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# **Breaking False Polarization: How Information on Descriptive Norms Mitigates Worry Rooted in Polarization (Mis)perceptions**

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#### Abstract

Worry about polarization in society, particularly around the topic of immigration, is widespread despite the lack of substantial evidence supporting the existence of actual polarization of attitudes. This study explores whether this widespread "polarization panic" can be attributed to misperceptions of the descriptive norm, more specifically, to overestimations of polarization in society, a phenomenon known as false polarization. I investigated whether Dutch participants were more worried about polarization when they perceived stronger polarization in immigration attitudes due to a misperception of attitudinal extremity as the descriptive norm and whether correcting their misperceptions with accurate information about the actual descriptive norm reduced this association. A pre-registered survey-embedded experiment (N = 925) revealed that the significant positive relationship between perceptions of polarization and polarization worry disappeared when participants were provided with accurate information about the descriptive norm in society. However, this effect was only observed among participants who realized and acknowledged that they overestimated the differences in attitudes. These results suggest that during times of widespread media reports on alarming increases in polarization, informing individuals about the actual descriptive norm can alleviate worry amongst those who overestimate polarization. This approach could potentially facilitate respectful dialogue about the hotly debated topic of immigration. Nevertheless, the effectiveness of this strategy hinges on ensuring that the descriptive norm is correctly interpreted, leading individuals to realize that their worry was based on misperceptions.

#### Keywords

descriptive norms; false polarization; perceived polarization; polarization worry



# **1. Introduction**

Polarization is widely regarded as one of the most severe societal issues globally. The World Economic Forum (2024) ranked societal polarization as the third most critical short-term global risk in 2024 and three in ten Americans consider it a top issue facing their country (Skelley & Fuong, 2022). Researchers argued that this widespread "polarization panic" is surprising (Miltenburg et al., 2022; Muis, 2024), as evidence for significant attitudinal polarization is lacking in many societies (Baldassarri & Bearman, 2007; Dekker, 2022). It has been suggested that "polarization is perceived rather than actually occurring" (Muis, 2024, p. 273) and that "there is more agreement on many topics than people think" (NOS, 2022), implying that polarization worry stems from misperceptions of the prevalence of attitudinal extremity in society (i.e., the descriptive norm), leading individuals to overestimate polarization. Although this phenomenon, known as false polarization, is robustly found in the US context (Levendusky & Malhotra, 2016), I am not aware of any studies empirically testing this in the European context, nor of any that have tested the relationship between perceptions of polarization and polarization worry.

Using a pre-registered survey-embedded experiment (N = 925), I tested the implicit claim that polarization worry is rooted in (mis)perceptions of polarization and additionally, whether this relationship can be mitigated by providing information about the actual descriptive norm in society. If individuals are worried about polarization because they have an inaccurate perception of polarization, offering accurate information on the real attitudes in society may change their polarization perception so that their initial perception will become less predictive of polarization worry.

The hypotheses were tested in relation to immigration attitudes in the Netherlands. Polarization spans many topics, but immigration is consistently identified as one of the most polarized issues in Europe. Immigration was indicated as the issue most likely to create a division in society by European citizens (Herold et al., 2023) and was found to be the most polarized issue amongst European political parties (Reiljan, 2019). I focus on the Netherlands, where polarization worry is widespread, despite little evidence of increasing attitudinal polarization. A majority of Dutch citizens indicated to be very worried about increasing polarization (SIRE, 2023). However, Dekker (2022) concluded in his book on Dutch polarization that "no evidence was provided for (increasing) polarization as a dominant trend" (p. 39). Supporting this, Dutch citizens were found to be among the least polarized in Europe (Herold et al., 2023). In this context, where evidence for increasing attitudinal polarization is lacking, understanding the roots of polarization worry, and exploring ways to reduce it is particularly relevant.

# 2. Polarization Worry

Polarization has been defined in various ways (Fernbach & Van Boven, 2022) and different types of polarization have been studied in the academic literature. Although affective polarization—referring to increasing dislike and distrust between those with differing views—has recently received increasing attention (see lyengar et al., 2019; Levendusky, 2018; Orhan, 2022), researchers have traditionally studied attitudinal or ideological polarization, which refers to increasing divergence among people in their political beliefs, policy preferences, and ideological positions (see Abramowitz & Saunders, 2008; Fiorina & Abrams, 2008). Polarization has raised widespread worry across the globe, a phenomenon dubbed "polarization panic" (Muis, 2024; Ros, 2023), which can have several harmful implications. Similar to the negative mental



health impacts linked to worry about other societal issues like climate change (Clayton, 2020) and the Covid-19 pandemic (Hossain et al., 2020), polarization worry is suggested to have detrimental consequences for mental health (Nayak et al., 2021; Smith, 2022; Smith et al., 2019).

Moreover, polarization worry might make individuals withhold their views, to avoid confrontations. According to the Spiral of Silence theory (Noelle-Neumann, 1974), individuals withhold opinions that they believe others disagree with, to prevent being socially isolated (Matthes et al., 2017; Wuestenenk et al., 2025). In line with this, Americans were found to self-censor their own views more in times of stronger affective polarization (Gibson & Sutherland, 2023). Polarization worry might therefore impede dialogue about contentious subjects, potentially harming the functioning of democracies (Carpini et al., 2004; Dahlgren, 2002). This means that, in line with previous arguments that actual polarization can harm democratic functioning (Graham & Svolik, 2020; Webster & Abramowitz, 2017), merely worrying about polarization—regardless of whether that worry is justified—may itself be detrimental to democracy. Another harmful implication is that when individuals worried about polarization retreat into attitudinal bubbles (see Webster & Abramowitz, 2017), they discuss contentious topics with people with similar attitudes only. Literature on group polarization shows that discussions with like-minded individuals lead to more extreme views (Cooper et al., 2001; Myers & Lamm, 1976). Radicalization dynamics can lead individuals with similar opinions to mutually reinforce each other, leading to more radical views over time (Baumann et al., 2020). Therefore, polarization worry can become a self-fulfilling prophecy (Muis, 2024).

Despite these harmful implications, I am unaware of studies systematically explaining polarization worry. Based on the limited and mixed empirical evidence of the existence of attitudinal polarization (e.g., Abramowitz & Saunders, 2008; Baldassarri & Bearman, 2007; Cowan & Baldassarri, 2018; Fischer & Hout, 2006; Lelkes, 2016), researchers have implied that this worry is rooted in misperceptions of attitudinal extremity as the descriptive norm in society, leading individuals to overestimate polarization (Baldassarri & Bearman, 2007; Dekker, 2022; Miltenburg et al., 2022; Muis, 2024). This claim has not been systematically tested.

# 3. Perceptions of Polarization

Extensive research has revealed that individuals tend to have a biased perception of which behaviours, attitudes, or beliefs are common, referred to as the descriptive norm (Cialdini et al., 1990). For example, individuals consistently misperceive the prevalence of behaviors or attitudes among their peers, a pattern frequently examined in the context of adolescent substance use (Amialchuk et al., 2019; Lintonen & Konu, 2004; Perkins et al., 2011), as well as within the general public at large (Andre et al., 2024; Broockman & Skovron, 2018; Wenzel, 2005). Similarly, Americans were found to systematically overestimate attitudinal extremity in society leading to overestimating attitudinal polarization between Republicans and Democrats (Ahler, 2014; Levendusky & Malhotra, 2016; Westfall et al., 2015). This false polarization bias reflects a misperception of a *descriptive norm*, as it focuses on the perceived prevalence of extreme attitudes among others, distinct from an *injunctive norm* (Cialdini et al., 1990), which would concern the perceived social approval or disapproval of attitudinal extremity.

Often without explicitly testing whether polarization was *overestimated* or *false*, researchers have explored the consequences of perceptions of polarization across various contexts and political issues. Studies have



identified both positive and negative consequences. On the positive side, perceptions of stronger polarization relate to more collective action, voting, and political participation (Enders & Armaly, 2018; Moral, 2017; Roblain & Green, 2021; Westfall et al., 2015). For example, Roblain and Green (2021) found that those who perceive stronger polarization of immigration attitudes regard their immigration attitudes as more central to their self-definition and feel more capable to make a change, prompting collective action. On the negative side, perceptions of stronger polarization are linked to lower political and social trust, more negative affective evaluations of outparties and their candidates, and lower political efficacy (Enders & Armaly, 2018; Lee, 2022). It is argued that perceived polarization decreases a sense of shared values and belonging, reducing trust among members of society (Lee, 2022).

Although studies have shown that a distorted perception of reality (on conspiracy beliefs see, for example, Hornsey et al., 2021) and perceptions of the social norm (on alcohol use see, for example, Labrie et al., 2014) can relate to worry about a range of topics, no studies have examined whether perceptions of attitudinal polarization in society relate to worry about rising polarization. As people fear that strongly opposing beliefs in society will increase conflict, limit free expression, and make countries ungovernable (SIRE, 2023), I test the claim that:

People who perceive more polarization in immigration attitudes in society are more worried about rising polarization in society (H1).

# 4. The Mitigating Role of Offering Accurate Information on the Descriptive Norm

When worry about polarization originates from perceptions of polarization that are often incorrect, providing accurate information about the descriptive norm in society may mitigate this relationship. Descriptive social norms interventions traditionally aimed to promote specific attitudes and behaviours by informing individuals about others who hold similar attitudes or engage in similar behaviours (Gifford & Nilsson, 2014; Larimer & Neighbors, 2003; Niemiec et al., 2020; Rand & Yoeli, 2024). Consistent with this, Peters (2021) argues that repeated reports by researchers and journalists about rising polarization may exacerbate polarization by conveying a descriptive norm of attitudinal extremity. Other scholars have argued that since individuals tend to overestimate attitudinal extremity, providing accurate information about actual levels of polarization can lead to the adoption of less extreme attitudes (Ahler, 2014; Blatz, 2024; Lees & Cikara, 2021).

In the current study, I do not test the traditional norm conformity hypothesis that offering accurate information on actual levels of polarization affects attitudinal extremity. Instead, I propose that individuals who receive accurate information will change their polarization perception so that their initial perception will become less predictive of polarization worry. This applies both to individuals who overestimate and underestimate polarization. Although it has been robustly found that many tend to overestimate polarization (Ahler, 2014; Levendusky & Malhotra, 2016; Westfall et al., 2015), others may underestimate it or have accurate perceptions. Providing truthful information about the descriptive norm in society functions as a self-reflection exercise, helping individuals recognize that their (lack of) worry was based on misperceptions of reality (Blatz, 2024). For those who overestimate polarization, accurate information worry. Consistent with this, prior research showed that offering accurate information on levels of polarization reduced perceived attitudinal extremity (Blatz, 2024; Fernbach & Van Boven, 2022). For those who underestimate



polarization, for example because they are disengaged from politics and unaware of attitudinal divides in society, such information may lead to the realization that attitudinal differences are real and widespread, potentially increasing polarization worry. Thus, the effects of providing accurate information and participants' initial perceptions are strongly interdependent, resulting in the following hypothesis:

The positive relationship between perceived polarization and polarization worry is weaker when people are informed about the actual levels of polarization (H2).

# 5. Methods

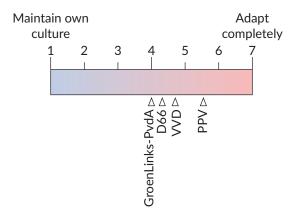
## 5.1. Sample

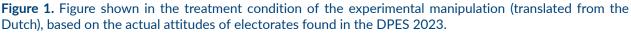
I surveyed 1,010 Dutch participants who indicated that they and both their parents were born in the Netherlands via the online platform Panel Inzicht in February and March 2024. Although the exclusion of participants with a migration background was not necessary for testing the hypotheses, the questionnaire included several other items and experiments to test hypotheses unrelated to the current research. Some of these hypotheses could not be tested on participants with a migration background, which is why they were not included in the data collection. The study was approved by the Ethics Review Board of the Faculty of Social & Behavioural Sciences at Utrecht University. Before data collection, I calculated that a regression analysis with seven predictors, assuming a power of .8 and a small effect size, required a sample of 725 participants. I considered a small effect size since effect sizes in moderation tests are generally smaller (Aguinis et al., 2005). Seventy-three participants were excluded because they failed an attention check at the start of the questionnaire. An additional twelve participants were excluded because they had missing values on at least one of the items used in the analyses. The final sample (N = 925) was diverse in terms of gender (53.5% women), age (18–89, M = 48.6, SD = 18.1), and education level (14% low secondary school or less, 39% high school or vocational training, and 47% [applied] university).

## 5.2. Procedure

After giving informed consent and indicating background characteristics, participants were offered a scale used in the Dutch Parliamentary Election Study (DPES) 2023 to measure immigration attitudes. The scale taps into assimilation beliefs and asks whether migrants should be able to live in the Netherlands while retaining their own culture or must adapt completely to Dutch culture (see Section 5.3). Participants used this scale to indicate their own attitudes and the attitudes of the electorates of four Dutch political parties to measure perceptions of polarization. Subsequently, participants were randomly divided in either a treatment (n = 460) or control (n = 465) condition. In the treatment condition, participants were shown the following (translated from the Dutch): "The Dutch Parliamentary Election Study 2023 shows that the average voters for those parties answered the question as follows..." Subsequently, a figure was shown in which the results of the DPES 2023 were visualized (see Figure 1). To make sure that participants actively compared their own perception to the actual attitudes of the four electorates as presented in the figure, participants in the treatment condition were asked: "When you look at this picture, are the differences in opinions bigger or smaller than you expected?" The aim of this question was to encourage participants to actively reflect upon whether or not this new information aligned with their initial perception of polarization. Directly after







the experimental manipulation, participants answered an item measuring polarization worry, used as the dependent variable.

The design was inspired by a manipulation of Ahler (2014), who also visualized descriptive results from nationwide public opinion research and asked participants to reflect upon the information offered. The approach to first ask participants to indicate their perception of attitudes of the electorates and present the actual attitudes of these electorates right after, is inspired by the interactive intervention of Blatz (2024) in which participants were informed that they engaged in false polarization right after reporting their perceptions of attitudes.

#### 5.3. Measures

#### 5.3.1. Polarization Worry

The dependent variable polarization worry was measured with one item treated as a continuous scale: "To what extent do you agree with the following statement? I worry that disagreements about migration are increasing in the Netherlands" ( $1 = completely \ disagree, 5 = completely \ agree$ ).

#### 5.3.2. Perceived Polarization

To measure the independent variable perceived polarization, participants answered the following questions:

The question about preserving culture was also presented to a representative sample of Dutch people in 2023 (in the DPES). In your estimation, where do you think the following groups have placed themselves on a scale from 1 to 7, where 1 means preservation of their own culture for people with a migration background and 7 means that they have to adapt completely?

The groups presented were the average Dutch person, the average VVD voter, the average GroenLinks-PvdA voter, the average PVV voter, and the average D66 voter.



Perceived polarization in multiparty democracies has been measured in various ways, such as assessing the distance between the most ideologically distant political parties (Yang et al., 2016) or between all parties to the left and the right of the mean stance (Moral, 2017). In this study, I included PVV and GroenLinks-PvdA in the measure of perceived polarization as they are the biggest parties in parliament representing strongly conservative and strongly progressive stances on immigration, respectively. I additionally included VVD and D66, which are more moderately conservative and progressive, respectively. These four parties were among the five biggest in the Dutch parliamentary elections in 2023 and played a salient role in election debates on immigration, which voters considered the most important topic in those elections (Voogd et al., 2024). Other big parties, such as NSC and BBB were not considered as they were relatively new, and their immigration stances were expected to be insufficiently salient. Parties with immigration stances that may be considered as they were very small and might not be well-known to the general public. Following approaches by, for example, Yang et al. (2016) and Levendusky and Malhotra (2016), I calculated the absolute difference between the average scores of the two more conservative electorates (VVD and PVV) and the average scores of the two more conservative electorates (VVD and PVV) and the average scores of the two more progressive electorates (GroenLinks-PvdA and D66), resulting in a scale ranging between 0 and 6.

## 5.3.3. Perceived Accuracy of Polarization Perception

Participants assigned to the treatment condition received the following question right after the figure was shown: "When you look at this picture, are the differences in opinions bigger or smaller than you expected?" Answer categories were *bigger than expected, approximately as I expected*, and *smaller than expected*. Although this question was primarily included to make participants actively reflect on the information presented in the figure, it was used as a manipulation check in exploratory analyses (see the section Analyses).

## 5.3.4. Control Variables

I controlled for gender, age, education level, and participants' own immigration attitude. Gender was a dichotomous variable (0 = male; 1 = female). Age in years and education level (1 = no education to 7 = University degree) were treated as continuous variables. Immigration attitude was measured with the question: "Where would you place yourself on a scale from 1 to 7, where 1 means preservation of their own culture for people with a migration background and 7 means that they have to adapt completely?"

## 5.4. Analyses

Before testing the hypotheses, I descriptively examined whether false polarization of immigration attitudes existed among Dutch citizens. To do so, I performed a one-sample *t*-test to compare the mean perceived polarization (measured as the difference between the average perceived attitudes of the PVV and VVD electorates and the average perceived attitudes of the GroenLinks-PvdA and D66 electorates) to the actual polarization as found in the DPES 2023 (measured as the difference between the average self-reported attitudes of the PVV and VVD electorates and the average self-reported attitudes of the GroenLinks-PvdA and D66 electorates).

To test the hypotheses, I performed an Ordinary Least Squares regression moderation model with polarization worry as the dependent variable, perceived polarization as the independent variable, and the



experimental manipulation (1 = treatment, 0 = control) as the moderator. Note that H1 was tested with the moderation included, as the perceived polarization coefficient reflects the relationship between perceived polarization and polarization worry among people who did not receive the manipulation (the moderator has value 0). All control variables were added in a second model. Unstandardized beta coefficients were reported in all analyses. Additionally, I explored whether the strength of the moderating effect of the experimental manipulation to test H2 was influenced by answers to the question measuring perceived accuracy of polarization perception, that was posed right after the figure in the treatment condition. I tested whether filtering out the participants who indicated that differences in opinions were *approximately as expected* would increase the effect of the moderation. This way, I used the question as a manipulation check, based on the idea that the relationship between perceived polarization and polarization worry is likely not influenced when participants consider their initial perceptions of polarization to be accurate (Ahler, 2014).

All analyses, including the exploratory analyses, were pre-registered prior to data collection (https://osf.io/x28yf). Note that this pre-registration also included hypotheses that were tested in a different article (in the pre-registration, referred to as H1a and H1b). In that article, I examined to what extent attitudinal extremity in the social network explains perceptions of polarization. Perceived polarization was used as a dependent variable there, whereas it was used as an independent variable in the current study. H1 and H2 in the current article were respectively called H2a and H2b in the pre-registration. Note that the analyses in the manuscript slightly deviate from the analysis plan in the pre-registration to keep the results section concise. More specifically, I did not test a model without a moderation, and without own immigration attitude.

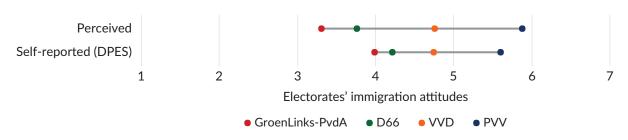
# 6. Results

## 6.1. Descriptive Statistics

On average, participants in the control condition, who did not receive any information, scored 3.82 (on a scale from 1 to 5) on polarization worry, indicating that they were closest to "agreeing" with the statements that they worry that disagreements about migration are increasing in the Netherlands. Of those participants, 72% *agreed* (4) or *completely agreed* (5) with the statement, showing that polarization worry was widespread in this sample. Participants in the treatment condition, who did receive information about levels of polarization were slightly less worried (M = 3.69) than people in the control condition (t(919) = 2.00, p = .046).

Figure 2 shows how participants on average perceived the attitudes of the four electorates and how the four electorates self-reported their attitudes in the DPES 2023. Whereas the attitude of the VVD electorate was perceived very accurately (as indicated by the proximity of the orange dots), the attitudes of the other electorates were perceived as more extreme than self-reported by the electorates in the DPES 2023. Participants on average perceived the immigration attitudes of the electorates of the two conservative parties (VVD and PVV) on the one hand and the two progressive parties (GroenLinks-PvdA and D66) on the other hand to differ by 2.24 points on a 7-point scale. In the DPES 2023, the self-reported immigration attitudes of the electorates of the two progressive parties on the one hand, and the two progressive parties on the other hand differed only 1.08 points. A one-sample t-test suggests that the mean perception of polarization was significantly higher than the actual polarization (t(924) = 24.47, p < .001) suggesting that false polarization of immigration attitudes existed among this Dutch sample.

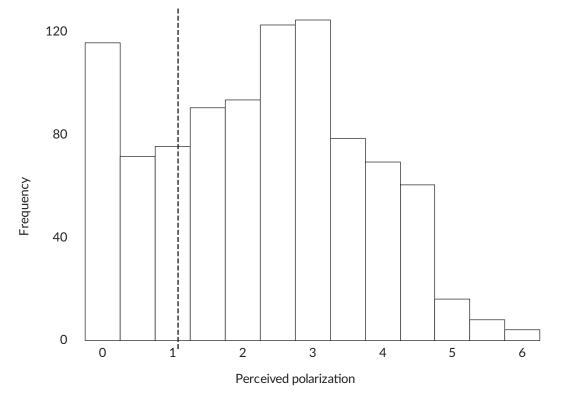




**Figure 2.** The difference in electorates' immigration attitudes either as perceived by participants in the current dataset, or as self-reported by participants in the DPES 2023.

Figure 3 displays the distribution of perceived polarization. The dashed line represents the self-reported level of polarization based on the DPES 2023. It shows that the vast majority of participants overestimated polarization as 72% scored higher than 1.08 on perceived polarization. Still, a substantial number of participants underestimated or accurately perceived polarization.

Of the participants who received accurate information about polarization in the treatment conditions, 12% (53) indicated that the differences were bigger than expected, 45% (206) indicated that they were approximately as expected, 43% (200) indicated that they were smaller than expected, and one did not respond to this question. This suggests that less than half of the participants in the treatment condition realized that they overestimated polarization. Those who indicated that the differences were smaller than expected did perceive the strongest polarization (M = 2.97), compared to those who indicated that they were approximately as (M = 1.69) and



**Figure 3.** Distribution of perceived polarization. Notes: Perceived polarization was measured as the absolute difference between the average perceived attitudes of the two more conservative electorates and the two more progressive electorates; the dashed line represents the self-reported level of polarization based on the DPES 2023 (1.08).



bigger than expected (M = 1.93). The average own immigration attitude, used as a control variable, was 4.74 (on a scale from 1 to 7), which was significantly more conservative than the neutral midpoint (t(924) = 14.36, p < .001).

## 6.2. Testing the Hypotheses

A moderation model excluding control variables showed that mean centred perceived polarization was significantly and positively related to polarization worry (B = .08, SE = .03, p = .008). Since the moderation of the experimental manipulation was included, this result indicates a positive relationship between perceived polarization and polarization worry among those who did not receive the manipulation, which is in line with H1. See all results in Table 1. The experimental manipulation in which participants were informed about the actual levels of polarization had a significant and negative effect on polarization worry (B = -.13, SE = .06, p = .040), which suggests that the manipulation had a main reducing effect on polarization worry, in line with the t-test reported in the descriptive statistics. However, the manipulation did not significantly moderate the positive association between perceived polarization and polarization worry (B = -.06, SE = .04, p = .181), which is not in line with H2. An  $R^2$  of .01 indicated that only 1% of the variance of polarization worry was explained by the independent variables. The results did not substantially change when control variables were added. Age was the only control variable that was significantly and positively related to polarization worry (B = .01, SE = .00, p < .001) indicating that older participants were more worried.

	Main analysis (complete sample)		Exploratory analysis (restricted sample)	
	Excluding control variables	Including control variables	Excluding control variables	Including control variables
	B (SE)	B (SE)	B (SE)	B (SE)
Perceived polarization	.08 (.03)**	.08 (.03)**	.08 (.03)**	.08 (.03)**
Manipulation (1 = accurate information offered)	13 (.06)*	14 (.06)*	08 (.08)	09 (.08)
Perceived polarization * manipulation	06 (.04)	07 (.04)	12 (.05)*	13 (.05)*
Gender (female)		.06 (.06)		.07 (.07)
Age		.01 (.00)***		.01 (.00)**
Education level		01 (.03)		00 (.03)
Own immigration attitude		02 (.02)		02 (.02)
Ν	925	925	718	718
R <sup>2</sup>	.01	.03	.01	.02

Table 1. Ordinary	/ Least Squares regression	models with polarization	worry as the dependent variable.
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Notes: \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001; B represents non-standardized beta coefficients and SE represents standard errors; in the restricted sample, participants were excluded who indicated that differences in opinions were *approximately as expected*.

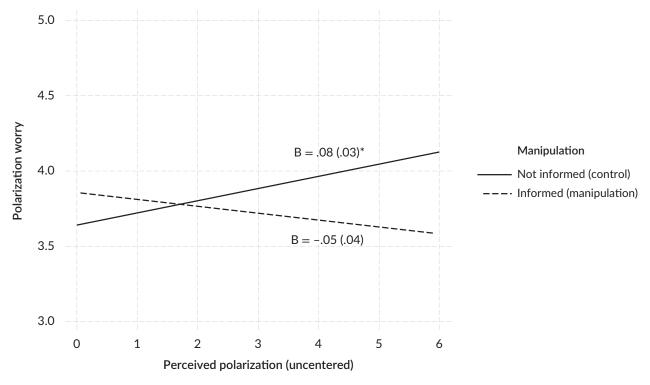


# 6.3. Exploring the Role of Perceived Accuracy of Polarization Perception

As pre-registered, I explored whether the strength of the moderating effect of the experimental manipulation to test H2 was stronger when filtering out the participants who indicated that differences in opinions were "approximately as expected" after being informed about the actual levels of polarization. One additional participant who did not respond to this question was also excluded. On this restricted sample (N = 718), the experimental manipulation did have a negative and significant moderating effect, both when control variables were excluded (B = -.12, SE = .05, p = .027) and included (B = -.13, SE = .05, p = .018; see also Table 1). The main effect of the experimental manipulation did not reach statistical significance, both when control variables were excluded (B = -.08, SE = .08, p = .295) and included (B = -.09, SE = .08, p = .245).

Simple slopes in Figure 4 suggested that polarization perceptions were positively and significantly related to polarization worry when participants were not informed about the accurate levels of polarization (B = .08, SE = .03, p = .010) but unrelated to polarization worry when individuals were informed (B = -.05, SE = .04, p = .296). This suggests that the positive association between perceptions of polarization and polarization worry can be mitigated by informing participants about actual levels of polarization, which is in line with H2, but only when participants realize and acknowledge that these actual levels of polarization diverge from their initial perceptions of polarization.

To explore these results further, I tested whether the moderating effect of the manipulation existed among those who indicated that the differences were smaller than expected, among those who indicated that the differences were bigger than expected, or among both groups. These exploratory analyses were not



**Figure 4.** Simple slopes of perceived polarization when individuals were *informed* (1) or *not informed* (0) about actual levels of attitudinal polarization.



pre-registered. Using the full sample, I included three dichotomous moderators, one for those who indicated that the differences were bigger, one for those who indicated they were as expected, and one for those who indicated they were smaller, with participants in the control condition as the reference group. These results, reported in Table S1 in the Supplementary File, suggested that the manipulation only moderated the relationship between polarization perceptions and polarization worry amongst those who indicated that the differences were smaller than expected (B = -.17, SE = .06, p = .006). The manipulation did not moderate this relationship amongst those who indicated that the differences were bigger than expected (B = -.02, SE = .08, p = .779), nor amongst those who indicated that the differences were as expected (B = -.02, SE = .06, p = .722).

# 7. Discussion and Conclusions

"The only thing we do not seem to be polarizing on these days is the worry that we are polarizing" (Muis, 2024, p. 17). This study provides initial evidence that widespread worry about polarization can, at least in part, be explained by misperceptions of the descriptive norm, more specifically, by overestimations of polarization in society. Dutch participants perceived the differences in immigration attitudes between the electorates of two progressive parties and two conservative parties to be more than twice as large as the differences reported by these electorates themselves. This offers initial evidence of systematic false polarization in the Netherlands, a context where polarization worry is widespread while evidence for attitudinal polarization is lacking (Dekker, 2022; Miltenburg et al., 2022; SIRE, 2023).

Importantly, the findings revealed that the significant positive relationship between perceptions of polarization and polarization worry disappeared when participants were provided with accurate information about the descriptive norm in society. However, this effect was only observed among participants who realized and acknowledged that they overestimated the differences in attitudes. These results suggest that during times of widespread media reports on alarming increases in polarization (Baldassarri & Bearman, 2007; Peters, 2021), informing individuals about the actual descriptive norm may have the potential to alleviate worry amongst those who perceive high levels of polarization. This approach could potentially facilitate respectful dialogue about the hotly debated topic of immigration, particularly between individuals with seemingly divergent views (Noelle-Neumann, 1974). Nevertheless, the effectiveness of this strategy partly depends on individuals correctly interpreting the descriptive norm, leading individuals to realize that their worry was based on misperceptions. Our results suggest that this is not an easy task. Of those who indicated that the actual differences in attitudes between the electorates were approximately as expected, a vast majority still strongly overestimated polarization, suggesting that many participants did not interpret the information as expected. This suggests that numerical results from public opinion research should be accompanied by sufficient explanation and interpretation (for an inspiring example see the intervention from Blatz, 2024).

Although the positive relationship between perceived polarization and polarization worry, and the effect of the manipulation reached statistical significance, the findings should be treated with care. The model accounted for only a very small portion of the variance of the dependent variable. Therefore, I do not claim that perceptions of polarization are *at the root* of polarization worry, nor that offering information about the descriptive norm is a guaranteed solution to alleviate worry among those who perceive high levels of polarization. Polarization perceptions are rather a small piece of the polarization panic puzzle.



One can speculate on other puzzle pieces based on existing literature. Polarization worry might not only be explained by perceptions of polarization amongst the mass public, but also by perceptions of institutionalized polarization amongst political elites, partisan media, and social media (Enders, 2021; Wilson et al., 2020). Media and politicians tend to portray an exaggerated picture of polarization in society which might particularly fuel into polarization worry (see Yang et al., 2016). Literature on elite cueing and media framing has consistently shown that political elites and media can have a strong impact on attitudes and beliefs among the public (see Banks et al., 2020; Robison & Mullinix, 2015). In that case, offering information on the descriptive attitudinal norm amongst the mass public might be less impactful. Rather, lyengar and Westwood (2014) suggested that it is important that political leaders set an injunctive norm that the expression of hostility towards people with opposing beliefs is unacceptable. This might also alleviate polarization worry. Relatedly, polarization worry might not only be explained by perceptions of attitudinal differences, but also by how people with different attitudes feel about each other and communicate their attitudes. This is reflected by qualitative research concluding that Dutch participants were "not worried about the existence of differences of opinion per se, but about the broader and more intense expression of these differences. They are also worried about the lack of tolerance and hostility towards those who think differently" (Miltenburg et al., 2022, p. 52). Studies have found that people do not only overestimate attitudinal polarization, but also affective polarization (Moore-Berg et al., 2020). In line with this, Overgaard (2024) found that offering Americans information about low levels of hostility between Republicans and Democrats reduced affective polarization. Similarly, correcting such meta-prejudices by offering information on truthful levels of affective polarization also has the potential to mitigate polarization worry.

The study has several limitations that suggest directions for future research. First, it focused solely on polarization of immigration attitudes. While overestimating polarization appears to be common across various contentious issues (Levendusky & Malhotra, 2016), immigration debates are often particularly hostile, and individuals may be more worried about tone than about attitudinal differences. Thus, the relationship between perceived polarization and polarization worry may be stronger for other topics like climate change, LGBTIQA+ rights, or abortion, where opposing views are prevalent, but the tone may be considered less aggressive. Second, although the operationalization of perceived polarization based on participants' perception of political electorates' attitudes is the prevailing measure in existing literature, it has its limitations. The rather indirect measure might not always reflect respondents' subjective impression of polarization. For example, it may be subject to participants' political knowledge. The four political parties used to measure perceived polarization were selected based on their popularity and salient immigration stances. However, the perceived polarization score may not be an accurate reflection for participants who lacked knowledge about the parties' immigration positions. For example, a score of 0, which means that the participant reported the immigration stances of the more conservative and progressive electorates to be equal, could indicate political ignorance rather than a perception of minimal polarization (even though participants were allowed to skip questions and those who did were excluded from the analysis). Future research could explore alternative operationalizations of perceived polarization, such as examining the perceived distribution of attitudes in the general public (see Van Boven et al., 2012 for an example). Though cognitively demanding, these measures do not require specific knowledge of political parties, which could be useful in political systems with many parties, such as the Netherlands. Third, participants who attended (applied) university were slightly overrepresented in the sample. Although I do not expect this to substantially affect the results, one could argue that higher educated individuals might be more susceptible to information from public opinion research, meaning that the manipulation's effect could be somewhat



weaker in a sample not skewed toward higher education. Finally, the sample was limited to individuals who were, and both their parents were born in the Netherlands. While I have no theoretical reasons to believe this impacted the relationships found, (descendants of) migrants might perceive even greater polarization in immigration attitudes and might be more worried about polarization on this topic, due to personal experiences with prejudice and racism. Future research using more diverse samples should explore this possibility.

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## **Conflict of Interests**

The author declares no conflict of interest.

## **Data Availability**

All data and code needed to reproduce the results can be found here: https://osf.io/gpf4w

#### **Supplementary Material**

Supplementary material for this article is available online in the format provided by the author (unedited).

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