


Perceiving Affective Polarization in the United States: How Social Media Shape Meta-Perceptions and Affective Polarization

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Christian Staal Bruun Overgaard 

Abstract

Affective polarization is on the rise, not least in the United States. Recent scholarship has identified meta-perceptions, concerning how much opposing partisans think they dislike each other, as a potential driver of actual interparty animosity. I theorize that social media content shapes people's political meta-perceptions, which in turn influence affective polarization. I integrate prior work on meta-perceptions with research on intergroup conflict and social norms to distinguish perceptions about people's ingroup from perceptions about their outgroup. A probability sample ($n=825$) shows outgroup meta-perceptions (i.e., perceptions about the outparty's feelings toward the inparty) are linked to actual affective polarization. Ingroup meta-perceptions do not predict affective polarization above and beyond outgroup meta-perceptions. An original experiment ($n=541$) then examines the proposed causal pathway by exposing subjects to politically unifying, divisive, or neutral media content. In line with the proposed model, unifying content reduces affective polarization, and this effect is mediated by political meta-perceptions. Surprisingly, divisive content has no effects on meta-perceptions or affective polarization. These findings have theoretical implications for research on social media, perceptions, and intergroup relations. These, as well as practical implications, are discussed in light of mounting concerns about increasing affective polarization and the role social media may play in exacerbating it.

Keywords

affective polarization, meta-perceptions, news, perceived polarization, social media

Political polarization is increasing in the United States. Researchers distinguish between issue polarization, or attitudes toward specific political issues (Pew Research Center, 2014, 2021), and affective polarization, or negative feelings and attitudes toward one's outparty (Iyengar et al., 2019, 2012). Research has also examined *perceived* polarization, showing that Americans tend to perceive greater political disagreement than exists (Westfall et al., 2015), which may fuel issue polarization (Ahler, 2014). Whereas this line of research originally focused on perceptions of political disagreement (i.e., issue polarization), recent work has focused on perceptions of interparty hostility (i.e., affective polarization). Typically referring to these as “meta-perceptions” (perceptions about perceptions), this research has convincingly demonstrated that Americans think their outparty members are more prejudiced against them than is the case (Moore-Berg et al., 2020), which might intensify affective polarization (Lees & Cikara, 2020). Yet little is known about how meta-perceptions arise in the first place. The current

research addresses this gap by posing that social media exposure influences people's meta-perceptions, which then shape affective polarization. This research advances scholarship on political meta-perceptions, affective polarization, and social media's influence on politics and intergroup relations.

Prior research on political meta-perceptions has focused on how people think their outparty members feel toward them (here referred to as *perceived outparty animosity*), mostly overlooking people's perceptions of their inparty's feelings toward outparty members (*perceived inparty animosity*), even though such perceptions are also likely to drive behaviors and attitudes (e.g., Cialdini, 2007; Turner et al., 2008).

The University of Texas at Austin, USA

Corresponding Author:

Christian Staal Bruun Overgaard, Center for Media Engagement, Moody College of Communication, The University of Texas at Austin, 2504 B Whitis Avenue (A0730), Austin, TX 78712-1879, USA.
Email: csbo@utexas.edu



Leveraging a representative probability sample ($n=825$), I examine the American public's political meta-perceptions and how these perceptions relate to affective polarization.

Existing scholarship on political meta-perceptions is also limited by relying mostly on correlational evidence and by yielding little knowledge about how meta-perceptions arise in the first place. This reflects a trend in research on misperceptions, which is generally limited by a lack of focus on the origins of misperceptions and how they can be re-calibrated (for a recent meta-analysis, see Bursztyrn & Yang, 2021). The current research addresses these limitations. I theorize a conceptual model contextualizing the role of political meta-perceptions in contemporary media ecologies. Research shows that news and social media exposure is a likely driver of affective polarization (Levendusky & Malhotra, 2016; Levy, 2021; Settle, 2018). Since media messages affect perceptions (Tai, 2016) and meta-perceptions drive affective polarization (e.g., Lees & Cikara, 2020; Moore-Berg et al., 2020), I propose political meta-perceptions as an underlying mechanism that explains how news and social media shapes affective polarization. This pathway is tested in an original experiment ($n=541$). The findings from these two studies (along with some surprising null results) have important implications for scholarship on social media, meta-perceptions, and affective polarization.

Theoretical Framework: Affective Polarization and How It Is Perceived

Affective polarization has been rising for decades in the United States (Iyengar et al., 2012). Americans increasingly dislike their outparty members, spawning social cleavages even in non-political domains (Iyengar et al., 2019). While affective polarization likely has many roots, political meta-perceptions are emerging as a particularly compelling explanation.

People generally perceive greater hostility from their outgroups than exists, which might exacerbate actual intergroup animosity (Kteily et al., 2016). Moore-Berg et al. (2020) found that Americans tend to perceive greater affective prejudice, or propensity for people to favor inparty members over outparty members than exists. Such meta-prejudice was, in turn, linked to being prejudiced against the outparty in return. Similarly, Lees and Cikara (2020) found that Democrats and Republicans overestimate how negatively outparty members will react to unfavorable political actions taken by their inparty. If, for example, the Democratic Party introduces legislation unfavorable to the Republican Party, Republicans will, of course, react negatively to it. Democrats will be aware of this but will tend to overestimate *how negative* these reactions will be. Lees and Cikara found that negative meta-perceptions were associated with believing that the other party deliberately obstructs democratic processes. Further, correcting these misperceptions made participants less likely to impute such obstructionism to the opposition.

Large-scale replications have found similar effects (e.g., Ruggeri et al., 2021; see also: Broockman et al., 2023; Voelkel, Chu, et al., 2022). These findings inform the current research, despite a key difference; whereas Lees and Cikara dealt with meta-perceptions about *political actions*, the current research concentrates on meta-perceptions about *people*. The literature reviewed above leads to the expectation that *perceived outparty animosity* (toward the inparty) will be associated with affective polarization (H1). In other words, the more Democrats and Republicans believe they are disliked by the opposition, the more they will, in turn, dislike the opposition.

Perceived inparty animosity (toward the outparty), which has largely been overlooked, might also matter. Lees and Cikara (2020) found that partisans exaggerate in their minds how negatively their inparty members will react to unfavorable policy initiatives from the outparty (but see Lees & Cikara, 2021). There is reason to believe that such ingroup perceptions may also drive outparty animosity. People's peer groups are integral to how they see themselves (Smith & Henry, 1996), and tend to shape their attitudes, especially when group identification is strong (Haslam et al., 1996; Terry & Hogg, 1996). Research on social norms also indicates that people's behavior is influenced by their perceptions of their ingroup (Cialdini, 2007). Such perceptions can also have ramifications for people's attitudes toward members of other social groups. Turner et al. (2008) found that people's ingroup perceptions (of how their fellow ingroup members felt toward outgroup members) mediated the beneficial impact of extended intergroup contact on prejudice. There are also other instances of perceptions about one's ingroup shaping issues related to political polarization. Recent work, for example, suggests that issue polarization may be driven by a false impression that one's inparty members oppose the "other side" more than is the case (van Boven et al., 2018). In the context of US politics, I expect that *perceived inparty animosity* (toward the outparty) will be associated with affective polarization (H2).

Existing research on political meta-perceptions is limited by relying mostly on correlational evidence, thereby making it difficult to discern causality. Similarly, little is known about how negative meta-perceptions arise. In the next section, I propose a model in which media-induced meta-perceptions shape affective polarization.

The Impact of News and Social Media on Affective Polarization

Research suggests that social media usage can intensify affective polarization (Kubin & von Sikorski, 2021), especially in established democracies (Lorenz-Spreen et al., 2023). Some of the most compelling evidence comes from Settle (2018), who conducted multiple surveys and experiments and found that social media platforms like Facebook can exacerbate affective polarization, even among users who

are not interested in politics. One contributing factor is that most Facebook users encounter political content on the platform even if they do not seek out it deliberately and are not particularly interested in politics. Similarly, in a recent large-scale field experiment, Allcott et al. (2020) found that deactivating Facebook for 4 weeks reduced users' levels of issue polarization. The intervention also reduced affective polarization but only among users who got news from Facebook fairly often or often (but see Asimovic et al., 2021). News exposure, it seems, is important to consider to understand social media's implications for affective polarization. In particular, Allcott et al.'s (2020) findings suggest that exposure to divisive news content might contribute to the polarizing effects of social media.

Further, extremist content spreads more easily on these platforms than more moderate content. US politicians with extreme ideologies tend to have more Twitter followers than their more moderate colleagues (Hong & Kim, 2016). Research also shows that talking negatively about "the other side" (Rathje et al., 2021) or expressing moral outrage (Brady et al., 2017) increases attention on social media. This might incentivize politicians and other influencers to share divisive content. Other work, however, suggests that exposure to differing points of view, facilitated by social media, may curb polarization (Beam et al., 2018). Social media exposure, it seems, can either polarize or depolarize the public. The model below allows for these differences by offering political meta-perceptions, shaped by exposure to divisive or unifying content, as an underlying mechanism.

The news media may also drive affective polarization. As Fiorina et al. (2005) have argued, the US news media tends to exaggerate how polarized the nation is. Further, the past few decades have seen the rise of partisan media outlets that capitalize on producing divisive content (Berry & Sobieraj, 2013). This may, in turn, make the public more affectively polarized. Further, recent experiments show that media content can shape affective polarization, such that positive examples of intergroup contact may curb affective polarization, whereas negative examples may exacerbate it (Huddy & Yair, 2021; Wojcieszak & Warner, 2020).

Using an original experiment, I explore these tendencies in a novel context: exposure to news content on social media. In doing so, I randomly assign participants to view *unifying content* (i.e., content portraying relations between opposing partisans positively), *divisive content* (i.e., content portraying relations between opposing partisans negatively), or apolitical content (the control condition). Given the rationale and literature reviewed above, I expect divisive and unifying content to have opposite effects on common measures of affective polarization such as *outparty feelings* and *trait perceptions*. Specifically, I expect divisive content to (a) increase negative outparty feelings, (b) increase negative trait perceptions, and (c) decrease positive trait perceptions (H3). Contrarily, I expect unifying content to (a) increase

positive outparty feelings, (b) decrease negative trait perceptions, and (c) increase positive trait perceptions (H4).

Underlying Mechanism: Media-Induced Meta-Perceptions

This section lays out a theoretical explanation of the polarizing (and yet sometimes depolarizing) impact of news and social media content. In the proposed model, media-induced meta-perceptions, concerning how Democrats and Republicans feel toward each other, shape how the two sides actually feel toward each other. This pathway depends on two assumptions: (a) that news and social media content influence political meta-perceptions, and (b) that changes in political meta-perceptions lead to changes in affective polarization.

As for the first assumption, research demonstrates that media messages shape people's perceptions of many aspects of public life, for example, concerning the government (Tai, 2016), social outgroup members (Overgaard, 2021), and public opinion (Mutz & Soss, 1997). Research also suggests that social media can shape Americans' perceptions of the two parties; one study, for example, found that social media exposure to political content increased the perceived *ideological* distance between the two parties (Banks et al., 2021).

As for the second assumption, concerning the potential for political meta-perceptions (i.e., perceptions of interparty animosity) to change actual interparty animosity, this is supported by research showing that other kinds of political perceptions can drive polarization (Ahler, 2014; Ahler & Sood, 2018). More specific to the current project, the causal effect of meta-perceptions on affective polarization is implied in recent scholarship (Moore-Berg et al., 2020) and also has some experimental evidence to support it. Lees and Cikara (2020) tested an intervention in which they informed participants about the inaccuracy of their (overly negative) meta-perceptions (about how negatively one's outparty members would react to certain unfavorable actions taken by one's inparty). Upon learning that outparty members were unlikely to react as negatively as assumed, people came to feel less hostile toward the other side. Although that experiment focused on meta-perceptions about how partisans will *react to political actions*—whereas the current research focuses on meta-perceptions about how partisans *feel toward their political opponents*—it does support the idea that changes in political meta-perceptions can lead to changes in affective polarization. Further, a recent study of various interventions (Voelkel, Stagnaro, et al., 2022) showed that interventions centered on correcting misperceptions consistently reduced affective polarization.

Although existing scholarship on political meta-perceptions has overwhelmingly focused on *perceived outparty animosity* (toward the inparty), there is reason to believe that *perceived inparty animosity* (toward the outparty) will also

shape affective polarization, given that people's attitudes and behaviors are often guided by perceived ingroup norms (Cialdini, 2007; Smith & Henry, 1996; Turner et al., 2008). In sum, I expect the causal effects hypothesized above to be indirect through *perceived outparty animosity toward the inparty* and *perceived inparty animosity toward the outparty* (H5). Specifically, I expect that divisive content will increase perceived animosity (both kinds), leading to greater affective polarization. Conversely, I expect that unifying content will decrease perceived animosity (both kinds), leading to lower affective polarization.

Study 1

Method

Study 1 examined whether two types of political meta-perceptions (*perceived outparty animosity toward the inparty* and *perceived inparty animosity toward the outparty*) are associated with affective polarization. Institutional review board (IRB) approval for this and the following study was granted from the author's university. A survey was fielded in August 2020, by NORC to their AmeriSpeak panel, yielding a probability sample of 1,010 US adults. Address-based sampling and area probability were used. Recruitment was done using telephone, mail, as well as in-person interviews. Respondents completed this study online ($n=978$) or via phone ($n=32$). For hypothesis testing, the sample was weighted based on demographic variables,¹ although using the unweighted sample yields the same conclusions. For a demographic breakdown of the sample, see the Supplemental Material (A1). This sample's margin of error (95%), when

adjusted for the design effect, was $\pm 4.09\%$. The weighted cumulative response rate (AAPOR² RR3) was 5.5%.

Affective polarization was measured with a feeling thermometer (Iyengar et al., 2012), ranging from 0 (extremely negative) to 10 (extremely positive), asking how respondents felt toward Democrats and Republicans. Following recent research (e.g., Huddy & Yair, 2021; Overgaard et al., 2022; Wojcieszak & Warner, 2020), affective polarization was operationalized as *negative feelings* toward the outparty ($M=7.95$, $SD=2.05$). Using the same scale, respondents were also asked how they thought Democrats felt toward Republicans and vice versa. These responses were reversed to denote the two forms of perceived affective polarization, *perceived outparty animosity toward the inparty* ($M=8.60$, $SD=1.99$) and *perceived inparty animosity toward the outparty* ($M=7.52$, $SD=2.25$). These two types of perceptions were moderately correlated ($r=.51$) but are theoretically distinct (Turner et al., 2008). These variables could not be calculated for true independents³ ($n=178$), who do not have an outparty, leaving only partisans ($n=825$), including those who did not identify as Democrats or Republicans but leaned toward one of the parties (for a similar approach, see Druckman & Levendusky, 2019).

Results

As a prelude, it is worth noting that partisans on both sides had overly pessimistic meta-perceptions about their outparty's feelings toward them (Figure 1). Democrats thought Republicans felt less warmly toward them ($M=1.43$, $SE=0.09$) than was the case ($M=2.01$, $SE=0.11$), $t(763.01)=4.02$, $p<.000$, Cohen's $d=0.28$. Similarly, Republicans thought

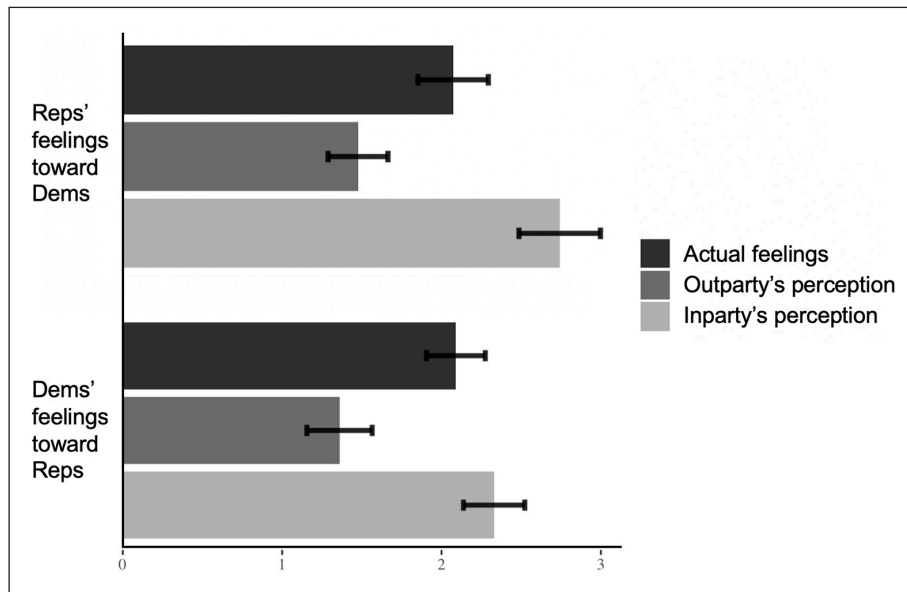


Figure 1. Perceived versus actual affective polarization (Study 1).

Error bars show 95% confidence intervals. The X-axis represents feelings of warmth/positivity toward the opposing party.

Democrats felt less warmly toward them ($M=1.36$, $SE=0.10$) than was the case ($M=2.09$, $SE=0.09$), $t(780.54)=5.20$, $p<.000$, $d=0.36$. For inparty perceptions, however, the respondents were more optimistic. Republicans thought that other Republicans felt more positive toward Democrats ($M=2.66$, $SE=0.13$) than was the case ($M=2.01$, $SE=0.11$), $t(709.35)=-3.90$, $p<.000$, $d=0.29$. Democrats' beliefs about other Democrats' view of Republicans ($M=2.33$, $SE=0.10$) were more accurate ($M=2.09$, $SE=0.09$), $t(914.59)=-1.77$, $p=.077$, $d=0.12$. There was no significant difference between the two parties' feelings toward each other, $t(766.09)=-0.60$, $p=.550$, $d=0.04$.

To test if the two forms of meta-perceptions were associated with affective polarization (H1-2), affective polarization was regressed on each type of meta-perception (Table 1). Affective polarization was linked to *perceived outparty animosity toward the inparty* ($b=0.34$, $SE=0.03$, $p<.001$) as well as *perceived inparty animosity toward the outparty* ($b=0.16$, $SE=0.03$, $p<.001$). When regressing affective polarization on both types of meta-perceptions simultaneously, a significant association was found for *perceived outparty animosity toward the inparty* ($b=0.35$, $SE=0.04$, $p<.001$) but not *perceived inparty animosity toward the outparty* ($b=-0.02$, $SE=0.03$, $p=.493$). (There was no evidence of high *multicollinearity* among these two predictors; *Tolerance*=0.74; *Variance Inflation Factor*=1.35). Models with control variables (demographics, ideology) are presented in Table 1.

Discussion

Study 1 confirms that perceived outparty animosity (i.e., believing that outparty members dislike inparty members) is associated with affective polarization. Perceived inparty animosity (i.e., believing that inparty members dislike outparty members), however, did not predict affective polarization above and beyond perceived outparty animosity. This null finding is surprising in light of research on intergroup contact (Turner et al., 2008) and social norms (Cialdini, 2007), which would suggest such ingroup perceptions have important implications. Study 1 also shows, consistent with Lees and Cikara (2020, 2021), that members of both parties have overly negative outparty perceptions, but that this pattern differs when it comes to inparty meta-perceptions. In this study, Republicans believed other Republicans felt more positive toward Democrats than was the case, whereas Democrats had accurate perceptions of other Democrats' feelings toward Republicans. Against this backdrop, Study 2 examines how news and social media content might shape affective polarization through meta-perceptions.

Study 2

Method

Study 2 examined the causal pathway in the conceptual model laid out above, using a between-subjects experiment,

varying whether participants saw divisive, unifying, or neutral media content. The data were collected in September and October 2020 via the Qualtrics platform. The subjects were randomly assigned to one of the three conditions, exposing each subject to a series of three simulated Facebook updates from a fictitious news organization. Afterward, they answered a questionnaire.

Participants were recruited using the CloudResearch (2020) platform which gives access to workers from Amazon's Mechanical Turk (MTurk), using screening procedures to ensure high-quality responses. MTurk samples provide relatively good approximations of the US population, as compared to other frequently used convenience samples (Berinsky et al., 2012), and often yield answers similar to nationally representative surveys (Coppock, 2019).

A power analysis showed that, given $\alpha=.05$ and $power=.80$, about 500 participants would be sufficient to detect the small- and medium-sized effects commonly found in the literature (e.g., Wojcieszak & Warner, 2020). To ensure sufficient power while accounting for attrition, 549 participants were recruited. Subjects who failed an attention check ($n=8$) were excluded,⁴ although the findings remain consistent if they are included. It is worth noting that, because the current experiment only included three experimental conditions, this study had *more participants per condition* (unifying condition=179; divisive condition=182; neutral condition=180), than recent experiments using similar designs (e.g., Huddy & Yair, 2021; Tong & DeAndrea, 2023). A post hoc analysis showed that the study was powered to detect a condition contrast of Cohen's $d=0.26$, given $\alpha=.05$ and $power=.80$.

The remaining sample ($n=541$) was 59.7% male, varied from 18 to 81 years of age ($M=38.33$, $SD=11.68$), and represented different races (78.5% White; 9.8% Black; 6.9% Asian or Pacific Islander; 4.8% Others) as well as the full political spectrum (35.5% Democrats; 36.6% Republicans; 25.7% independents [including leaners]; 2.2% Others). Participants were paid 75 cents (average duration=4.36 min), which translates to an hourly wage of over US\$10.

Published news articles were adapted to create realistic simulated social media posts, each of which consisted of a headline along with a featured photo. The headlines construed affective polarization in America as either high (divisive) or low (unifying). As an example, one divisive headline read "Study: Most Republicans and Democrats have 'just a few' or no friends in the opposing party," whereas the unifying version read "Study: Most Republicans and Democrats have friends in the opposing party." Although seemingly contradictory, each version stems from Pew Research Center (2017), and both are correct because having "just a few friends" (a category that is included in the statistics presented in *both headlines*) is quite common. A similar breakdown of each pair of headlines is provided in the Supplemental Material (Table B3). The photos looked similar across conditions but were tweaked to reflect the sentiment of the titles. An apolitical control condition was also included. The full

Table 1. OLS Regressions for Affective Polarization (Study 1).

	Perceived outparty animosity			Perceived inparty animosity			Both types of perceived animosity											
	Model 1			Model 2			Model 3			Model 4			Model 5			Model 6		
	<i>b</i>	β		<i>b</i>	β		<i>b</i>	β		<i>b</i>	β		<i>b</i>	β		<i>b</i>	β	
(Intercept)	5.08***	(0.27)		2.35***	(0.44)	0.42	6.73***	(0.24)	4.13***	(0.47)	0.20	5.14***	(0.28)	0.37	2.36***	(0.46)	0.43	
POA	0.34***	(0.03)	0.36	0.43***	(0.03)	0.42	0.16***	(0.03)	0.18	0.18***	(0.03)	0.20	0.35***	(0.04)	0.37	0.44***	(0.04)	0.43
PIA							0.16***	(0.03)	0.18	0.18***	(0.03)	0.20	-0.02	(0.03)	-0.03	-0.01	(0.03)	-0.01
Female				-0.10	(0.13)	0.13						-0.04				-0.10	(0.13)	-0.02
Age				0.00	(0.00)	0.04					0.06					0.00	(0.00)	0.04
High school or less				0.12	(0.19)	0.02					-0.02					0.12	(0.19)	0.02
Some college				0.06	(0.15)	0.02					0.02					0.07	(0.15)	0.02
Income				-0.02	(0.02)	-0.05					-0.01					-0.02	(0.02)	-0.05
White				-0.02	(0.15)	0.00					0.03					-0.02	(0.15)	0.00
Republican				0.06	(0.13)	0.01					0.03					0.06	(0.13)	0.01
Partisan strength				0.62***	(0.08)	0.23					0.25					0.62***	(0.08)	0.23
<i>N</i>	821			821		821	821				821					820		820
<i>R</i> ²	.128			.236		.032	.032				.110					.129		.236
Adjusted <i>R</i> ²	.127			.228		.031	.031				.100					.127		.227
<i>F</i>	120.61***			27.856***		27.055***	27.055***				11.096***					60.429***		25.039***

POA: perceived outparty animosity toward the inparty; PIA: perceived inparty animosity toward the outparty; OLS: ordinary least squares.

Standard errors are in parentheses.

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

Table 2. Total Effects of Treatments on Affective Polarization (Study 2).

Media content	Outparty feeling			Positive traits			Negative traits		
	<i>b</i>	β	<i>d</i>	<i>b</i>	β	<i>d</i>	<i>b</i>	β	<i>d</i>
Intercept (control)	2.64 (.19)***			3.52 (.11)***			3.98 (.12)***		
Divisive content	-0.01 (.27)	-0.00	0.14	-0.07 (.16)	-0.02	0.15	0.26 (.18)	0.07	0.22
Unifying content	0.64 (.27)*	0.13	0.27	0.32 (.16)*	0.10	0.23	-0.22 (.18)	-0.06	0.21
	<i>F</i> =3.87*			<i>F</i> =3.35*			<i>F</i> =3.85*		
	<i>R</i> ² =.016			<i>R</i> ² =.012			<i>R</i> ² =.014		
	Adjusted <i>R</i> ² =.018			Adjusted <i>R</i> ² =.009			Adjusted <i>R</i> ² =.010		
	<i>N</i> =483			<i>N</i> =541			<i>N</i> =541		

OLS: ordinary least squares; *d*: Cohen's *d*.

Results are based on OLS regressions. Standard errors are in parentheses.

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

stimuli materials are provided in the Supplemental Material (Table B1).

The same items were used as in Study 1 to measure *outparty feelings*⁵ ($M=2.85$, $SD=2.41$), *perceived outparty animosity toward the inparty* ($M=8.12$, $SD=2.26$), and *perceived inparty animosity toward the outparty* ($M=7.33$, $SD=2.30$).⁶ Following recent research (Overgaard et al., 2022; Wojcieszak & Warner, 2020), *trait evaluations* were measured by asking respondents how well, on a seven-point scale, a series of words described their political opponents. The items *selfish*, *hateful*, *mean*, and *misguided* were combined into an index for *negative traits evaluation*, $M=3.99$, $SD=1.67$, Cronbach's $\alpha=.89$; *reasonable*, *honest*, *caring*, and *informed*, which were combined into an index for *positive traits evaluation*, $M=3.60$, $SD=1.52$, Cronbach's $\alpha=.91$.

Results

Study 2 examined the effects of unifying and divisive news content on affective polarization, and the mediating role of political meta-perceptions. The total effects were tested by regressing each dependent variable on the experimental conditions.⁷ Contrary to H3a–c, exposure to divisive content did not influence outparty feelings ($b=-0.01$, $SE=0.27$, $p=.985$, Cohen's $d=0.14$) or positive traits evaluations ($b=-0.07$, $SE=0.16$, $p=.678$, $d=0.15$) and only trended in the expected direction for negative traits evaluations ($b=0.26$, $SE=0.18$, $p=.140$, $d=0.22$). Exposure to unifying content increased positive outparty feelings ($b=0.64$, $SE=0.27$, $p=.012$, $d=0.27$) and positive traits evaluations ($b=0.32$, $SE=0.16$, $p=.046$, $d=0.23$), supporting H4a and H4c, but only trended in the expected direction for negative traits evaluations ($b=-0.22$, $SE=0.18$, $p=.196$, $d=0.21$), contrary to H4b (see Table 2).

H5 predicted that there would be indirect effects of the news content on the outcome variables through *perceived outparty animosity toward the inparty* and *perceived inparty animosity toward the outparty*. This was tested in R using the *Mediation* package (Tingley et al., 2014).⁸ Bootstrapping

procedures with 10,000 bootstrapped samples were used. The pathways are summarized in Figure 2. For the divisive content, there were no significant indirect effects through either of the two mediators. For the unifying content, however, there were significant indirect effects through *perceived outparty animosity toward the inparty* on outparty feeling ($.41$, $p=.019$, 95% confidence interval [CI]=[0.07, 0.72]), positive traits evaluations ($.25$, $p=.017$, 95% CI=[0.05, 0.46]), and negative traits evaluations ($-.08$, $p=.017$, 95% CI=[-0.17, -0.01]). The unifying content also had significant indirect effects through *perceived inparty animosity toward the outparty* on outparty feeling ($.28$, $p=.020$, 95% CI=[0.05, 0.51]) and positive traits evaluations ($.20$, $p=.015$, 95% CI=[0.04, 0.37]) but only trended in the expected direction for negative traits evaluations ($-.04$, $p=.052$, 95% CI=[-0.12, 0.00]). A robustness check indicated that the results are robust to potential assumption violations (see Supplemental Table B2).

Discussion

Study 2 reveals that brief exposure to snippets of political content can help recalibrate partisans' negative meta-perceptions, which, in turn, can curb affective polarization. Surprisingly, divisive news content produced no effects, whereas unifying content decreased affective polarization. This pattern could be due to pre-treatment effects (Druckman & Leeper, 2012); specifically, the unifying content might have been seen as more novel, given the predominance of negative political content in American news (Fiorina et al., 2005). Nevertheless, this finding implies that it may not be effective to make news consumers see fewer divisive stories—it appears that a more substantial effect would come from seeing more unifying stories. Although both types of meta-perceptions emerged as significant mediators, *perceived outparty animosity toward the inparty* was most influential and consistent, yielding significant indirect effects in the expected directions on each of the three forms of affective polarization. Taken together, these results suggest that subtle differences in news content on social media

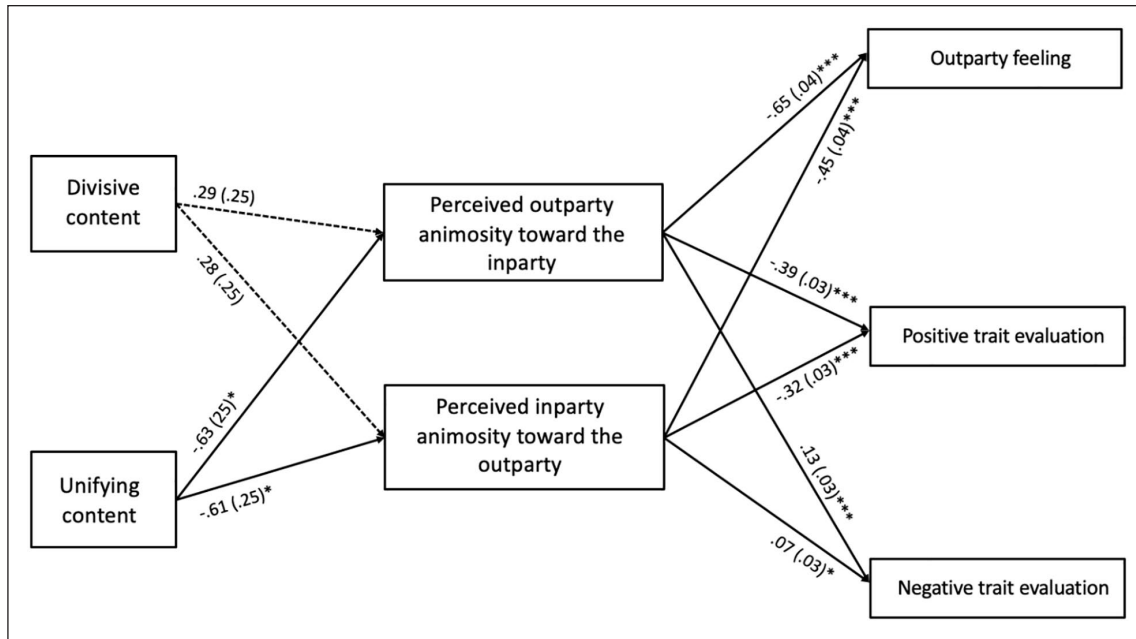


Figure 2. Indirect effects through perceived affective polarization (Study 2).

Standard errors are in parentheses. The figure is based on a series of mediation analyses, with *unifying* and *divisive* content denoted as dummy variables with the control group as the baseline.

*** $p < .001$. * $p < .05$.

can influence people's meta-perceptions and animosity toward their outparty.

General Discussion

The current research integrates two adjacent lines of work on (a) the impact of news and social media on affective polarization (e.g., Levendusky & Malhotra, 2016; Levy, 2021; Settle, 2018) and (b) political meta-perceptions (Lees & Cikara, 2020; Moore-Berg et al., 2020) into a conceptual model. In this model, exposure to news and social media content shapes people's political meta-perceptions, which, in turn, influence their attitudes toward their outparty. The proposed model distinguishes between two types of meta-perceptions. The first type, *perceived outparty animosity toward the inparty*, was drawn from recent work on meta-perceptions, which suggest such perceptions may drive actual interparty animosity (e.g., Lees & Cikara, 2020; Moore-Berg et al., 2020). The second type, *perceived inparty animosity toward the outparty*, came from research on intergroup contact (Turner et al., 2008) and social norms (Cialdini, 2007), which suggests that such perceptions can also intergroup hostility. The association between these types of meta-perceptions and affective polarization was first examined using a probability sample (Study 1); the proposed theoretical pathway was then examined in an original experiment (Study 2).

The finding that both Democrats and Republicans believe they are disliked more by their outparty members than is the case (Study 1), echoes the idea that people have overly

negative meta-perceptions about their political adversaries (Moore-Berg et al., 2020) and outgroup members more broadly (Kteily et al., 2016).

Surprisingly, however, Study 1 found that partisans did not have overly negative meta-perceptions of their inparty, as has been found in other research (Lees & Cikara, 2020); Democrats had accurate perceptions about their ingroup members, and Republicans perceived other Republicans to like their outparty *more* than is the case. This discrepancy might occur because this study used a more representative sample. The discrepancy could also stem from differences in operationalization; Lees and Cikara (2020) focused on how participants thought people would react to political actions taken by their outparty, whereas the current research focused on how participants thought people felt toward their outparty more generally. The discrepancy points to a need for caution in assuming that different types of political meta-perceptions (e.g., perceptions about reactions to political actions and perceptions about feelings) will necessarily trend in a similar direction.

Of the two types of meta-perceptions measured in Study 1, *perceived outparty animosity* toward the inparty was most strongly linked with affective polarization. In line with prior research (e.g., Moore-Berg et al., 2020), partisans who thought they were disliked by their outparty disliked the outparty in return. The other kind of meta-perception, *perceived inparty animosity*, toward the outparty did not predict affective polarization above and beyond perceived outparty animosity. This is surprising in light of research on intergroup contact and social norms, which suggests that people's

attitudes are often strongly influenced by what they perceive as normative in their social groups (Cialdini, 2007; Turner et al., 2008). These findings suggest that meta-perceptions about one's outparty are particularly important in driving affective polarization. Yet it is worth noting that Study 1 did not address causality.

An original experiment (Study 2) then examined the potential for news and social media content to drive these meta-perceptions, and the downstream consequences for affective polarization. Exposure to divisive content had no effects on meta-perceptions or affective polarization, which is striking, given that polarization is often attributed to news or social media (e.g., Levendusky & Malhotra, 2016; Levy, 2021; Settle, 2018). Unifying media content (i.e., content that casts affective polarization as relatively low) led to various forms of depolarization, and these effects were indirect through both types of political meta-perceptions. Perceived outparty animosity toward the inparty emerged as a particularly powerful mediator, although perceived inparty animosity toward the outparty also yielded significant indirect effects on some forms of affective polarization. These findings support the idea that changing meta-perceptions can lead partisans to feel warmer toward their political adversaries (Lees & Cikara, 2020; Moore-Berg et al., 2020). Further, these findings address a gap in this literature, which has thus far yielded little knowledge about how political meta-perceptions arise. In particular, news and social media content is offered as a potential driver of political meta-perceptions in the United States. Whereas the current research focused on US politics, future research could test if the proposed model generalizes to other contexts, for example, racial or religious conflicts, where meta-perceptions also play a central role (Kteily et al., 2016).

The present results indicate that news and social media content can shape affective polarization, and also provide a theoretical explanation: news and social media can shape affective polarization indirectly by changing the public's perceptions of how the two parties feel toward one another. Further, adding to recent advances on mediated intergroup contact theory (Huddy & Yair, 2021; Wojcieszak & Warner, 2020), the current results demonstrate that social media exposure to unifying news content can reduce affective polarization by changing people's meta-perceptions. This is particularly noteworthy in light of a recent review that found that "[n]o experiments provided insights into ways social media can decrease (or have a null effect) on affective polarization" (Kubin & von Sikorski, 2021, p. 9).

The current findings have scholarly implications as well as practical implications for news organizations, social media platforms, and those interested in curbing affective polarization. A rich literature has investigated social media's potential role in exacerbating polarization (e.g., Allcott et al., 2020; Settle, 2018), in part because of their algorithms (Levy, 2021; Sunstein, 2018; Van Bavel et al., 2021; but see Guess et al., 2023), which may accelerate the spread of inflammatory content (Rathje et al., 2021) and foster ideological echo

chambers (Sunstein, 2018; but see Barberá, 2020). The current experiment contributes by shedding light on how specific changes in content exposure might affect individual social media users' animosity toward their outparty members. The results show that exposing social media users to unifying media content can be an effective way to mitigate the growing problem of partisan discord in America. In the current experiment, even brief exposure to a few unifying posts altered people's perceptions of polarization as well as their actual feelings toward the "other side." There is, therefore, some reason to suspect that sustained intervention of this kind could help reduce affective polarization.

Polarization should, however, not be seen as the only outcome of interest for those seeking to help democracies flourish; some democratic pursuits (e.g., fighting for equality) can, at times, inflame polarization but are nevertheless vital, as Kreiss and McGregor (2023) have pointed out. Further, recent large-scale studies, which induced affective polarization experimentally, did not find much of an impact on key outcomes such as electoral accountability, support for democratic norms, support for political violence, or perceptual biases (Broockman et al., 2023; Voelkel, Chu, et al., 2022). Yet affective polarization might indirectly influence democratic processes in other ways, for example, if it prevents partisans from talking to those they disagree with or if it exacerbates their tendencies to believe what they want to believe about certain matters of fact (Overgaard & Collier, 2023; Overgaard et al., 2022). Further research should investigate the potential democratic implications of affective polarization.

The reported experiment is not without limitations. For one, the mediation analyses are not designed to rule out all potential confounders. Although additional analyses (Supplemental Table B2) were conducted to alleviate concerns about unmeasured pre-treatment confounders (Imai et al., 2010), unmeasured mediators (e.g., perceived issue polarization or perceived commonality) could potentially explain the effect of media content on affective polarization. Another limitation pertains to statistical power; whereas some past meta-perceptions studies (e.g., Lees & Cikara, 2020) have found small effect sizes, the current experiment was powered to detect small to moderate effect sizes.

Further, although the experiment breaks important ground by including a focus on visuals, a crucial aspect of political communication currently missing from most polarization research (Tucker et al., 2018), it comes with an important limitation. The experiment varied text and images simultaneously; it is, therefore, not clear which of the two produced the observed effects. The purpose was to examine the effects of social media posts with congruent text and images. Prior work has focused on text alone (Huddy & Yair, 2021; Wojcieszak & Warner, 2020). Future studies could examine the effects of visuals alone or use factorial designs to study different text-image combinations, although some of these combinations (e.g., unifying headlines paired with divisive images) would likely look unnaturalistic, thus threatening ecological validity.

The current design also does not untangle whether the effects found for unifying content were primarily driven by one, two, or all of the social media posts; future research might benefit from detailing such nuances. Further, the current experiment focused on the downstream consequences of exposure to realistic-looking news content as it appears on social media; future studies should take steps to manipulate the two mediators separately (not necessarily using news or social media content) to examine and validate their individual effects.

The causal pathway proposed here, that the press changes people's meta-perceptions which then shape affective polarization, raises a worrisome possibility: increases in affective polarization might lead news and social media users to encounter more divisive content (or less unifying content). After all, as polarization increases, it becomes more relevant for journalists and citizens to pay attention to, and manifestations of affective polarization on social media might even normalize the use of hateful expressions in these spaces (Harel et al., 2020), which could then fuel polarization. Further, increasing levels of affective polarization might also intensify people's tendency to selectively consume news content that fits their partisan leanings (Stroud, 2011), which is especially pronounced among those with more extreme attitudes (Brannon et al., 2007). If affective polarization indeed makes exposure to divisive content (relative to unifying content) more likely, it could turn the theorized pathway into a recursive feedback loop, where (a) exposure to divisive media content (or lack of exposure to unifying content) leads to negative meta-perceptions, (b) negative meta-perceptions fuel affective polarization, and (c) affective polarization leads to more exposure to divisive media content relative to unifying content (for a similar model, less focused on affect, see Wilson et al., 2020). On a more hopeful note, the reverse is also possible: exposure to unifying content could lead to more positive meta-perceptions, which could reduce affective polarization, and thereby facilitate exposure to more unifying content. These feedback loops, however, go beyond the current evidence, and are offered here, not as claims, but as possibilities for future research to investigate. Such endeavors might benefit from disentangling the relative impact of perceptions about political disagreement (i.e., perceived issue polarization) versus perceptions about interparty animosity (i.e., affective polarization) in driving affective polarization.

Future studies could also examine the proposed pathway in the context of exposure to different kinds of news content (e.g., whole news articles as opposed to social media snippets) and social media content (e.g., posts from private users as opposed to posts from news media). Similarly, future studies could compare the effects of divisive as well as unifying content that conveys statistical information, as was done in the experiment reported here, versus content that focuses on more vivid personal examples or stories.

In sum, the current research points to political meta-perceptions as a potent underlying mechanism that can help explain how social media shapes affective polarization.

Future research can help clarify if and how social media platforms influence people's meta-perceptions, and what the implications are for intergroup relations.

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The datasets collected for this project are available for replication from the author.

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ORCID iD

Christian Staal Bruun Overgaard  <https://orcid.org/0000-0002-8774-0778>

Supplemental Material

Supplemental material for this article is available online.

Notes

1. This included variables such as gender, education level, race, ethnicity, age, housing tenure, Census Division, as well as household phone status.
2. AAPOR stands for American Association for Public Opinion Research.
3. Those who do not identify with or lean toward either party.
4. Two attention checks were included: *What is 2+2?* and *Who is the current president of the United States?* Subjects failing either were removed.
5. Outparty feelings were not reverse-scored here.
6. Consistent with Study 1, these could not be calculated for true independents ($n=58$).
7. The conditions were coded as two dummy variables, with the control condition as the baseline.
8. Same dummy as above. In each model, the condition not being tested is used as a covariate.

References

- Ahler, D. J. (2014). Self-fulfilling misperceptions of public polarization. *The Journal of Politics*, 76(3), 607–620. <https://doi.org/f58vdj>
- Ahler, D. J., & Sood, G. (2018). The parties in our heads: Misperceptions about party composition and their consequences. *The Journal of Politics*, 80(3), 964–981. <https://doi.org/gdt4zw>

- Allcott, H., Braghieri, L., Eichmeyer, S., & Gentzkow, M. (2020). The welfare effects of social media. *American Economic Review*, *110*(3), 629–676. <https://doi.org/ggmzcs>
- 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), Article e2022819118. <https://doi.org/10.1073/pnas.2022819118>
- Banks, A., Calvo, E., Karol, D., & Telhami, S. (2021). #PolarizedFeeds: Three experiments on polarization, framing, and social media. *The International Journal of Press/Politics*, *26*(3), 609–634. <https://doi.org/10.1177/1940161220940964>
- Barberá, P. (2020). Social media, echo chambers, and political polarization. In N. Persily & J. A. Tucker (Eds.), *Social media and democracy: The state of the field, prospects for reform* (pp. 34–55). Cambridge University Press.
- Beam, M. A., Hutchens, M. J., & Hmielowski, J. D. (2018). Facebook news and (de) polarization: Reinforcing spirals in the 2016 US election. *Information, Communication & Society*, *21*(7), 940–958. <https://doi.org/gf3gr5>
- Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon.com’s Mechanical Turk. *Political Analysis*, *20*(3), 351–368. <https://doi.org/10.1093/pan/mpr057>
- Berry, J. M., & Sobieraj, S. (2013). *The outrage industry: Political opinion media and the new incivility*. Oxford University Press.
- Brady, W. J., Wills, J. A., Jost, J. T., Tucker, J. A., & Bavel, J. J. V. (2017). Emotion shapes the diffusion of moralized content in social networks. *Proceedings of the National Academy of Sciences*, *114*(28), 7313–7318. <https://doi.org/10.1073/pnas.1618923114>
- Brannon, L. A., Tagler, M. J., & Eagly, A. H. (2007). The moderating role of attitude strength in selective exposure to information. *Journal of Experimental Social Psychology*, *43*(4), 611–617. <https://doi.org/10.1016/j.jesp.2006.05.001>
- Broockman, D. E., Kalla, J. L., & Westwood, S. J. (2023). Does affective polarization undermine democratic norms or accountability? Maybe not. *American Journal of Political Science*, *67*, 808–828. <https://doi.org/10.1111/ajps.12719>
- Bursztyjn, L., & Yang, D. Y. (2021). *Misperceptions about others* (Working Paper 29168; Working Paper Series). National Bureau of Economic Research. <https://doi.org/10.3386/w29168>
- Cialdini, R. B. (2007). Descriptive social norms as underappreciated sources of social control. *Psychometrika*, *72*(2), 263–268. <https://doi.org/10.1007/s11336-006-1560-6>
- CloudResearch. (2020). *Transform MTurk into a complete online survey platform*. <https://www.cloudresearch.com/products/turkprime-mturk-toolkit/>
- Coppock, A. (2019). Generalizing from survey experiments conducted on Mechanical Turk: A replication approach. *Political Science Research and Methods*, *7*(3), 613–628. <https://doi.org/10.1017/psrm.2018.10>
- Druckman, J. N., & Leeper, T. J. (2012). Learning more from political communication experiments: Pretreatment and its effects. *American Journal of Political Science*, *56*(4), 875–896. <https://doi.org/10.1111/j.1540-5907.2012.00582.x>
- Druckman, J. N., & Levendusky, M. S. (2019). What do we measure when we measure affective polarization? *Public Opinion Quarterly*, *83*(1), 114–122. <https://doi.org/10.1093/poq/nfz003>
- Fiorina, M. P., Abrams, S. J., & Pope, J. C. (2005). *Culture war: The myth of a polarized America*. Pearson.
- Guess, A. M., Malhotra, N., Pan, J., Barberá, P., Allcott, H., Brown, T., Crespo-Tenorio, A., Dimmery, D., Freelon, D., Gentzkow, M., González-Bailón, S., Kennedy, E., Kim, Y. M., Lazer, D., Moehler, D., Nyhan, B., Rivera, C. V., Settle, J., Thomas, D. R., & . . . Tucker, J. A. (2023). How do social media feed algorithms affect attitudes and behavior in an election campaign? *Science*, *381*(6656), 398–404. <https://doi.org/10.1126/science.abp9364>
- Harel, T. O., Jameson, J. K., & Maoz, I. (2020). The normalization of hatred: Identity, affective polarization, and dehumanization on Facebook in the context of intractable political conflict. *Social Media + Society*, *6*(2), 2056305120913983. <https://doi.org/10.1177/2056305120913983>
- Haslam, S. A., McGarty, C., & Turner, J. C. (1996). Salient group memberships and persuasion: The role of social identity in the validation of beliefs. In J. L. Nye & A. M. Brower (Eds.), *What’s social about social cognition? Research on socially shared cognition in small groups* (pp. 29–56). Sage. <https://doi.org/10.4135/9781483327648.n2>
- Hong, S., & Kim, S. H. (2016). Political polarization on twitter: Implications for the use of social media in digital governments. *Government Information Quarterly*, *33*(4), 777–782. <https://doi.org/f9jqwp>
- Huddy, L., & Yair, O. (2021). Reducing affective polarization: Warm group relations or policy compromise? *Political Psychology*, *42*(2), 291–309. <https://doi.org/10.1111/pops.12699>
- Imai, K., Keele, L., & Yamamoto, T. (2010). Identification, inference and sensitivity analysis for causal mediation effects. *Statistical Science*, *25*(1), 51–71. <https://doi.org/bqxs88>
- Iyengar, S., Lelkes, Y., Levendusky, M., Malhotra, N., & Westwood, S. J. (2019). The origins and consequences of affective polarization in the United States. *Annual Review of Political Science*, *22*, 129–146. <https://doi.org/gfv79s>
- Iyengar, S., Sood, G., & Lelkes, Y. (2012). Affect, not ideology: A social identity perspective on polarization. *Public Opinion Quarterly*, *76*(3), 405–431. <https://doi.org/bस्क>
- Kreiss, D., & McGregor, S. C. (2023). A review and provocation: On polarization and platforms. *New Media & Society*, *26*, 556–579. <https://doi.org/10.1177/14614448231161880>
- Kteily, N., Hodson, G., & Bruneau, E. (2016). They see us as less than human: Metadehumanization predicts intergroup conflict via reciprocal dehumanization. *Journal of Personality and Social Psychology*, *110*(3), 343–370. <https://doi.org/ggfj pz>
- Kubin, E., & von Sikorski, C. (2021). The role of (social) media in political polarization: A systematic review. *Annals of the International Communication Association*, *45*(3), 188–206. <https://doi.org/10.1080/23808985.2021.1976070>
- Lees, J., & Cikara, M. (2020). Inaccurate group meta-perceptions drive negative out-group attributions in competitive contexts. *Nature Human Behaviour*, *4*(3), 279–286. <https://doi.org/10.1038/s41562-019-0766-4>
- Lees, J., & Cikara, M. (2021). Understanding and combating misperceived polarization. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, *376*(1822), 20200143. <https://doi.org/10.1098/rstb.2020.0143>
- Levendusky, M., & Malhotra, N. (2016). Does media coverage of partisan polarization affect political attitudes? *Political Communication*, *33*(2), 283–301. <https://doi.org/10.1080/10584609.2015.1038455>
- Levy, R. (2021). Social media, news consumption, and polarization: Evidence from a field experiment. *American*

- Economic Review*, 111(3), 831–870. <https://doi.org/10.1257/aer.20191777>
- Lorenz-Spreen, P., Oswald, L., Lewandowsky, S., & Hertwig, R. (2023). A systematic review of worldwide causal and correlational evidence on digital media and democracy. *Nature Human Behaviour*, 7, 74–101. <https://doi.org/10.1038/s41562-022-01460-1>
- Moore-Berg, S. L., Ankori-Karlinsky, L.-O., Hameiri, B., & Bruneau, E. (2020). Exaggerated meta-perceptions predict intergroup hostility between American political partisans. *Proceedings of the National Academy of Sciences*, 117(26), 14864–14872. <https://doi.org/10.1073/pnas.2001263117>
- Mutz, D. C., & Soss, J. (1997). Reading public opinion: The influence of news coverage on perceptions of public sentiment. *Public Opinion Quarterly*, 61(3), 431–451. <https://www.jstor.org/stable/2749580>
- Overgaard, C. S. B. (2021). Constructive journalism in the face of a crisis: The effects of social media news updates about COVID-19. *Journalism Studies*, 22(14), 1875–1893. <https://doi.org/10.1080/1461670X.2021.1971107>
- Overgaard, C. S. B., & Collier, J. R. (2023). In different worlds: The contributions of polarization and platforms to partisan (mis)perceptions. *New Media & Society*. Advance online publication. <https://doi.org/10.1177/14614448231176551>
- Overgaard, C. S. B., Masullo, G. M., Duchovnay, M., & Moore, C. (2022). Theorizing connective democracy: A new way to bridge political divides. *Mass Communication and Society*, 25(6), 861–885. <https://doi.org/10.1080/15205436.2022.2119870>
- Pew Research Center. (2014). *Political polarization in the American public*. <https://www.people-press.org/2014/06/12/political-polarization-in-the-american-public/>
- Pew Research Center. (2017). *The partisan divide on political values grows even wider*. <https://www.people-press.org/2017/10/05/the-partisan-divide-on-political-values-grows-even-wider/>
- Pew Research Center. (2021). *Americans' views of the problems facing the nation*. <https://www.pewresearch.org/politics/2021/04/15/americans-views-of-the-problems-facing-the-nation/>
- Rathje, S., Bavel, J. J. V., & van der Linden, S. (2021). Out-group animosity drives engagement on social media. *Proceedings of the National Academy of Sciences*, 118(26), Article e2024292118. <https://doi.org/10.1073/pnas.2024292118>
- Ruggeri, K., Većkalov, B., Bojanić, L., Andersen, T. L., Ashcroft-Jones, S., Ayacaxli, N., Barea-Arroyo, P., Berge, M. L., Bjørndal, L. D., Bursalıoğlu, A., Bühler, V., Čadek, M., Çetinçelik, M., Clay, G., Cortijos-Bernabeu, A., Damjanović, K., Dugue, T. M., Esberg, M., Esteban-Serna, C., & . . . Folke, T. (2021). The general fault in our fault lines. *Nature Human Behaviour*, 5(10), 1369–1380. <https://doi.org/10.1038/s41562-021-01092-x>
- Settle, J. E. (2018). *Frenemies: How social media polarizes America*. Cambridge University Press.
- Smith, E. R., & Henry, S. (1996). An in-group becomes part of the self: Response time evidence. *Personality and Social Psychology Bulletin*, 22(6), 635–642. <https://doi.org/10.1177/0146167296226008>
- Stroud, N. J. (2011). *Niche news: The politics of news choice*. Oxford University Press.
- Sunstein, C. R. (2018). *#Republic: Divided democracy in the age of social media*. Princeton University Press.
- Tai, Q. (2016). Western media exposure and Chinese immigrants' political perceptions. *Political Communication*, 33(1), 78–97. <https://doi.org/10.1080/10584609.2014.978921>
- Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: A role for group identification. *Personality and Social Psychology Bulletin*, 22(8), 776–793. <https://doi.org/10.1177/0146167296228002>
- Tingley, D., Yamamoto, T., Hirose, K., Keele, L., & Imai, K. (2014). *mediation: R package for causal mediation analysis*. UCLA Statistics/American Statistical Association. <https://dspace.mit.edu/handle/1721.1/91154>
- Tong, S. T., & DeAndrea, D. C. (2023). The effects of observer expectations on judgments of anti-Asian hate tweets and online activism response. *Social Media + Society*, 9(1), 20563051231157299. <https://doi.org/10.1177/20563051231157299>
- Tucker, J. A., Guess, A., Barberá, P., Vaccari, C., Siegel, A., Sanovich, S., Stukal, D., & Nyhan, B. (2018). Social media, political polarization, and political disinformation: A review of the scientific literature. <https://doi.org/10.2139/ssrn.3144139>
- Turner, R. N., Hewstone, M., Voci, A., & Vonofakou, C. (2008). A test of the extended intergroup contact hypothesis: The mediating role of intergroup anxiety, perceived ingroup and outgroup norms, and inclusion of the outgroup in the self. *Journal of Personality and Social Psychology*, 95(4), 843–860. <https://doi.org/10.1037/a0012743>
- Van Bavel, J. J., Rathje, S., Harris, E., Robertson, C., & Sternisko, A. (2021). How social media shapes polarization. *Trends in Cognitive Sciences*, 25, 913–916. <https://doi.org/10.1016/j.tics.2021.07.013>
- van Boven, L., Ehret, P. J., & Sherman, D. K. (2018). Psychological barriers to bipartisan public support for climate policy. *Perspectives on Psychological Science*, 13(4), 492–507.
- Voelkel, J. G., Chu, J., Stagnaro, M. N., Mernyk, J. S., Redekopp, C., Pink, S. L., Druckman, J. N., Rand, D. G., & Willer, R. (2022). Interventions reducing affective polarization do not necessarily improve anti-democratic attitudes. *Nature Human Behaviour*, 7, 55–64. <https://doi.org/10.1038/s41562-022-01466-9>
- Voelkel, J. G., Stagnaro, M., Chu, J., Pink, S., Mernyk, J., Redekopp, C., Cashman, M., Submitters, Q., Druckman, J., & Rand, D. (2022). *Megastudy identifying successful interventions to strengthen Americans' democratic attitudes*. Northwestern University. <https://www.ipr.northwestern.edu/documents/working-papers/2022/wp-22-38.pdf>
- Westfall, J., Van Boven, L., Chambers, J. R., & Judd, C. M. (2015). Perceiving political polarization in the United States: Party identity strength and attitude extremity exacerbate the perceived partisan divide. *Perspectives on Psychological Science*, 10(2), 145–158. <https://doi.org/10.1177/1745691615569849>
- Wilson, A. E., Parker, V., & Feinberg, M. (2020). Polarization in the contemporary political and media landscape. *Current Opinion in Behavioral Sciences*, 34, 223–228. <https://doi.org/10.1016/j.cob.2020.07.003>
- 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), 1–23. <https://doi.org/10.1080/10584609.2020.1760406>

Author Biography

Christian Staal Bruun Overgaard (MSc, University of Southern Denmark) is a Knight Research Associate at the Center for Media Engagement and a doctoral candidate at the School of Journalism and Media at the University of Texas at Austin. His research interests include news, social media, and political polarization.