0.019
	(0.038)	(0.038)		(0.042)
Ideologically crosscutting political talk offline	0.015	0.013	0.034	−0.008
	(0.027)	(0.027)	(0.053)	(0.036)
Ideological self-placement	0.119***	0.116***	0.129***	0.109***
	(0.008)	(0.008)	(0.017)	(0.010)
Ethnic or family background: non-Caucasian (ref. Caucasian)	0.057	0.048	−0.099	0.088
	(0.051)	(0.051)	(0.122)	(0.060)
Gender: Female (ref. Male)	−0.193***	−0.195***	−0.121	−0.173***
	(0.037)	(0.037)	(0.076)	(0.048)
Age	0.002	0.002	0.002	0.003
	(0.001)	(0.001)	(0.003)	(0.002)
Education	−0.061***	−0.058***	−0.096**	−0.058**
	(0.017)	(0.017)	(0.035)	(0.022)
Religion: Atheist (ref. Believer)	−0.180***	−0.176***	−0.088	−0.227***
	(0.040)	(0.040)	(0.082)	(0.051)
Country: UK (ref. US)	−0.038	−0.021	−0.137	−0.028
	(0.047)	(0.047)	(0.097)	(0.057)
Country: France (ref. US)	0.169***	0.179***	0.145	0.204***
	(0.046)	(0.046)	(0.097)	(0.060)
Constant	3.147***	3.167***	3.166***	3.227***
	(0.107)	(0.108)	(0.229)	(0.129)
Observations	4157	4157	945	2472
R^2	0.152	0.149	0.134	0.150
Adjusted R^2	0.149	0.147	0.125	0.146
Residual Std. Error	1.168 (df = 4142)	1.170 (df = 4143)	1.151 (df = 934)	1.156 (df = 2458)
F Statistic	52.862*** (df = 14; 4142)	55.935*** (df = 13; 4143)	14.472*** (df = 10; 934)	33.380*** (df = 13; 2458)

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

between the intergroup ethnocentrism levels of those who use only Facebook versus those who use only X, with the latter demonstrating lower intergroup ethnocentrism ($p < .001$). Moreover, we ran a second OLS regression where the social media use was operationalized using a binary variable that varies between having and not having an X account (which may mean having a Facebook account, but not necessarily). This model (Table 1, model 2) also gave support to H2, as having an X account, as opposed to not having it, correlated with lower intergroup ethnocentrism, even accounting for all other correlates in the model.

Our H3 predicted that, online interethnic talk would be negatively correlated with intergroup ethnocentrism. The results support H3, as online (as well as offline) interethnic talk is negatively correlated with intergroup ethnocentrism. Among our respondents, 47% declare having political discussions with ethnic outgroups both in offline and online environments. To account for this collinearity, we run additional regression separately on those who do not use social media (Appendix C). The results confirm a negative correlation between both online and offline discussions with ethnic outgroups and intergroup ethnocentrism, meaning that we can isolate the effect of online interethnic discussions from the offline ones with a high confidence.

Ideologically crosscutting political talk (either offline and online) is not statistically significantly correlated with the dependent variable. Four out of six demographic control variables demonstrate statistically significant correlations: a more right-wing ideology is positively correlated with intergroup ethnocentrism, whereas being female, more educated, and atheist all show negative correlations.

As our cross-sectional design only allows us to test for associations, endogeneity is an obvious limitation of our analysis. At the same time, social media use is widespread and there is no evidence to suggest that intergroup ethnocentrism contributes to whether people use social media, or how much. While we cannot confidently assume that motivations for adopting social media are entirely unrelated to ethnocentrism, it is plausible that for the most part causation is likely to work from social media use toward increased or decreased intergroup ethnocentrism among users. Our largest concern in this regard, however, is that people with more favorable attitudes towards ethnic outgroups might have been preferentially attracted to X over Facebook, thereby making the findings of the models 1 and 2 questionable. This is especially noteworthy considering that the data was collected in 2017, when X was called Twitter and was rather liberal-leaning (Wojcik & Hughes, 2019). This concern is reverberated by the disproportionate representation of people with higher education on both X and Facebook in all three studied countries (Boyadjian, 2014; Mellon & Prosser, 2017; Ribeiro et al., 2020).

To mitigate this risk, we ran propensity score matching to randomize the 'allocation' of having an X account. This approach finds and matches pairs of observations with the most similar levels of covariates so that only one observation from the two is subject to the approximated experimental treatment (using X), while the other is a control (not using X). The matched data demonstrated lower standardized mean differences and reduced assignment bias, while also displaying a good fit of treated and control units' propensity scores (Appendix D). After the matching procedure, we ended up with 2472 respondents.

Similar to the models 1 and 2, the matched-dataset-based model, where X use is as good as 'randomly assigned', shows negative correlation between having an X account and intergroup ethnocentrism (Table 1, model 4), echoing support to H1 and H2, as well as to the existence of a causal link between having an X account and intergroup ethnocentrism.

Country-level analysis

The models 1, 2, and 4 showed that, all other covariates held constant, the French demonstrate higher intergroup ethnocentrism than the Americans, with no difference between

Table 2. OLS regressions using country sub-sets.

	Dependent variable:					
	Ethnocentrism					
	US	UK	FR	US	UK	FR
	(5)	(6)	(7)	(8)	(9)	(10)
Time spent on Facebook	−0.009	0.016	−0.028			
	(0.015)	(0.018)	(0.022)			
Time spent on X	−0.049*	−0.137***	−0.076*			
	(0.022)	(0.034)	(0.037)			
Having an X account				−0.153*	−0.231**	−0.076
				(0.075)	(0.071)	(0.084)
Interethnic political talk on social media	−0.091	−0.044	−0.163*	−0.098	−0.062	−0.175*
	(0.063)	(0.073)	(0.075)	(0.063)	(0.072)	(0.075)
Interethnic political talk offline	−0.225***	−0.252***	−0.334***	−0.227***	−0.245***	−0.335***
	(0.050)	(0.048)	(0.048)	(0.050)	(0.048)	(0.048)
Ideologically crosscutting political talk (online)	−0.045	0.020	0.208**	−0.048	0.038	0.194**
	(0.062)	(0.066)	(0.070)	(0.062)	(0.066)	(0.070)
Ideologically crosscutting political talk (offline)	0.068	−0.080	0.066	0.067	−0.090*	0.068
	(0.049)	(0.045)	(0.047)	(0.049)	(0.045)	(0.047)
Ideological self-placement	0.065***	0.134***	0.154***	0.063***	0.133***	0.152***
	(0.013)	(0.015)	(0.013)	(0.013)	(0.015)	(0.013)
Ethnic or family background: non-Caucasian (ref. Caucasian)	0.036	0.228*	−0.018	0.015	0.219	−0.022
	(0.086)	(0.112)	(0.077)	(0.086)	(0.112)	(0.078)
Gender: Female (ref. Male)	−0.208**	−0.250***	−0.103	−0.215***	−0.254***	−0.105
	(0.064)	(0.063)	(0.065)	(0.064)	(0.063)	(0.065)
Age	−0.001	0.003	0.003	−0.001	0.003	0.004
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Education	−0.052	−0.086**	−0.045	−0.051	−0.082**	−0.037
	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)
Religion: Atheist (ref. Believer)	−0.290***	−0.085	−0.185**	−0.285***	−0.079	−0.182**
	(0.078)	(0.065)	(0.068)	(0.078)	(0.065)	(0.068)
Constant	3.523***	3.095***	2.971***	3.569***	3.169***	2.909***
	(0.169)	(0.177)	(0.185)	(0.173)	(0.178)	(0.184)
Observations	1375	1322	1460	1375	1322	1460
R^2	0.106	0.181	0.187	0.104	0.177	0.184
Adjusted R^2	0.099	0.173	0.181	0.097	0.170	0.178
Residual Std. Error	1.147 (df = 1362)	1.115 (df = 1309)	1.216 (df = 1447)	1.148 (df = 1363)	1.117 (df = 1310)	1.218 (df = 1448)
F Statistic	13.516*** (df = 12; 1362)	24.060*** (df = 12; 1309)	27.823*** (df = 12; 1447)	14.439*** (df = 11; 1363)	25.628*** (df = 11; 1310)	29.693*** (df = 11; 1448)

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.

the UK and the US. Unpaired two-samples Wilcoxon tests comparing the three countries' mean intergroup ethnocentrism levels confirm these findings.

Besides including the country variable in the main models and doing the Wilcoxon tests, we ran analyzes separately for each country subsets. Country-specific regressions (Table 2) show no difference in terms of the effect of social media use on intergroup ethnocentrism, as time spent on Facebook remains statistically insignificant, whereas the time spent on X remains significant in all three countries. When social media use is operationalized as having an X account as opposed to not having it, the results of the model 2 are reproduced, as the effect remains statistically significant and negative. Model 10 in Table 2 (French subset) is the only exception, as having an X account does not have a statistically significant effect on intergroup ethnocentrism.

The analysis also shows that the effect of interethnic political talk offline maintains the direction and the significance of the effect, but the effect of having such talk online only has a statistically significant and a negative effect in France. Finally, the effect of offline and online ideologically crosscutting political talk remains statistically insignificant, except for France, where such discussions online are associated with a higher intergroup ethnocentrism. The demographic control variables maintain their direction and significance, with the exception of education that becomes statistically insignificant for the US and France subsets.

Discussion and conclusion

Ethnocentrism has received relatively little attention in the context of digital media, and our aim in this study was to shed light on this topic. Because of the globally universal nature of social media, it was natural to consider questions about ethnocentrism and social media in a multi-country context. This too is something of a departure from studies that have focused on single countries, even though theoretically ethnocentrism is a human universal.

Our aim was to examine the relationship between social media use and intergroup ethnocentrism in France, the UK, and the US. Our general expectation was that social media use is associated with lower intergroup ethnocentrism, on average, but that this would vary between X and Facebook. We expected variation because of the different kinds of networks that each platform facilitates and because intergroup contact can either increase or decrease intergroup ethnocentrism. Facebook affordances facilitate networks of strong ties among people known to one another, with more political homogeneity and less exposure to crosscutting views. The affordances of X facilitate larger, asymmetric thin-tie networks with more heterogeneity and crosscutting exposure.

The results generally supported our expectations, but with some twists. Our expectation that social media use is associated with lower intergroup ethnocentrism was supported only when it comes to X use – both having an account and spending more time on X was linked to lower intergroup ethnocentrism. Taking one step towards addressing the thorny issue of endogeneity, which is omnipresent in survey-based research, especially in social media studies, we matched the non-users of X with the users of X with similar characteristics. The results once again supported the negative correlation between having an account on X and intergroup ethnocentrism. We also compared people who use only Facebook and only X and found that the latter demonstrate lower intergroup

ethnocentric. This supports our platform-level expectations and partially supports the expectation that the more frequent social media use is associated with lower intergroup ethnocentrism. Among the potential reasons, besides our theoretical framework involving weak ties, which could have contributed to the difference between the effects of X and Facebook is the content moderation policy of these two platforms by 2017.

We also found negative correlations between interethnic political discussions on social media and intergroup ethnocentrism. In doing so, we controlled for such discussions that take place offline which also produced a significant and a negative effect. We then isolated the effect of online and offline discussions to show that the results are not driven by the individuals with whom the respondents engaged in *both* online and offline discussions. Unlike the decision to use social media, the choice to engage in discussions with members of outgroups is likely highly endogenous with intergroup ethnocentrism, so we cannot say anything about the direction of this specific causal link, especially as the effect of interethnic political discussions on social media disappeared in the matched data set for the US and the UK subsets. We can say, however, that, in all three countries, when people engage in discussions with members of different racial or ethnic outgroups in real life as opposed to online, these appear to be bridging on average, as opposed to ethnically or racially hostile. We found general contact with people of crosscutting political views to have no effect on intergroup ethnocentrism.

The demographic control variables mostly performed in accordance with the expectations, arising from the prior research. The lack of a statistically significant effect for age is intriguing, as previous research on ethnocentrism found older age to be correlated with a higher ethnocentrism. The negative correlation between being female and intergroup ethnocentrism goes against the earlier findings (Gerritsen & Lubbers, 2010; Nguyen et al., 2008) and supports a more recent study on young people in the US which finds a significant effect between being male and being oriented towards bonding capital at the expense of the bridging one (Shane-Simpson et al., 2018). Ethnic or family background did not predict the level of intergroup ethnocentrism, potentially indicating that intergroup ethnocentrism cannot be ascribed to a single ethnic group or migratory family roots.

In the country-specific analysis, we found that, all else being equal, people from France demonstrate higher levels of intergroup ethnocentrism than people from the US and the UK. The frequency of using X was statistically significantly and negatively correlated with intergroup ethnocentrism in all three countries. It seems that the effect of using X is consistent for intergroup ethnocentrism across countries. The same cannot be said about Facebook use effect, which was statistically insignificant both in the pooled models and in the country-specific ones. Nevertheless, the country-specific findings must be interpreted with caution when it comes to making causal statements, as it was not possible to conduct the propensity score matching with the country sub-sets, as the number of observations would have been too low.

This study does not come without limitations. The crucial limitation is that it is based on the survey data, collected in 2017, when Twitter had a dramatically different moderation policy. Since the takeover of Twitter by Elon Musk, bans were reversed for numerous far-right and conspiracy theorist accounts, almost certainly making the online public sphere less safe for people of color and immigrants, especially in the US (Bebchuk et al., 2023). Another limitation of this study is that establishing causal relationship between the use of social media and intergroup ethnocentrism using a cross-sectional survey data is

next to impossible. The best way to tackle this, to our knowledge, was to use PSM, which confirmed the findings of the main OLS regression comparing X users with non-users. As the survey data was not paired with web tracking, it is unclear to what extent Allport's optimal intergroup contact conditions were satisfied for each instance of interethnic contact. The intergroup contact theory was therefore only applied rudimentarily, based on the literature on platform affordances. Specifically, which platform affordances contributed to the correlations identified in the analysis remains an open question, as social media are multifaceted platforms that bring people into contact in various ways. To avoid these challenges and potentially pinpoint the specific affordances, future research should rely more on longitudinal data and web tracking.

The research field of interethnic contact on social media can be theoretically enriched by descriptive studies investigating specific cases of interethnic contact online, such as Schwab et al. (2019). In-depth interviews with administrators and moderators of Facebook groups, group chats, discussion platforms could shed more light on the theoretical linkage between the intergroup contact theory and the virtually lived experiences on social media. As the current study isolates the differences between the online and the offline behavior, as well as the platform-level differences, it is crucial to have a rigid theoretical framework explaining the online behavior on various platforms, their internet cultures, and demographics. This will help the researchers stay alert for what seems like a very dynamic field of research, owing to the emergence, transformation, and disappearance of various online public spheres which may potentially affect each new user through the process of socialization. Comparing the pre- and post-Musk Twitter/X seems an especially interesting line of work that could build up on the given study. Lastly, with a rigid experimental design, one can also explore the potential of various social media platforms to bring the often-alienated ethnic groups together as a byproduct of optimal intergroup contact conditions or potentially through targeted depolarization process.

Notes

1. Lightspeed Kantar uses a weighting efficiency which gives an indication of how well balanced the sample is. The higher the value the better a non-weighted sample mirrors population values. Kantar offers a minimum threshold of 70% efficiency per study. This metric measures the match between the census profile and the sample characteristics.
2. *Digital 2021*. We Are Social, Hootsuite.
3. Detailed descriptive statistics for all the variables in all countries are present in Appendix A.
4. Both age and education served as our quota variables to achieve a representative sample. A detailed country-specific comparison between the official and the survey figures is given in Appendix F.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by Audencia Foundation.

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Ethics approval

The survey has been funded by Audencia Foundation. All the projects financially supported by Audencia Foundation are going through an automated ethics approval commission; projects are excluded from financial support if such approval is not granted.

Data availability statement

The data that support the findings of this study are openly available.

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References

Alesina, A., & La Ferrara, E. (2002). Who trusts others? *Journal of Public Economics*, *85*(2), 207–234. https://doi.org/10.1016/S0047-2727(01)00084-6

Allport, G. W. (1954). *The nature of prejudice*. Addison-Wesley.

Altemeyer, B. (1996). *The authoritarian specter*. Harvard University Press.

Altemeyer, B. (1998). The other "authoritarian personality". *Advances in Experimental Social Psychology*, *30*(C), 47–92. https://doi.org/10.1016/S0065-2601(08)60382-2

Amichai-Hamburger, Y., & McKenna, K. Y. A. (2006). The contact hypothesis reconsidered: Interacting via the internet. *Journal of Computer-Mediated Communication*, *11*(3), 825–843. https://doi.org/10.1111/j.1083-6101.2006.00037.x

Arceneaux, K., Foucault, M., Giannelos, K., Ladd, J., & Zengin, C. (2023). *The effects of facebook access during the 2022 French Presidential Election: Can we incentivize citizens to be better informed and less polarized?* 2023 Annual Meeting of the Midwestern Political Science Association.

Asimovic, N., Nagler, J., Bonneau, R., & Tucker, J. A. (2021). Testing the effects of Facebook usage in an ethnically polarized setting. *Proceedings of the National Academy of Sciences*, *118*(25), 1–9. https://doi.org/10.1073/pnas.2022819118

Asimovic, N., Nagler, J., & Tucker, J. A. (2023). Replicating the effects of Facebook deactivation in an ethnically polarized setting. *Research & Politics*, *10*(4), 20531680231205157. https://doi.org/10.1177/20531680231205157

Bakshy, E., Rosenn, I., Marlow, C., & Adamic, L. (2012). The role of social networks in information diffusion. In *WWW'12 - Proceedings of the 21st Annual Conference on World Wide Web* (pp. 519–528). https://doi.org/10.1145/2187836.2187907

Barberá, P., Jost, J. T., Nagler, J., Tucker, J. A., & Bonneau, R. (2015). Tweeting from left to right: Is online political communication more than an echo chamber? *Psychological Science*, *26*(10), 1531–1542. https://doi.org/10.1177/0956797615594620

Bebchuk, L. A., Kastiel, K., & Toniolo, A. (2023, Forthcoming). How Twitter pushed stakeholders under the bus. *Stanford Journal of Law, Business, and Finance*, *28*. http://dx.doi.org/10.2139/ssrn.4330393

Bizumic, B., & Duckitt, J. (2012). What is and is not ethnocentrism? A conceptual analysis and political implications. *Political Psychology*, *33*(6), 887–909. https://doi.org/10.1111/j.1467-9221.2012.00907.x

Bizumic, B., Duckitt, J., Popadic, D., Dru, V., & Krauss, S. (2009). A cross-cultural investigation into a reconceptualization of ethnocentrism. *European Journal of Social Psychology*, *39*(June 2009), 871–899. https://doi.org/10.1002/ejsp.589

Bizumic, B., Monaghan, C., & Priest, D. (2021). The return of ethnocentrism. *Political Psychology*, *42*(S1), 29–73. https://doi.org/10.1111/pops.12710

Bossetta, M. (2018). The digital architectures of social media: Comparing political campaigning on Facebook, twitter, Instagram, and snapchat in the 2016 U.S. Election. *Journalism & Mass Communication Quarterly*, *95*(2), 471–496. https://doi.org/10.1177/1077699018763307

Bossetta, M., Dutceac Segesten, A., & Trenz, H.-J. (2017). Engaging with European politics through twitter and Facebook: Participation beyond the national? In M. Barisione, & A. Michailidou (Eds.), *Social media and European politics: Rethinking power and legitimacy in the digital Era* (pp. 53–76). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-59890-5_3

Boyadjian, J. (2014). Twitter, un nouveau «baromètre de l'opinion publique»? *Participations*, *1*(1), 55–74. https://doi.org/10.3917/parti.008.0055

Brubaker, R. (2017). Between nationalism and civilizationism: The European populist moment in comparative perspective. *Ethnic and Racial Studies*, *40*(8), 1191–1226. https://doi.org/10.1080/01419870.2017.1294700

Chouliaraki, L., & Zaborowski, R. (2017). Voice and community in the 2015 refugee crisis: A content analysis of news coverage in eight European countries. *International Communication Gazette*, *79*(6-7), 613–635. https://doi.org/10.1177/1748048517727173

Clinton, J. D., Lapinski, J. S., & Trussler, M. J. (2022). Reluctant Republicans, eager democrats?: Partisan nonresponse and the accuracy of 2020 Presidential pre-election telephone polls. *Public Opinion Quarterly*, *86*(2), 247–269. https://doi.org/10.1093/poq/nfac011

Cohen, S. G., & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management*, *23*(3), 239–290. https://doi.org/10.1177/014920639702300303

Crisp, R. J., & Turner, R. N. (2009). Can imagined interactions produce positive perceptions? Reducing prejudice through simulated social contact. *American Psychologist*, *64*(4), 231–240. https://doi.org/10.1037/a0014718

Delhey, J., & Newton, K. (2005). Predicting cross-national levels of social trust: Global pattern or nordic exceptionalism? *European Sociological Review*, *21*(4), 311–327. https://doi.org/10.1093/esr/jci022

Eller, A., Abrams, D., Viki, G. T., Imara, D. A., & Peerbux, S. (2007). Stay cool, hang loose, admit nothing: Race, intergroup contact, and public-police relations. *Basic and Applied Social Psychology*, *29*(3), 213–224. https://doi.org/10.1080/01973530701503036

Farris, E. M., & Silber Mohamed, H. (2018). Picturing immigration: How the media criminalizes immigrants. *Politics, Groups, and Identities*, *6*(4), 814–824. https://doi.org/10.1080/21565503.2018.1484375

Fletcher, R., & Nielsen, R. K. (2018). Are people incidentally exposed to news on social media? A comparative analysis. *New Media and Society*, *20*(7), 2450–2468. https://doi.org/10.1177/1461444817724170

Fossett, M. A., & Kiecolt, K. J. (1989). The relative size of minority populations and white racial attitudes. *Social Science Quarterly*, *70*(4), 820–835.

Gerritsen, D., & Lubbers, M. (2010). Unknown is unloved? Diversity and inter-population trust in Europe. *European Union Politics*, *11*(2), 267–287. https://doi.org/10.1177/1465116510363311

Gil de Zúñiga, H., Jung, N., & Valenzuela, S. (2012). Social media use for news and individuals' social capital, civic engagement and political participation. *Journal of Computer-Mediated Communication*, *17*(3), 319–336. https://doi.org/10.1111/j.1083-6101.2012.01574.x

Good, L. K., & Huddleston, P. (1995). Ethnocentrism of Polish and Russian consumers: Are feelings and intentions related? *International Marketing Review*, *12*(5), 35–48. https://doi.org/10.1108/02651339510103047

Haddock, G., Zanna, M. P., & Esses, V. M. (1993). Assessing the structure of prejudicial attitudes: The case of attitudes toward homosexuals. *Journal of Personality and Social Psychology*, *65*(6), 1105–1118. https://doi.org/10.1037/0022-3514.65.6.1105

Hamberger, J., & Hewstone, M. (1997). Inter-ethnic contact as a predictor of blatant and subtle prejudice: Tests of a model in four West European nations. *British Journal of Social Psychology*, *36*(2), 173–190. https://doi.org/10.1111/j.2044-8309.1997.tb01126.x

Heidenreich, T., Lind, F., Eberl, J.-M., & Boomgaarden, H. G. (2019). Media framing dynamics of the 'European refugee crisis': A comparative topic modelling approach. *Journal of Refugee Studies*, *32*(Special_Issue_1), i172–i182. https://doi.org/10.1093/jrs/fez025

Hobolt, S. B. (2016). The Brexit vote: A divided nation, a divided continent. *Journal of European Public Policy*, *23*(9), 1259–1277. https://doi.org/10.1080/13501763.2016.1225785

Hooghe, M. (2008). Ethnocentrism. International encyclopedia of the social sciences. In William A. Darity Jr. (Ed.), *International encyclopedia of the social sciences* (Vol. 3, pp. 11–12). Macmillan Reference USA.

Jackson, S. E., Brett, J. F., Sessa, V. I., Cooper, D. M., Julin, J. A., & Peyronnin, K. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions, and turnover. *Journal of Applied Psychology*, *76*(5), 675–689. https://doi.org/10.1037/0021-9010.76.5.675

Katz, I., & Hass, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology*, *55*(6), 893–905. https://doi.org/10.1037/0022-3514.55.6.893

Keller, R. T. (2001). Cross-functional project groups in research and new product development: Diversity, communications, job stress, and outcomes. *Academy of Management Journal*, *44*(3), 547–555. https://doi.org/10.2307/3069369

Kim, Y. (2011). The contribution of social network sites to exposure to political difference: The relationships among SNSs, online political messaging, and exposure to cross-cutting perspectives. *Computers in Human Behavior*, *27*(2), 971–977. https://doi.org/10.1016/j.chb.2010.12.001

Kim, Y., Hsu, S.-H., & de Zúñiga, H. G. (2013). Influence of social media use on discussion network heterogeneity and civic engagement: The moderating role of personality traits. *Journal of Communication*, *63*(3), 498–516. https://doi.org/10.1111/jcom.12034

Koroleva, K., & Kane, G. C. (2017). Relational affordances of information processing on Facebook. *Information & Management*, *54*(5), 560–572. https://doi.org/10.1016/j.im.2016.11.007

Laurence, J., Schmid, K., & Hewstone, M. (2018). Ethnic diversity, inter-group attitudes and countervailing pathways of positive and negative inter-group contact: An analysis across workplaces and neighbourhoods. *Social Indicators Research*, *136*(2), 719–749. https://doi.org/10.1007/s11205-017-1570-z

Lee, J. K., Choi, J., Kim, C., & Kim, Y. (2014). Social media, network heterogeneity, and opinion polarization. *Journal of Communication*, *64*(4), 702–722. https://doi.org/10.1111/jcom.12077

Lu, Y., & Lee, J. K. (2019). Stumbling upon the other side: Incidental learning of counter-attitudinal political information on Facebook. *New Media & Society*, *21*(1), 248–265. https://doi.org/10.1177/1461444818793421

Mellon, J., & Prosser, C. (2017). Twitter and Facebook are not representative of the general population: Political attitudes and demographics of British social media users. *Research & Politics*, *4*(3), 205316801772000. https://doi.org/10.1177/2053168017720008

Min, S. J., & Wohn, D. Y. (2018). All the news that you don't like: Cross-cutting exposure and political participation in the age of social media. *Computers in Human Behavior*, *83*, 24–31. https://doi.org/10.1016/j.chb.2018.01.015

Nguyen, T. D., Nguyen, T. T. M., & Barrett, N. J. (2008). Consumer ethnocentrism, cultural sensitivity, and intention to purchase local products—Evidence from Vietnam. *Journal of Consumer Behaviour*, *7*(1), 88–100. https://doi.org/10.1002/cb.238

Norris, P., & Inglehart, R. (2019). *Cultural backlash: Trump, Brexit, and authoritarian populism*. Cambridge University Press.

O'Riordan, S., Feller, J., & Nagle, T. (2012). Exploring the affordances of social networking sites: An analysis of three networks. In *ECIS 2012: 20th European Conference on Information Systems*.

Parsons, B. M. (2010). Social networks and the affective impact of political disagreement. *Political Behavior*, *32*(2), 181–204. https://doi.org/10.1007/s11109-009-9100-6

Peffley, M., & Hurwitz, J. (2001). Whites' stereotypes of Blacks: Sources and political consequences. In J. Hurwitz & M. Peffley (Eds.), *Perception and prejudice: Race and politics in the United States* (pp. 58–99). Yale.

Phua, J., Jin, S. V., & Kim, J. J. (2017). Uses and gratifications of social networking sites for bridging and bonding social capital: A comparison of Facebook, twitter, Instagram, and snapchat. *Computers in Human Behavior*, *72*, 115–122. https://doi.org/10.1016/j.chb.2017.02.041

Putnam, R. D. (2007). E pluribus unum: Diversity and community in the twenty-first century the 2006 Johan Skytte prize lecture. *Scandinavian Political Studies*, *30*(2), 137–174. https://doi.org/10.1111/j.1467-9477.2007.00176.x

Quillian, L. (1995). Prejudice as a response to perceived group threat: Population composition and anti- immigrant and racial prejudice in Europe. *American Sociological Review*, *60*(4), 586–611. https://doi.org/10.2307/2096296

Raden, D. (2003). Ingroup bias, classic ethnocentrism, and non-ethnocentrism among American Whites. *Political Psychology*, *24*(4), 803–828. https://doi.org/10.1046/j.1467-9221.2003.00355.x

Ribeiro, F. N., Benevenuto, F., & Zagheni, E. (2020). How Biased is the Population of Facebook Users? Comparing the Demographics of Facebook Users with Census Data to Generate Correction Factors. In *WebSci 2020 - proceedings of the 12th ACM conference on web science* (pp. 325–334). https://doi.org/10.1145/3394231.3397923

Ryan, C. S., Hunt, J. S., Weible, J. A., Peterson, C. R., & Casas, J. F. (2007). Multicultural and colorblind ideology, stereotypes, and ethnocentrism among Black and White Americans. *Group Processes & Intergroup Relations*, *10*(4), 617–637. https://doi.org/10.1177/1368430207084105

Sajuria, J., VanHeerde-Hudson, J., Hudson, D., Dasandi, N., & Theocharis, Y. (2015). Tweeting alone? An analysis of bridging and bonding social capital in online networks. *American Politics Research*, *43*(4), 708–738. https://doi.org/10.1177/1532673X14557942

Schwab, A. K., Sagioglou, C., & Greitemeyer, T. (2019). Getting connected: Intergroup contact on Facebook. *The Journal of Social Psychology*, *159*(3), 344–348. https://doi.org/10.1080/00224545.2018.1489367

Shane-Simpson, C., Manago, A., Gaggi, N., & Gillespie-Lynch, K. (2018). Why do college students prefer Facebook, twitter, or Instagram? Site affordances, tensions between privacy and self-expression, and implications for social capital. *Computers in Human Behavior*, *86*, 276–288. https://doi.org/10.1016/j.chb.2018.04.041

Sheagley, G. (2019). The effect of cross-cutting partisan debates on political decision-making. *Party Politics*, *25*(3), 401–411. https://doi.org/10.1177/1354068817722671

Silver, L., Huang, C., & Taylor, K. (2019). *In emerging economies, smartphone and social media users have broader social networks. Pew Research Center.*

Thompson, J. (2021). What it means to be a "true American": Ethnonationalism and voting in the 2016 U.S. Presidential election. *Nations and Nationalism*, *27*(1), 279–297. https://doi.org/10.1111/nana.12638

Upadhyay, Y., & Singh, S. K. (2006). Preference for domestic goods: A study of consumer ethnocentrism. *Vision: The Journal of Business Perspective*, *10*(3), 59–68. https://doi.org/10.1177/097226290601000306

Vaccari, C., & Valeriani, A. (2021). *Outside the bubble: Social media and political participation in Western democracies*. Oxford University Press.

Valentino, N. A., Brader, T., & Jardina, A. E. (2013). Immigration opposition among U.S. Whites: General ethnocentrism or media priming of attitudes about latinos? *Political Psychology*, *34*(2), 149–166. https://doi.org/10.1111/j.1467-9221.2012.00928.x

Valenzuela, S., Correa, T., & Gil de Zúñiga, H. (2018). Ties, likes, and tweets: Using strong and weak ties to explain differences in protest participation across Facebook and twitter Use. *Political Communication*, *35*(1), 117–134. https://doi.org/10.1080/10584609.2017.1334726

West, B. T., & Andridge, R. R. (2023). Evaluating pre-election polling estimates using a new measure of non-ignorable selection bias. *Public Opinion Quarterly*, *87*(S1), 575–601. https://doi.org/10.1093/poq/nfad018

Wojcieszak, M., & Warner, B. R. (2020). Can interparty contact reduce affective polarization? A systematic test of different forms of intergroup contact. *Political Communication*, *37*(6), 789–811. https://doi.org/10.1080/10584609.2020.1760406

Wojcik, S., & Hughes, A. (2019). *Sizing up twitter users*. Pew Research Center.

Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, *73*(1), 73–90. https://doi.org/10.1037/0022-3514.73.1.73