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Elite communication and affective polarization among voters

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ABSTRACT

How does elite communication influence affective polarization between partisan groups? Drawing on the literature on partisan source cues, we expect that communication from in- or outgroup party representatives will increase affective polarization. We argue that polarized social identities are reinforced by partisan source cues, which bias perceptions of elite communication and result in increased intergroup differentiation. Further, we expect that the effect of such source cues is greater for voters with stronger partisan affinities. To evaluate our hypotheses, we performed a survey experiment among about 1300 voters in Sweden. Our analyses show that individuals who received a factual political message with a source cue from an in- or outgroup representative exhibited higher affective polarization, especially when they already held strong partisan affinities. This suggests that political elites can increase affective polarization by reinforcing existing group identities, and that this occurs in conjunction with biased interpretation of elite communication. The results improve our understanding of how political elites can influence affective polarization and add to previous research on party cues and attitude formation by demonstrating that such source cues can also increase intergroup differentiation.

1. Introduction

The phenomenon of affective polarization, marked by increased hostility and division between individuals from differing political affiliations, has garnered increased attention in recent years. Studies have indicated that many democratic societies are facing heightened levels of affective polarization, characterized by a significant degree of intergroup distancing between one's own political party and other political parties and their supporters (e.g., Iyengar et al., 2019; Mason, 2018). Such intergroup distancing can have serious implications for democratic societies, hindering political compromise (Whitt et al., 2020), eroding political trust (Hetherington and Rudolph, 2018), and even leading to political violence (Kalmoe and Mason, 2022). Hence, it is important to gain a deeper understanding of the underlying causes and effects of affective polarization.

Until recently, most work on affective polarization has focused on the US electorate and partisan hostility between Republican and Democrat supporters (e.g., Iyengar et al., 2012; Iyengar et al., 2019; Mason, 2018). However, a rapidly growing literature focuses on measuring and explaining such hostilities in multi-party systems in Europe (e.g., Wagner, 2021; Harteveld, 2021; Gidron et al., 2020; Reiljan, 2020; Reiljan

and Ryan, 2021; Renström et al., 2021, 2022, 2022). Recent work has identified the need to better understand how political elites influence affective polarization in the electorate. Some studies, for example, associate negative campaign content with affective polarization (e.g., Sood and Iyengar, 2016; cf. Ridout et al., 2018), whereas others have focused on the intergroup relations of political elites (e.g., Skytte, 2021; Huddy and Yair 2021), or on previous co-governance patterns among parties (see Horne et al., 2022; Harteveld and Wagner, 2020). We contribute to this growing field of research by focusing on the role of political elites and their communication in driving affective polarization in a multi-party context.

To specify our hypotheses, we build on the literature on party cues, which suggests that the actors behind a policy issue play an important role in shaping public opinion (Nicholson, 2012). These cues activate individuals' biases that reinforce the group identities at the core of affective attitudes in political conflicts (e.g., Goren et al., 2009). Partisan source cues from both in- and outgroup representatives thus not only influence opinion formation but also polarize the electorate, as individuals try to distinguish themselves from outgroup members. However, with the exception of recent work by Rudolph and Hetherington (2021), this literature has focused on the impact of partisan source cues

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on opinion formation and ideological or attitudinal polarization. The consequences of such cues on affective polarization, therefore, remain understudied.

Drawing on this literature and on Brewer's (1991) theory of optimal distinctiveness, which says that inter-group differentiation is important for all social groups' survival, we hypothesize that partisan source cues influence affective polarization even when the content of elite communication lacks a clear position because individuals will interpret messages from their in- or outgroups as reinforcing their partisan identity and/or ascribe directional content to the message in a way that reinforces the sense of ingroup distinctiveness relative to the outgroup. Hence, we expect that voters will react with an increase in affective polarization when presented with a message from a representative of their in- or outgroup party. As the mechanism for this argument relies on a polarized interpretation of partisan source cues, we also expect that the effect of receiving such a cue will be stronger if the voter has existing partisan (dis)affinities. In other words, individuals will be more sensitive to source cues increasing their inter-party differentiation when they are already affectively polarized.

To evaluate our hypotheses, we performed a survey experiment among about 1300 voters in Sweden, a multi-party context which has, in previous research, been found to be one of the most affectively polarized contexts in Europe (Bettarelli et al., 2022), but otherwise shares many features with other advanced European democracies. The experiment presented participants with messages on political topics that were factual and descriptive in nature, lacking any advocacy of a particular direction. The treatment groups received information that the sender of the message was either an in- or outgroup party representative, and the control group did not receive any source cue. Our analyses show that individuals who received a source cue from either an in- or outgroup representative were higher on affective polarization compared to participants in the control condition. In line with our argument, the results also show a conditional effect of source cues and the individual's pre-existing feelings toward parties, such that the effect of the treatment was particularly strong among those who had more intense partisan (dis)affinities.

These results suggest that political elites can influence affective polarization associated with existing group identities, even when the content of messages on polarized topics does not explicitly advocate a specific political stance. The fact that those with stronger partisan affinities responded more strongly to source cues suggests that the effect of party source cues on affective polarization is driven by group identities held by the respondents. Further, it indicates that high underlying affective polarization is likely to bias the interpretation of elite communication, which in turn further increases partisan hostility.

2. Social identities, party cues, and affective polarization

Following recent work on affective polarization, our theoretical argument builds on social identity theory and the idea that groups become a significant part of an individual's self-definition by forming emotional and psychological attachments. Identification with a group creates positive feelings for this "ingroup" and often negative feelings for other groups, the "outgroups" (Haslam et al., 2010). The mere creation of groups can create intergroup tension (Tajfel, 1970; Tajfel and Turner, 1979), and the categorization of individuals into socially constructed categories based on partisanship facilitates general inferences about the members of these categories, even if the conclusions are incorrect (Iyengar et al., 2019). Intergroup tension may thus come with significant positive bias toward members of one's ingroup and negative bias against members of the outgroup. The reason for this is, as suggested by Brewer's (1991, 478) theory of "optimal distinctiveness," that groups must maintain distinctiveness from other groups to survive - "to secure loyalty, groups must not only satisfy members' need for affiliation and belonging within the group, they must also maintain clear boundaries that differentiate them from other groups."

Several scholars have suggested that political elites' behavior and communication should matter for affective polarization (e.g., Rudolph and Hetherington, 2021; Horne et al., 2022). Our theoretical argument thus focuses on the role of "cues" in elite communication, and draws on the literature on party cues that argues that citizens can make reasoned choices by making use of information shortcuts (see e.g., Zaller 1992; Lau and Redlawsk, 2006). The idea is that source cues, "the political actors behind an issue – are among the most widely available and influential information shortcuts in politics" (Nicholson 2012: 52). The persuasiveness of such cues has been shown to lie in whether the communicator is seen as credible (e.g., Lupia et al., 1998). It has also been shown that "out-party" cues coming from the opposing party's leader may be particularly important to consider when explaining opinion polarization (Nicholson, 2012).

Drawing on this literature and Brewer's (1991) theory of optimal distinctiveness, we argue that political representatives can influence affective polarization in the electorate through communication by simply making group identities salient, independently of the content of messaging. We argue that if policy issues are already associated with polarized group identities, and certain political positions "belong" to associated partisan groups, political representatives can activate those political identities merely by drawing attention to the issue. That is, we suggest that voters, as supporters of a particular party, can position themselves on some political issues and have clear expectations for the positions of their own representatives and political opponents, resulting in biased interpretations of political messages. This implies that partisan source cues can also influence affective polarization even when elite communication is non-directional in terms of content since individuals are likely to interpret messages from their in- or outgroups to contain content linked to their views on polarized issues and associated group identities.

We suggest that when individuals get a political message from a representative of their ingroup party, they are more likely to perceive that the content of the message is in line with their own position, provoking a feeling of being closer to the ingroup. When individuals get such a message from a representative of an outgroup party, they are instead more likely to perceive that the content of the message is opposite to their own position, which should provoke intergroup differentiation. More specifically, we hypothesize that,

H1. Individuals who receive a political message from a representative of a partisan in- or outgroup will have higher levels of affective polarization, compared to individuals who did not receive a source cue.

Hence, we expect that source cues from both an ingroup and an outgroup representative should influence affective polarization. Both types of partisan source cues should result in a heightened sense of partisan identity, thereby resulting in a higher degree of intergroup differentiation and affective polarization. Consequently, as shown in previous work on party cues and opinion polarization (e.g., Nicholson 2012), we suggest that some voters become more affectively polarized when reading messages from "the other side." This general expectation is in line with recent work on party cues and affective polarization in the US by Rudolph and Hetherington (2021), who show, using an experimental design, that partisan cues shape trust judgments.

Our argument implies that sender cues are important in isolation from content due to an existing association between group identities, political parties, and a polarized context. Thus, we expect that individuals vary in how they react to partisan source cues since the underlying identity polarization driving this mechanism will vary across individuals. This mirrors the argument made by Druckman and Levendusky (2019), who posit that partisans with strong negative feelings toward the outgroup party are more motivated to differentiate themselves from their opponents by taking positions that are distinct from the outgroup party. This expectation is also in line with research on trust judgments in the US, which has shown that partisan identity moderates the impact of cues on affective polarization in political settings (Rudolph

and Hetherington, 2021).

Following this line of reasoning, we expect that voters with preexisting strong (dis)affinities toward ingroup or outgroup parties – those who are already strongly affectively polarized – will react most strongly to partisan source cues. For individuals with such strong affinities, receiving political communication from an in- or outgroup representative will reinforce polarized social identities based on the sender cue itself, leading to a biased interpretation of the content and a higher degree of affective polarization. We thus expect that,

H2. Individuals who have strong (dis)affinities for partisan in- or outgroups will be more likely to polarize affectively when they receive a political message from a representative of an in- or outgroup.

3. Methods and data

3.1. The case of Sweden

The Swedish party system, though historically characterized as highly unidimensional along the traditional left-right dimension and with rather consolidated left and right party blocs (Dahlberg and Oscarsson, 2006; Reiljan and Ryan, 2021), has recently become much more divided on cultural issues, particularly those relating to globalization. The high influx of immigrants, and asylum seekers in particular, has placed these questions high on the political agenda (Strömbäck and Theorin, 2018), heightening the salience of associated issues.

This emphasis is perhaps most clearly seen in the success of populist radical right Sweden Democrats (SD), which has rearranged how the traditional party blocs are configured. Party politics in Sweden during the last decade has revolved around the question of whether mainstream right-of-center parties should end their strict *cordon sanitaire* against the party and accept their inclusion in a joint government. Research has shown that the Sweden Democrats is subject to widespread loathing from supporters of center- and left-wing parties (Reiljan and Ryan, 2021; Renström et al., 2021). This goes beyond the party itself, as out-partisans express discomfort at the prospect of socializing even with supporters of the party (Renström et al., 2021). Meanwhile, the Green Party has emerged as the primary target of affective polarization from right-wing voters (Renström et al., 2021). Mirroring the Sweden Democrats, the party is also strongly associated with cultural issues concerning gender rights and migration, in addition to environmental issues.

Sweden is thus typical of many advanced democracies in which polarization of group identities relates primarily to cultural issues, such as immigration, national identity, and gender - sometimes called 'culture war' issues - which have been shown to be linked to affective polarization (Hetherington and Weiler, 2009; Johnston, 2018). As Johnston (2018, 220) describes, these issues are "things that are easy to conceptualize, emotionally evocative, and which underpin one's broader lifestyle choices". Compared to pecuniary questions associated with the left-right economic scale, cultural issues within advanced democracies have provoked a stronger identity-based reaction among citizens (Hetherington et al., 2016). This phenomenon is visible in the increased association between partisanship and authoritarian values in the US (MacWilliams, 2016; Hetherington and Weiler, 2009) but also, among other things, in the polarization between populist-right and anti-populist forces in European multi-party systems (Harteveld et al., 2021; Meléndez and Kaltwasser, 2021). As a result, cultural issues with the potential to polarize on group identities are most likely to influence affective polarization. We therefore focus on content relating to these issues in our empirical study of whether partisan cues amplify this effect.

3.2. A survey experiment manipulating sender cues

Participants had already been recruited to be part of an online panel (the citizen panel) organized by the Laboratory of Opinion Research (LORE) at the University of Gothenburg. They were recruited as part of

Panel 45, with random probability sampling and pre-stratification variables based on sex, education, and gender (Martinsson et al., 2022). The sample that makes up our component of the panel had a gross participation rate of 49 percent and a net participation rate of 51 percent. A more thorough description of the sampling methodology, descriptive statistics, and full question wordings can be found in the methodology report provided by Martinsson et al. (2022) and in the Online Appendix. In addition, the Online Appendix also compares the sample to population statistics on demographic variables and party sympathies in an election barometer. In short, the sample is fairly representative of the population, but older and better-educated people were slightly overrepresented, as were people who supported left-of-center parties.

The respondents were first informed about the purpose of the survey and gave informed consent by ticking a box. Subsequently, they were asked some questions about sociodemographic characteristics and issue attitudes, and they were asked to choose the party they liked the most and least among the eight parties represented in the Swedish parliament. These latter two items were then used to assign in- and outparty cues for the treatment conditions. The questionnaire also included like-dislike items before the treatment, intended for measuring partisan (dis)affinities, which we condition our treatment on (see below for details on the question). After this, the respondents received a fictional "tweet" including or not including party cues. All independent variables included in the analyses presented below were measured before the treatment to avoid any risk of post-treatment bias when measuring features such as partisan identification after treatment (Montgomery et al., 2018).

The experiment had two conditions – information from an in-party representative (most liked party) or information from an outparty representative (least liked party). Additionally, a control group received a message from an anonymous source. The tweets contained information designed to be subject to interpretation depending on the sender, focusing on potential cultural threats to Sweden related to immigration, minority groups, and gender issues. More specifically, respondents were randomly assigned to one of four different tweets. The first tweet about immigration states a fact about the number of refugees in the world, while the second describes a study about people from Western Europe joining the Islamic State. Two additional tweets concerned aspects of gender and crime and describe statistics on reported physical abuse of women and information that women's sense of insecurity has increased recently. An example of a tweet is, "The latest statistics show that the total number of immigrants in the world was around 82,4 million. Many of them will probably need to seek asylum in Sweden. We need a new politics that takes this seriously."

The topics were chosen to deal with cultural challenges that could evoke emotional reactions, yet the tweets were also carefully phrased so that it would be plausible that the content could come from a representative of any party and refer to facts from official statistics (see Appendix for full wordings). The content was intended to lack a clear ideological leaning or position on the issue in order to reduce the risk of conflation effects of party cues with policy concerns while also keeping the analyses closer to the assumption of the minimal group paradigm—that priming of group identities is enough to trigger affective

 $^{^{1}}$ The study was approved by the Swedish Ethical Review Authority (2022-04713-02).

² This design with multiple tweets within a general category of stimulus was chosen to ensure that the results are not influenced by unintended differences in information used in a specific stimulus, a method known as stimulus sampling.

³ However, it should be noted that because the tweets are intended to target a subset of issues related to the cultural dimension in politics, we may find similar results with tweets focusing on different issues, such as, for example, climate change or crime more generally. Other topics may however present difficulty for the phrasing of information in the tweets in a manner so that they could plausibly be interpreted as coming from any party representative.

polarization (Tajfel and Turner, 1979). This is also how it appears to have been mostly interpreted by respondents, as those in the control condition without an assigned party cue placed the sender of tweets related to gender issues at about 4.50 on a 1–7 left-right scale, while the same average placement of the sender of tweets about immigration was 4.76. Later in the survey, the respondents answered a battery of items used to operationalize affective polarization, which is further described below.

We chose to present the stimulus material in the form of a tweet for two main reasons. First, it provides a comparatively plausible format for elite communication, increasing the external validity of the stimulus material. Second, because of the inherently short information in a Twitter post, it is a methodologically beneficial format that reduces the amount of unnecessary information that might otherwise be needed if we would have used, for instance, a fake newspaper article. The tweet format thus presents advantages in terms of validity and efficiency.

3.3. Measuring affective polarization toward voters

Previous research has operationalized affective polarization as affective attitudes toward either parties or voters, with the former being more common, especially for studies outside of the US. However, studies show that these measures tend to represent theoretically and empirically distinct manifestations of affective polarization (Druckman and Levendusky, 2019; Harteveld, 2021). Considering that our experiments consist of party cues that are likely associated with political elites, it is possible that treatment effects may have been stronger with an affective polarization measure targeting parties. On the other hand, polarization toward voters comes closer to the conceptualization used in research based on social identity theory. That is, identification with an ingroup motivates people to distinguish themselves from outgroup members and to strengthen the ingroup's status advantage (Tajfel and Turner, 1979). Hence, the target of affective polarization is posited to be members of the outgroup rather than the group or party itself. As a result, social identity theory suggests that the priming of group identities should result in polarization toward group members. We therefore add to the growing number of studies focusing on affective polarization toward party supporters (e.g., Harteveld, 2021; Knudsen, 2021).

More specifically, we operationalize affective polarization in terms of trait ratings toward parties' supporters, whereby respondents rate to what extent they think party supporters exhibit four types of traits: honesty, intelligence, prejudice, and selfishness. All four items are scaled 1–7, with the endpoints indicating that party supporters exhibit the traits to a very small or large extent. Based on this, we first reverse code the two negative trait evaluations (prejudice and selfishness) so that higher values denote a positive rating of the parties' supporters. Subsequently, we calculate the average trait score toward each party across the four items as a measure of the average trait score of the parties. Finally, our affective polarization measure is the difference between the trait score of the in-party and the average of the other seven parties. As a result, it is operationalized as the difference in scores between the inparty and the rest of the field (for a similar operationalization, see, e. g., Reiljan, 2020; Wagner, 2021; Boxell et al., 2020).

3.4. Measurement of independent variables

To test the second hypothesis, we use a like-dislike "feeling thermometer" scale that has been widely used as a measure for party (dis) affinities. Respondents received a question battery before the experimental treatment asking them "to what extent they dislike or like the following parties". They responded on a 7-point scale (1 = "dislike"

strongly" and 7 = "like strongly"). The variable for ingroup affinity is based on respondents' highest like-dislike party evaluation toward one of the eight parliamentary parties. Not surprisingly, most respondents strongly like at least one party, and we thus dichotomize the variable so that those who gave a party scores of 6–7 receive the value one ("high ingroup affinity"), while the remaining values are coded as zero ("low ingroup affinity"). Similarly, the variable for outgroup disaffinity is constructed based on respondents' lowest like-dislike score. Approximately 83.5 percent of respondents assigned at least one party the lowest possible like-dislike evaluation, and the variable is dichotomized. Those who gave one of the parties the lowest possible score are coded as one ("high outgroup disaffinity") and the remaining scores as zero ("low outgroup disaffinity").

In the following, we include regression models both with and without control variables when examining whether the treatment effect differs based on party (dis)affinity. This is done for the sake of transparency, considering that party (dis)affinities are observed and not manipulated (Kam and Trussler, 2017, 794). First, we include control variables for left-right placement (scale 1–7) and political interest (scale 1–4). Second, we include variables for age (scale 1–6), education (scale 1–8), and gender (male and female). The Online Appendix provides full question wordings.

4. Empirical analyses

4.1. Descriptive analyses

The overall mean polarization score across all conditions for the trait ratings was 1.34 (SD=1.03). This value is significantly higher than 0, which would indicate no differentiation between ratings of the in- and outgroup parties on attributes, ts(1234)>45.75, Cohen's Ds>1.24. This means that the sample as a whole, regardless of condition, displayed affective polarization, favoring the ingroup over the outgroup on trait ratings. In Fig. 1, we show the level of affective polarization displayed by supporters of different parties. As can be seen, those who claimed the Left party to be their favorite party showed the highest levels of affective polarization, followed by those that best preferred the Green Party and then the right-wing populist Sweden Democrats' supporters.

To ensure that the manipulation had worked as intended – that is, that the reader interpreted the content of the tweet based on the sender of the tweet - we first explore how the sender affiliation (ingroup or outgroup party) influenced the interpretation of the content. We ran a univariate ANOVA with content interpretation as the dependent variable and condition (ingroup party sender/outgroup party sender/control condition) as the independent variable. The results show that there were significant differences in mean interpretation between the different conditions, F(2,1113) = 74.99, p < .001, $\eta_p^2 = 0.12$. Post-hoc analyses with Bonferroni corrections showed that all three conditions differed from each other, ps < .001. When receiving a tweet from the most liked party, participants agree most with the content of the tweet (M = 5.08, SD = 1.65); and when the sender was an outgroup party representative, they agree the least (M = 3.45, SD = 1.97). The control condition was in between $(M = 4.23, SD = 1.90)^{.5}$ We illustrate the differences in the agreement with content variable for the different groups

⁴ We do not use any weighting procedure to calculate the mean score toward outparties, since this can make it harder to interpret the results. Here we are interested in affective evaluations toward outparties in general.

⁵ Hence, there is a substantial difference between the in- and outparty cue groups of ca. 1.63 scale-steps which can be contrasted against a standard deviation for the control group of 1.49.

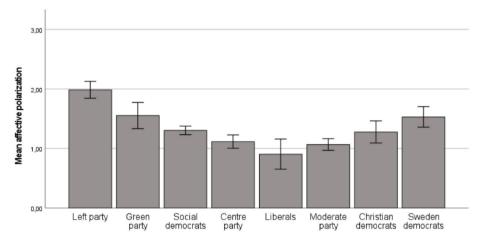


Fig. 1. Affective polarization across ingroup party preferences. Note: Error bars represent 95% confidence intervals.

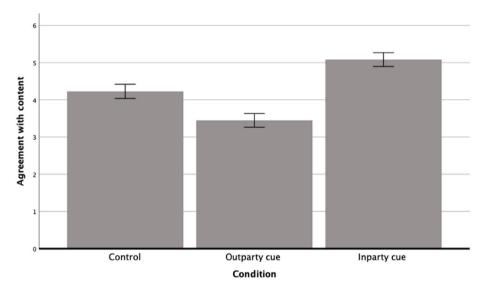


Fig. 2. Agreement with content of tweet across conditions. Note: Error bars represent 95% confidence intervals.

in Fig. 2.6

4.2. Analyses of the impact of partisan source cues on affective polarization

We now turn to analyzing the impact of source cues on affective polarization. To reiterate, we had three conditions in the design, ingroup party sender, outgroup party sender, and a control condition with an anonymized sender. The distribution of participants was $n_{\rm Ingroup} = 466$, $n_{\rm Outgroup} = 454$, $n_{\rm Control} = 424$. To explore if source cues influence affective polarization, we first perform an univariate ANOVA using affective polarization as dependent variable and treatment condition (ingroup sender/outgroup sender/control) as independent variable. The analysis shows that there is a significant difference in polarization between conditions F(2,1234) = 4.63, p = .01, $\eta_p^2 = 0.01$. Post-hoc analyses

using Bonferroni corrections reveal that the control condition (M=1.21, SD=1.00) is significantly lower than both the outgroup sender condition, p=.04 (M=1.39, SD=1.00) and the ingroup sender condition, p=.02 (M=1.42, SD=1.08). To put these effects of about 0.18-0.22 scale steps in perspective, it can be compared to the standard deviation of the affective polarization measure, which is 1.34. Thus, the effects are moderate or small in size, but it should be considered that the messages were intentionally framed as non-directional. The effect could therefore be stronger when a partisan prime is combined with, for example, explicit criticism of outgroups and more substantive content. The results are plotted in Fig. 3.

4.3. Analyses of the partisan source cues and partisan (dis)affinities

To further explore the influence of sender affiliation on affective polarization, we run several regression models presented in Table 1. Starting with the interaction effect between experimental treatment and ingroup affinity without any control variables, the results in Model 1 show that the effect of receiving in-party cues is significantly stronger for those with more positive feelings toward their most liked party (in-party cue*ingroup affinity). The effect is approximately 0.44 units greater for those with high ingroup affinity than for those with less warm feelings toward their most liked party, that is, coefficients of circa 0.38

⁶ Further, we also ran a regression analysis to analyze the impact of the manipulation on agreement with the tweet. This analysis shows that the effects remain essentially the same after including controls, i.e., receiving the tweet from the most liked party leads to greater agreement with the tweet relative to the control group and vice versa for those who learned that the tweet came from the most disliked party.

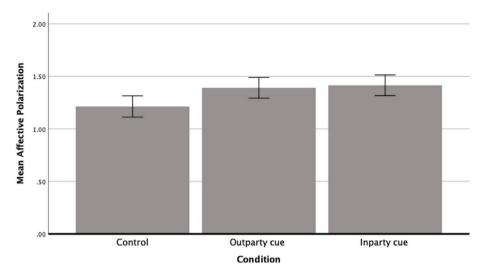


Fig. 3. Affective polarization in trait ratings across conditions. Note: Error bars represent 95% confidence intervals.

Table 1
Regression analyses for moderation of treatment and (dis)affinities

	Model 1 AP B(SE)	Model 2 AP B(SE)	Model 3 AP B(SE)	Model 4 AP B(SE)
Out-party cue	0.101	0.118	0.115	0.115
Reference = no party cue	(0.111)	(0.178)	(0.107)	(0.170)
In-party cue	-0.056	0.037	-0.061	0.016
	(0.109)	(0.176)	(0.105)	(0.168)
Ingroup affinity (high)	0.560***		0.475***	
Reference = low	(0.100)		(0.098)	
Out-party	0.106		0.081	
cue*ingroup affinity	(0.139)		(0.134)	
In-party cue*	0.437**		0.359**	
ingroup affinity	(0.139)		(0.134)	
Outgroup disaffinity (high)		0.648***		0.494***
Reference = low		(0.142)		(0.137)
Out-party		0.084		0.079
cue*outgroup disaffinity		(0.193)		(0.185)
In-party		0.220		0.173
cue*outgroup disaffinity		(0.192)		(0.184)
Left-right = 1			1.000***	1.151***
			(0.145)	(0.147)
Left-right = 2–3			0.298***	0.379***
			(0.076)	(0.077)
Left-right = 5–6			0.015	0.113
			(0.076)	(0.077)
Left-right = 7			0.249	0.350
			(0.192)	(0.197)
Political interest			0.174***	0.209***
(1–4)			(0.041)	(0.042)
Constant	0.863***	0.659***	0.654***	0.269
	(0.079)	(0.131)	(0.166)	(0.193)
N	1235	1235	1232	1232
R^2	0.138	0.080	0.209	0.168
adj. R ²	0.134	0.076	0.201	0.159

Notes: Standard errors in parentheses: *p < .05, **p < .01, ***p < .001. Models 3–4 include controls for age, education and gender, not shown in the table. The lowest response option for left-right positioning is labeled "far to the left", the highest "far to the right" and the middle "neither left nor right". Accordingly, value 1 represents a position furthest to left, value 7 furthest to the right, and the middle position functions as the reference category.

(p < .00) compared to -0.06 (p = .61). As such, the effect for this group is approximately one third of the standard deviation for the affective polarization measure. Another way of putting it is that the change would mean that a person around the middle of the distribution of polarization scores would move up close to the 70th percentile. Likewise, the interaction effect with ingroup affinity is in the same direction for those who received a tweet from the out-party ("out-party cue"), although the effect is smaller and not statistically significant (b = 0.11, p = .45).

Next, Model 2 examines the interaction effect for disaffinity toward the most disliked party and treatment condition. While the effects of in- and out-party cues are stronger for those with colder feelings toward their most disliked party, neither of the coefficients reach statistical significance. However, it should be noted that there is a significant treatment effect for those who received the in-party cue and for those assigned an out-party cue among respondents with high outgroup disaffinity, but not for those belonging to the "low disaffinity" category. It is also important to note that there is a limited variation for the party disaffinity variable, as approximately 83.5 percent of respondents assigned at least one party the lowest possible like-dislike score.

Models 3–4, in turn, present the same analyses but with the inclusion of the control variables. Overall, the results are similar but slightly weaker than in models 1–2. The results in Model 3 show that the effect of receiving in-party cues is stronger for those with high ingroup affinity, and the interaction effect is significant ($b=0.36,\,p=.008$). However, similar to models 1–2, there is a weaker and nonsignificant interaction effect for those who received the out-party cue. Last, neither of the two interaction effects are close to being significant in Model 4, even though they are in the hypothesized positive direction.

The control variables are all in the expected direction and present some interesting findings. First, there is a surprising asymmetry in the effect of ideological identification/extremity that we noted earlier in the article as well: whereas left-leaning respondents express substantially stronger polarization, there is no consistent effect of moving toward the right on the ideological scale. Furthermore, being interested in politics also associate with greater affective polarization.

The interaction effects testing Hypothesis 2 are plotted in Fig. 4, based on models 1–2 from the regression table. Starting with the in-party cue group (Panel A), the interaction effects are visible in terms of notable gaps in marginal effects between those with high and low ingroup

 $^{^{7}}$ The lowest value of affective polarization for respondents in the 5th decile of polarization scores is ca. 0.96 while the lowest value for those in the 7th decile was ca. 1.43.

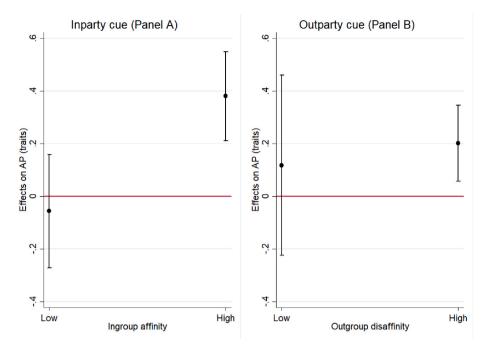


Fig. 4. Marginal effects plots showing the interaction effect between treatment and affinities. Note: Error bars depict 95% confidence intervals. Panel A shows treatment effects on affective polarization for those with high and low maximum like-dislike evaluations of a party (ingroup affinity). Panel B shows the same effects for those with high and low maximum dislike of a party (outgroup disaffinity).

affinity. Conversely, there are only small differences between the groups receiving out-party cues (Panel B), although it is also important to note that there is a significant treatment effect only for those with high outgroup disaffinity. These results support Hypothesis 2.

The Online Appendix replicates the analyses with different operationalizations of affective polarization (i.e., feeling thermometer evaluations of partisans instead of trait ratings) and with a measure that accounts for the spread of evaluations of the parties' voters rather than the difference between the most liked party's voters and the rest of the field (see Wagner, 2021). Although the direct treatment effects are somewhat weaker and do not fully reach statistical significance with these alternative specifications, the effects are in the same direction, and we find the same interaction effect between in-party affinity and treatment condition.

In sum, the results are consistent with our argument that elite communication on cultural issues can increase affective polarization by reinforcing group identities via source cues alone, even when the rhetoric itself does not engage in partisan conflict. First, we find that the interpretation of content without a direction of advocacy in a message from a political representative is influenced by sender affiliation, such that subjects feel they "agree" more with a tweet when the sender is from the ingroup compared to when the sender is from the outgroup. Hence, source cues clearly influence how the respondent interprets a message that is ambiguous in its stance. Second, regardless of whether the information comes from the in- or outgroup, partisan source cues increase affective polarization compared to a control condition.

Finally, the extent to which the participants had strong affinities toward parties moderates the extent to which the party cues increased affective polarization. This difference in magnitude is not found for those with stronger out-party disaffinities, although the effect of the treatment is statistically significant only in this group. This finding is in

line with the idea that partisans that already have strong affinities with parties are more motivated to distinguish themselves from their political opponents when their partisan identity is made salient, which they do by differentiating between in- and out-party supporters to a greater extent. Further, it supports the interpretation that the effect of cues is affected by partisan group identities rather than only policy attitudes on issues related to the tweets, although the latter may still influence the results.

5. Concluding discussion

The aim of this paper was to increase our understanding of how communication from political representatives may spur affective polarization among the electorate due to sender cues reinforcing polarized identities. To do this, we ran a survey experiment using data from Sweden where we presented participants with fictive tweets depicted as sent by a representative from the participant's most or least preferred party. While the content of the tweets was designed to be interpretable as relating to salient cultural divisions surrounding immigration or minority rights, the content of the tweet was a factual statement phrased in non-directional terms. The aim of this design was that participants would be required to rely on the sender cue to infer the valence of the content. Our validation exercise showed that the tweets were indeed interpreted by those sympathetic to the sender as having content in the direction of their own preferences.

We first expected that messages from the in- and outgroup would each increase affective polarization compared to a control condition where no sender information was provided. Second, we expected that the effect of in- and outgroup party cues on affective polarization would be moderated by prior (dis)affinity such that participants who already had strong affinities for a partisan in- or outgroup would show higher affective polarization when receiving a message from that in- or outgroup. An important empirical contribution of our study is that we measure affective polarization toward voters, rather than parties, as is most common in studies outside of the US. The results generally supported our expectations. Regardless of whether the information came from the in- or outgroup, partisan source cues increased affective polarization compared to a control condition. We also found that the extent

⁸ The graph does not show the effects of outgroup dislike for those in the inparty cue treatment group or ingroup affinity for the out-party cue condition. These effects are instead illustrated in the Appendix (Figure A3), together with analyses that use a continuous version of in- and outgroup (dis)affinity variables.

to which the participants had strong affinities toward parties moderated the extent to which the party cues increased affective polarization, an effect driven by particularly strong existing in-party affinities rather than out-party disaffinities.

Our argument that participants interpret content based on party cues is also supported by our finding showing that respondents agree more with the non-directional content when it comes from an in-party representative compared to an out-party representative. This indicates that people are biased when they interpret information, even when that information is not clearly ideologically connected. This result is in line with ideas of confirmation bias (Festinger, 1957) and motivated reasoning (Kunda, 1990), suggesting that people tend to interpret information in a way that confirms prior beliefs. Relatedly, Lodge and Taber (2000), argue that affect guides cognitive processing and it can be assumed that when one's in- or outgroup presents the message, emotions connected to the groups are in play as stated by social identity theory (Tajfel and Turner, 1986).

Taken together, the results found here show that prior affinities influence the degree of partisan intergroup distancing in response to communication by political elites, even when there is no explicit advocacy for a political position. This suggests that a polarized society may see further increases in bias and hostility between groups in response to elite communication even when political elites do not use a particularly negative or threatening rhetoric. That is, reinforcement of affective polarization may occur without explicitly negative content of political communication, as long as the sender is associated with a polarized context.

These results contribute to the literature on party cue effects, where outcomes have mainly been related to ideological or issue polarization in the form of, for instance, policy support and political opinions (Brader and Tucker, 2012; Nicholson, 2012). Importantly, we find that both inand outgroup messages function to polarize the public, which we interpret as being the result of a cueing effect that reinforces the identities surrounding the conflicts that motivate affective polarization. This is also in line with the party cue literature, where Nicholson (2012) for instance, shows that outgroup party messages had strong ideologically polarizing effects. The party cue literature has produced inconsistent findings across different studies (Bullock, 2020). Yet, most of the inconsistencies are related to when people do or do not follow the party lead and research shows that when the party presents an opinion contrasting with the individual's, people do not blindly follow the party lead (Boudreau and Mackenzie 2014, 2018). Therefore, the ambiguous, non-directional tone of our messages was needed for capturing party cue

To better understand the inconsistencies in the party cue literature, Bullock (2020) suggests that moderators need to be taken into account. In our study, we suggest that prior partisan (dis)affinities should moderate the effect of the party cue and we find clear results for in-party affinities having such an effect. One reason is that such affinity could be seen as a proxy for the level of attachment to the group, which may also imply a tendency toward distancing from a disliked outgroup. In line with social identity theory, the strength of identification with the social group entails stronger intergroup distancing (Tajfel and Turner, 1986), which has been shown in relation to affective polarization as well (e.g., Webster and Abramowitz, 2017; Reiljan and Ryan, 2021; Mason, 2015; Iyengar et al., 2012). Our results regarding party affinities are consistent with this idea, where more out-group distancing in response to the sender cue is seen among those with stronger in-group affinities. We saw results in the same direction for those with already high underlying out-party disaffinity, but here the results were not as clear.

Some methodological aspects of our study merit discussion. Our study was conducted in Sweden, a multi-party system where we have previously seen that affective polarization is present and influenced by identification (Renström et al., 2021, 2022). There is currently no agreed-upon solution for the multi-party context of how to operationalize the outgroup. In our study, we opted for the "strictest" test of the

hypothesis collapsing all parties that were not the most preferred party into one single outgroup. Because some parties in multi-party contexts are closer than others (Bergman, 2020; Horne et al., 2022; Harteveld and Wagner, 2020), this way of operationalizing the outgroup is likely to lead to weaker effects compared to other ways, such as creating blocs of policy-wise similar parties based on elite-level cultural disagreement. Although our sample arguably mirrors the population rather well in terms of demographic variables and partisanship, there is a slight overrepresentation of left-leaning party supporters and possibly respondents with a stated party identification. It is possible that this could result in somewhat higher levels of affective polarization if political engagement is associated with stronger feelings toward partisans.

We deliberately chose to formulate the content of the messages to appear as descriptive as possible, without implying advocacy on a policy direction, while making them plausible as political messages, in order to isolate effects of sender information. Follow-up work should also consider valenced elite communication. For instance, messages that are negative toward immigration coming from a right-wing populist party should further spur affective polarization both for supporters of the party but also for opponents of that party (i.e., the left/socialist supporters). In a similar manner, a message coming from a left-wing party with pro-immigration content should polarize right-wing voters. Such an approach would be more externally valid in representing what people actually encounter on social media.

One limitation of the research design used here is that we cannot fully examine the mechanisms that lead people to polarize affectively in response to party cues. As previously described, we assume that people would agree or disagree with the tweet because their partisan in- and outgroup identities are reinforced by the partisan cue, resulting in both changes in attitudes and potentially even higher affective polarization. However, it is possible that the priming of in- and outparty identities could be sufficient to affect issue attitudes, even in the absence of messages that deal with substantive topics or biased interpretations in terms of agreement or disagreement with the tweet. Furthermore, respondents may ascribe valence to the message that corresponds to the known positioning of the sender party and become more polarized because of pre-existing attitudes on these and related issues. Still, this explanation is likely to be insufficient to account for the change in specifically affective polarization because priming of policy attitudes would not necessarily lead us to expect changes in trait evaluations of party supporters, nor the moderating effect of prior partisan affinity.

Nevertheless, future studies should focus on more precisely separating the partisan prime from these and other alternative considerations. This could, for instance, be done by including additional treatment groups where the content is either non-political or without any implicit association with parties, thus enabling a test of the partisan prime in isolation from issue attitudes and ideology. Another alternative could be to examine the extent to which the effects are conditioned by the respondents' attitudes on issues and the importance they ascribe to them. Likewise, if the tweets are formulated to have a distinct direction, it would be possible to examine how changes in attitudes in response to the cues condition the effect on affective polarization.

In addition, our findings suggest many other avenues for future research. First, while this study was motivated by an interest in the effect of elites on polarization, the same type of research should examine the effect of non-elite partisans, which may encourage similar effects. Second, here we limited the study to the type of topics related to the type of cultural conflict known to be associated with affective polarization. Future studies should examine a variety of issues more thoroughly and engage with research such as Rudolph and Hetherington (2021), which examines the differential effects of non-political content as a stimulus. Third, we also note that the precise language used by political elites, and in the manipulation used to analyze the effects of elite communication, is important – a design that varies the inclusion of phrases would be helpful to pinpoint the sensitivity of these effects. We also note that the literatures on both cues and polarization suggest that ideology plays a

role, both as an effect of cues and as a cause of affective polarization. Future work should consider a research design allowing scholars to disentangle how ideology independently influences affective polarization. Fifth, in this study, we follow previous literature in using partisanship as the basis for group identity, but we expect this to represent broader group identities that are difficult to identify. Future studies should focus more explicitly on identifying social identities directly, such as alignment with ideological or cultural groupings.

Finally, we note that the case of Sweden has features common to other advanced democracies, where topics such as immigration are a typical basis for cultural divisions that can drive affective polarization. However, future research should consider how these concepts would travel to developing democracies and other regions, where the potential consequences of affective polarization may be stark but may require adaptation to the contexts of little party identification.

To conclude, we show here that party cues are important in how people interpret a message and thereby influence affective polarization. People interpret messages from their ingroup party more positively than messages from their outgroup party, and this leads to increased affective polarization among the electorate. Further, we find that an individual's prior partisan affinities moderate the effect of party cues on affective polarization, indicating that people who are already polarized respond more to polarizing triggers. This may create challenges for democratic societies already facing a highly polarized electorate and suggests that, even when political elites avoid polarizing language, their communication with voters, for example, through social media, may increase partisan hostilities and bias among the public.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data was collected by the Swedish citizen panel at the University of Gothenburg. Although the data is not publicly available, the codes for replicating the analyses are provided upon request.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi. org/10.1016/j.electstud.2023.102639.

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