(Mis-)Perceptions, Information, and Political Polarization

Maria Marino
Department of Econometrics, Statistics and Applied Economics, University of Barcelona

Roberto Iacono
Norwegian University of Science and Technology (NTNU); University of South-Eastern Norway (USN); International Inequalities Institute, LSE

Johanna Mollerstrom
Interdisciplinary Center for Economic Science (ICES) and Department of Economics, George Mason University; Research Institute of Industrial Economics, Stockholm

Maria Marino

Department of Econometrics, Statistics and Applied Economics, University of Barcelona

Roberto Iacono

Norwegian University of Science and Technology (NTNU); University of South-Eastern Norway (USN); International Inequalities Institute, LSE

Johanna Mollerstrom

Interdisciplinary Center for Economic Science (ICES) and Department of Economics, George Mason University; Research Institute of Industrial Economics, Stockholm

LSE International
Inequalities Institute

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Maria Marino[†]   Roberto Iacono*   Johanna Mollerstrom[‡]

Abstract: Voters hold widespread misperceptions about society, which have been documented in numerous studies. Likewise, voters demonstrate increasing political polarization over policy preferences. Against this backdrop, it is intuitively appealing to think that information provision can help correct misperceptions and create common ground by enhancing the political conversation and bridging political divisiveness. We show, using a general population survey in the United States, that beliefs in the power of information to reduce polarization are indeed widespread. Additionally, we review the extensive literature on misperceptions. To investigate the empirical relationships between misperceptions, information, and political polarization, we exploit the fact that many studies investigate heterogeneities in misperceptions and/or in the reaction to information treatments. Our review shows that existing misperceptions often, but not always, appear to be associated with an increased sense of divisiveness in society; however, information provision is more likely to increase polarization than decrease it. The reason is that different societal groups exhibit differing reactions to truthful and accurate information, in ways that often strengthens, rather than mitigates, existing preference schisms. Thus, the intuitively appealing suggestion that information provision can serve as a powerful tool to reduce polarization is often proven false.

Key words: *polarization, inequality, fairness, redistribution, information, survey.*

JEL codes: C90, D31, D72, D83, D91, H23, P16

1. Introduction

Political polarization is increasing in most Western democracies (Boxell et al. 2022; Iyengar et al., 2019). Some people believe polarization is not entirely negative, as it could, for example, help provide a plurality of views and perspectives. However, most agree that polarization can impede consensus-building and compromise, resulting in gridlocked governments and ineffective policy-making (c.f. Duffy et al., 2021; Haghtalab et al., 2021). Indeed, if excessive polarization reduces individuals' capacity to engage in constructive discussion, it is arguably less likely that they will find sustainable, long-term solutions to societal problems (c.f. Heltzel and Laurin, 2020). This could have troublesome consequences for democracy and social stability.

Polarization is increasing in an era where information on nearly any topic is abundantly available to most who seek it. However, that information is available does not necessarily mean that it is incorporated by voters. Indeed, a growing literature documents pervasive misperceptions about key societal facts regarding, e.g., the degree of inequality in society (e.g., Norton and Ariely, 2011) or one's own place in the income distribution (e.g., Cruces et al., 2013). Moreover, such misperceptions can potentially influence people's political preferences and opinions even more than objectively true facts (e.g., Gärtner et al., 2023). This has led many, including policymakers, to form the intuitively appealing hypotheses that: (i) misperceptions could be contributing to polarization; and (ii) information provision designed to correct the misperceptions could help reduce polarization (see e.g. OECD, 2021).

In this paper, we study the links between misperceptions, information provision, policy preferences, and polarization. We employ two different methods: an incentivized survey, and a literature review where we analyze specific parts of the existing literature on misperceptions and political preferences from a novel perspective.

We use the incentivized survey, conducted in a general population sample ($N = 900$) of the United States population, to confirm that respondents perceive: (i) polarization to be increasing; (ii) that this is problematic for society; and (iii) that misinformation about society is widespread. Importantly, we also show that the vast majority of people, regardless of political affiliation, share the belief that misinformation is polarizing, and that information provision can help reduce polarization.

However, the fact that people believe something is true does not necessarily make it so. While providing truthful and accurate information may sometimes facilitate a sound political discussion and bring people closer together, it could also serve to reinforce existing beliefs, thereby solidifying or even amplifying divisiveness. To investigate the empirical effects of misperceptions on polarization, as well as how the provision of accurate and truthful information affects misperceptions and policy preferences, we conduct a literature review of 52 published papers. While these studies did not originally aim to study polarization per se, they include heterogeneity analyses (either for existing misperception, or for the effects of information treatments) that make it possible for us to do so. We use these analyses to better understand the extent to which misperceptions are polarizing, and whether information treatments have a causal (either decreasing or increasing) effect on polarization.

We begin our review with studies that focus on documenting the existence of misperceptions and investigating whether they are polarizing. We find ample examples of how misperceptions, e.g., about the characteristics of minority groups in the population, are distributed such that people from different (political or other) groups become more polarized in their perceptions than they would be if they all held accurate beliefs (e.g., Haaland and Roth, 2023). In other words, misperceptions can indeed be polarizing. There are however also many instances

where misperceptions – notably about relative income – cause people to believe that they are closer together and more similar to each other than they actually are (e.g., Hoy and Mager, 2021a). Hence, existing misperceptions can also be associated with lower societal divisiveness.

The second part of our review focuses on studies featuring experiments that employ information treatments to investigate the causal relationship between perceptions and policy preferences. These papers cover an array of inequality-related topics, ranging from demand for redistribution and tax preferences to opinions on immigration. The studies explore whether providing truthful, objective information that correct misperceptions (related to, e.g., inequality levels, relative income, social mobility and characteristics of minority groups) causally affects voters' perceptions and preferences. We take advantage of the fact that many studies investigate whether treatment effects are heterogeneous – i.e., if people of different political leanings or social class react differently to information – which can be used to draw conclusions regarding how information affects polarization. Our findings show that while providing truthful information can help decrease polarization (as either one or both sides of the political spectrum become, on average, less extreme in their opinions), the opposite is also true. In fact, the more common result is that such information has a heterogeneous effect, causing opinions to become more extreme on either one or both sides of the political spectrum or income class, thereby increasing polarization.

This implies that the empirical evidence on the relationship between misperceptions, preferences, information provision, and polarization stands in sharp contrast to the general population's beliefs about the depolarizing effect of information. Specifically, while it *may* be true that a less misinformed society is less divided, and while information provision *may* help reduce polarization, this is often not what occurs. Therefore, our work contributes to at least two strands of literature: First, it adds to the large literature in economics (Campante and Hojman, 2013;

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Grechyna, 2016; Alesina et al; 2020; Canen et al., 2020; Levy, 2021; Boxell et al.; 2022; Azzimonti and Fernandes, 2023), political science (Fiorina and Abrams 2008; Abramowitz, 2010; Prior, 2013; Lelkes et al, 2017; Iyengar et al. 2019; Peterson and Iyengar, 2021), psychology (e.g., Baron and Jost, 2019; Moore-Berg et al. 2020; Van Baar, and FeldmanHall 2022; Jost et al., 2022) and sociology (DiMaggio et al., 1996; Baldassarri, D., & Gelman, 2008; Vann, 2021; Perry, 2022) on the determinants of polarization, and on tools to combat divisiveness. Second, we provide a novel lens (that of polarization) from which to consider the growing literature on misperceptions and preferences.

Our paper proceeds as follows: Section 2 describes the design and implementation of our incentivized survey, and the results thereof. Section 3 contains the literature review, which considers both the correlational evidence on the polarizing effects of misperceptions, and an investigation of the causal relation between information provision and polarization. Section 4 discusses the circumstances under which information seems to have a positive, negative or null effect on polarization, respectively. Section 5 concludes.

2. General Population Beliefs

The incentivized experiment was programmed with Qualtrics. It was deemed exempt from review by the George Mason University Institutional Review Board (IRBnet ID: 1997423). We recruited respondents through Prolific, and they were paid $1 for their participation in the survey, which took on average eight minutes. In addition, respondents received an average of $0.36 as a bonus payment. Total compensation hence corresponded to an hourly wage of $10.20. A total of N=900 people responded to the survey (an additional 20 people started, but did not finish, the survey, and these partial responses were deleted before analysis). All respondents were residing in the United States, and were sampled to create an equal representation of people describing themselves (in the

background information provided by them directly to Prolific) as liberal, moderate and conserva-tive, respectively. The average age in the full sample is 43.4 years (with liberals being, on average, 41.9 years old, moderates 42.7, and conservatives 45.8); 77 percent identify as White (77% of liberals, 72% of moderates and 82% of conservatives); the median education is four-year college, regardless of political affiliation; and the median category for individual income selected is $45,000-60,000 (the median for liberals is $30,000-45,000).

The goal of the incentivized survey was to examine general population beliefs about the effect of misperceptions on polarization, as well as the causal link between information provision and polarization. In addition, the survey contained questions about, *inter alia*, whether respondents think that the United States is currently polarized; whether polarization has changed over time; and whether people are generally more or less well-informed about societal matters. At the start of the survey, after collecting informed consent, we told participants that several questions in the survey would concern political polarization, which we defined as the *divergence of political attitudes away from the center towards ideological extremes*. The full survey materials are available in Online Appendix A.

INSERT TABLE 1 HERE

The results of the survey are summarized in Table 1. We find that respondents perceive the current level of polarization to be high. On a Likert scale from *1* to *10* (*1* = not polarized at all, *10* = extremely polarized), the average answer is *7.52*. On average, respondents also perceive the United States to be more polarized now than 10 years ago (*M = 7.61* scale 1-10 where *1* = much less polarization now, *5* = no change in polarization, *10* = much more polarization now). Further, respondents state that polarization is a problem (*M = 7.16* scale 1-10 where *1* = polarization is definitely good, *5* = neither good nor bad, *10* = definitely bad) and that less polarization would be

beneficial to American society ($M = 7.48$ scale 1-10 where 1 = definitely disagree that less polarization would be beneficial, 10 = definitely agree). These patterns generally hold for liberals, moderates, and conservatives alike. However, while conservatives agree with liberals and moderates that polarization is bad, and that less polarization would benefit society, they express this opinion less strongly.

Regarding which entity is more polarized in society, respondents believe that the population, politicians and media are all very polarized, but that politicians and the media are more polarized than the population, (M_{pop} = 7.23, M_{pol} = 7.60, M_{media} = 7.44). On average, they think that the right and the left are about equally responsible for polarization (M = 5.27, scale 1-10, 1 = the left/liberals are more responsible, 5 = Left and right are equally responsible, 10 = the right/conservatives are more responsible). However, this masks significant heterogeneity, in the sense that people who self-identify with one side of the political spectrum have a tendency to report that the other side is responsible for polarization ($M_{liberal}$ = 6.87, $M_{moderate}$ = 5.29, $M_{conservative}$ = 3.64).

Regarding how informed respondents believe citizens in the United States to be about societal matters, the answers reveal a certain pessimism: on a scale from 1-10 (1 = voters are definitely not well informed, 10 = voters are definitely well informed), the average answer is 3.96. The three political affiliation groups agree that citizens in general are poorly informed ($M_{liberal}$ = 3.89, $M_{moderate}$ = 3.94, $M_{conservative}$ = 4.06), but also believe that voters of their own political inclination are better informed (scale 1-10, 1 = the left/liberals are definitely better informed, 5 = Left and right are equally well informed, 10 = the right/conservatives definitely better informed, $M_{liberal}$ = 3.09, $M_{moderate}$ = 4.69, $M_{conservative}$ = 5.67).

Considering the link between information and polarization, we first observe that 69 percent of our sample list citizens being uninformed as one of the driving factors behind the current levels of polarization.[1] We asked respondents to imagine two societies, where people differ in how well-informed they are about society. Respondents report believing that polarization would be more prevalent in the society with poorly informed people (scale 1-10, 1 = Higher polarization in well informed society, 5 = same level of polarization, 10 = Higher polarization in poorly informed society, $M = 7.31$). Liberals express a stronger belief in an informed society being less polarized than moderates and conservatives do ($M_{liberal} = 7.76$, $M_{moderate} = 7.16$, $M_{conservative} = 7.01$). We thus document a belief in a negative correlation between polarization and the extent to which voters are well-informed. Beliefs about the causal relation between information provision and polarization are similar. On average, respondents believe that providing accurate and truthful information about society would decrease polarization in society (1-10, 1 = Polarization would decrease, 5 = Polarization would not change, 10 = Polarization would increase, $M = 3.10$). This belief is held by all political affiliation, but with liberals expressing it more strongly than moderates and conservatives ($M_{liberal} = 2.87$, $M_{moderate} = 3.12$, $M_{conservative} = 3.30$). It also holds in the incentivized part of the survey, where respondents are tasked with guessing how information treatments from academic papers affect polarization. Here, 52 percent of respondents guessed that the information provided in the study caused polarization to decrease, while 27 and 22 percent guessed that polarization did not change or that it increased, respectively).[2]

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[1] Respondents could choose as many or as few reasons as they wanted from the following list (items presented in random order): 1) Political parties adopt extreme positions (chosen by 85%); 2) Quality of education is low (59%); 3) Citizens are uninformed (69%); 4) Traditional media is biased (72%), 5); Inequality is too high (55%), 6); Social media is biased (66%), 7); Many citizens hold extreme political views (69%); 8) Large religious/cultural differences (56%); 9) People have limited knowledge about society and how it works (57%); 10) Other, please specify (11%). On average, respondents selected 6 out of the 10 items.

[2] We chose three studies (Karadja et al., 2017; Grigorieff et al., 2020, and Alesina et al., 2018) and randomly chose one for each respondent. Respondents saw a short description of the study, and were then asked to guess if providing information led to polarization increased, decrease or stayed the same (order of alternatives were randomized). Using three studies enabled us to confirm that respondents beliefs about how polarization changed with the information treatment were robust regardless of which of the three study descriptions a respondent saw.

Both liberals and conservatives believe that more information would move average opinions in their favored direction in society (1-10 scale, 1 = on average opinions would move left/liberal, 5 = opinions would not change, 10 = opinions would move right/conservative, $M_{liberal}$ = 3.37, $M_{moderate}$ = 4.66, $M_{conservative}$ = 6.57). They also believe that people from their own side of the political spectrum would be more willing to reconsider their opinions in light of new information (on a 1-10 scale with 1 = not willing to reconsider and 10 = willing to reconsider, liberals place people to the left at *6.03* and people to the right at *2.81*, with corresponding figures for moderates being *2.52* and *4.88*, and for conservatives *2.52* and *4.88*). Everyone, regardless of political affiliation, believes that moderates would be more likely to respond to information than liberals or conservatives.

In sum, we confirm that respondents in a general population sample from the United States believe that a more informed society would be less polarized, and that information provision will more often than not help combat polarization.

3. Literature Review – the Empirical Evidence

The empirical literature on misperceptions investigates the extent to which people hold inaccurate beliefs about factual realities. Individual studies tend to focus on one particular fact (or a small set of related facts). Common topics investigated in economics include facts about the degree of inequality in society (c.f. Norton and Ariely, 2011; Gimpelson and Treisman, 2017); one's own place in the relative income distribution (c.f. Cruces et al., 2013; Karadja et al., 2017, Hoy and Mager, 2021a); tax pressure (Ballard and Gupta, 2018; Stantcheva, 2021), and specific beliefs about minority groups (e.g., the employment rate of immigrants, as in Alesina et al. (2023), or the social mobility of people of a particular race, cf. Davidai and Walker 2022).

This section is divided into three parts. First, we discuss the existence of misperceptions and look at their size and sign. Second, we review papers that can shed light on the extent to which misperceptions are polarizing by focusing on the correlation between misperceptions and several socio-demographics characteristics. Third, we consider the causal relation between (mis)-perceptions and information on the one hand and political polarization on the other.

To accomplish this, we investigate both non-experimental and experimental studies that provide evidence on one or more of the above three aspects. The papers included in our review were selected accordingly: We searched for recent literature (from 2000 onwards), using Google Scholar, where we conducted repeated queries on the academic literature. The searches were made inclusive by using keywords such as "INEQUALITY", "PERCEPTIONS", and "MISPERCEPTIONS". To capture experimental papers, we also added the keywords "EXPERIMENT", "SURVEY EXPERIMENT," and "INFORMATION TREATMENT". All studies were also manually crosschecked to ensure they fit the following criteria; (i) the paper is published in a peer-reviewed journal; (ii) the paper states in the abstract or in the introduction that it investigates misperceptions, their determinants, and, for the experimental studies only, contains a survey experiment with an information provision treatment provision of information.[3]; (iii) the paper centers on (mis)perceptions related to inequality[4]; (iv) for the experimental studies only, the paper employs an experimental treatment containing information on one or more facts related to inequality, broadly defined[5]; (v) for the experimental studies only, the paper has as outcome

3 We do not include experiments with students (lab experiments) as they very rarely contain the heterogeneity analysis needed for our purposes. We also exclude conjoint experiments since they generally refer to abstract and hypothetical scenarios (e.g., Schechtl and Tisch, 2023).

4 This implies that we exclude papers that relate to other facts, e.g., perceptions about public debt in Roth et al. (2022).

5 Some articles include treatments that provide a bundle of information not directly aimed at correcting some misperceptions, but at explaining specific phenomena. We exclude such papers from the third part of the review. For instance, Stantcheva (2021) introduces instructional videos that explain the working and consequences of different aspects of tax policy, without aiming to correct certain, measured misperceptions. However, given that the study also elicits some misperceptions, it is included in the first and second part of the review, which discuss the sign and the sign of misperceptions and whether they are polarizing.

variables policy preferences broadly related to redistributive preferences, e.g., demand for redistribution, tax preferences, or attitudes towards minority groups[6]; (vi) for the second and third part, the paper provides a heterogeneity analysis on misperceptions and/or, for the experimental studies only, the effect of information treatment on either perceptions or policy preferences[7]; (vii) the topic of the paper is in the field of economics, political science, sociology and psychology.

3.1 The Size and Sign of Misperceptions

Misperceptions are defined as the difference between subjective beliefs – e.g., what a person believes the level of inequality to be in their country of residence – and the corresponding factual reality (Stantcheva, 2020). Additionally, misperceptions differ from random mistaken answers caused by ignorance or disinterest, in that they display a depth, firmness, and consistency that distinguishes them from pure noise (c.f. Nyhan, 2020; Fehr et al., 2022). The literature also highlights the role that misperceptions play in preference formation, exemplified through the fact that people's (mis)-perceptions are often more strongly correlated with their policy preferences than the corresponding factual reality. A person's perception of their own income mobility in the last five years or of the inequality levels in the society have, for example, been shown to correlate more strongly than their actual income mobility with their redistributive preferences (Gärtner et al., 2023; Osberg and Smeeding, 2006; Niehues, 2014, Page and Goldstein, 2016, Gimpelson and Treisman, 2018, Alesina et al., 2018, 2023, Bussolo et al., 2019, Kuhn, 2019, Fehr et al., 2022).

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6 Some articles were excluded due to the fact that they contain treatments on inequality, but their outcome variables are not the policy preferences under investigation in the present work (e.g., trust in the government in Healy et al., 2017, or financial hardship in Jachimowicz et al., 2020).

7 Some studies are excluded due to the fact that they contain informational treatment but do not contain analysis on the heterogeneity in misperceptions and/or heterogeneity of the treatment or they contain analysis on the heterogeneity but it is not possible to infer the effect on polarization (e.g., Schueler and West 2016; Kuziemko et al. 2015; Campos et al., 2022). Others might be included only in one or two of the three parts of the review. For instance, some are included only in the first part due to the fact that they contain only information on the size and sign of misperceptions (Osberg and Smeeding, 2006).

INSERT TABLE 2 HERE

Our review documents that misperceptions are very common (Table 2). Moreover, misperceptions vary greatly from person to person, and between contexts both on facts related to inequality and taxes (Panel A) or to minority group characteristics (Panel B). There is widespread agreement between studies that most people incorrectly estimate the degree of inequality, and that both overestimations and underestimations are common at the individual level. For the average misestimation, most studies report an underestimation of inequality (see e.g. Osberg and Smeeding, 2006; Norton and Ariely, 2011; Kuhn, 2017; Boudreau and MacKenzie, 2018), but contrary examples exists (c.f. Chambers et al., 2014). Beliefs about intergenerational social mobility have similarly been documented to both under- and overestimate mobility at the individual level, but the average misestimation is most often one of over-estimation (Davidai and Gilovich, 2015; Kraus and Tan, 2015; Alesina et al., 2018). Here, as well, examples exist where the average misestimation trends in the other direction (e.g., Chambers et al., 2015; Alesina et al., 2018; Cheng and Wen, 2019).[8]

Perceptions about one's relative position in the national income distribution have been extensively researched, finding large individual variation, with some people overestimating their position and others underestimating it. On average, at the country level, people seem to most often underestimate their position (Cruces et al., 2013; Karadja et al., 2017; Engelhardt and Wagener, 2018; Fehr et al., 2022; and Mu, 2022 predominantly find underestimation of relative income rank, on average, in Argentina, Sweden, Germany, and China).[9] Nair (2018) and Fehr et al. (2022)

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[8] The exact measure of inequality, or mobility, employed may play a role for whether under- or overestimation is documented on average (c.f. Eriksson and Simpson, 2012; Swan et al., 2017; Gimpelson and Treisman, 2018).

[9] The extent of the underestimation varies, however: For example, Berlingieri et al. (2023) investigate relative income bias in the 27 EU countries and find that while all countries display a negative average bias, the size of the bias decreases as countries become richer. Note that this study has not been included in the review, as it has not yet been published.

consider the global income distribution and find that respondents in the US and Germany, respectively, also underestimate their relative income rank in that distribution.

Regarding taxes, there is widespread agreement that most people cannot correctly assess which tax pressure applies to them, or to others. Under- and overestimation of average and marginal tax rates are both common, at the individual level and on average there seems to be a tendency to more often overestimate one's own tax burden, and underestimate that of top earners (Gemmell et al., 2004; Blaufus et al., 2013; Gideon, 2017, Ballard and Gupta, 2018; Stantcheva, 2021). Research has also focused on perceptions about the estate tax. Here, the most common finding is that respondents believe the estate tax affects more families than it actually does (Krupnikov et al., 2006; Slemrod, 2006; Kuziemko et al., 2015; Bastani and Waldenström, 2021; Stantcheva, 2021).

Finally, misestimations are also common when attempting to estimate certain characteristics of minority groups, such as the share of immigrants living in the respondent's country, or their characteristics. In general, the prevalence of negative characteristics (such as members of minority groups being unemployed or incarcerated) are overestimated, while more positive traits (such as minority group members being highly educated) are underestimated (c.f. Herda, 2010; Herda et al., 2019; Hopkins et al., 2019; Grigorieff et al., 2020; Alesina et al., 2023). Gender, ethnic, and racial gaps in, e.g., earnings, are often underestimated, as is the degree of discrimination in the labor and housing markets. However, the chances of upward social mobility of minority group representatives are often overestimated (see Becker, 2019; Kraus et al., 2019; Settele, 2019; Davidai and Walker, 2022; Haaland and Roth, 2023).

In sum, misperceptions are widespread and vary across individuals and contexts. Hence, the variation may actually be systematic in ways that impact the distance different groups in society

perceive between themselves and others. We next investigate takeaways from the empirical literature regarding whether misperceptions have a polarizing effect.

3.2. Misperceptions and Polarization: Correlational Evidence

An overview of heterogeneities in misperceptions that have been documented in the literature is provided in Table 3.

TABLE 3 INSERT HERE

The most common heterogeneities reported lay along the dimensions of political ideology (right/left, conservative/liberal, Republican/Democrat, etc.) and income (high/low income or wealth). A few studies also conduct heterogeneity analysis by gender (e.g., Norton and Ariely, 2011; Settele, 2020) or race (e.g., Engelhardt and Wagener, 2017; Alesina et al., 2018). Here, we limit our analysis to results reported by the authors of the original studies, i.e., we do not re-analyze data and search for additional heterogeneities. This is important to note, as the patterns we discern may be influenced by the discretionary choices of the authors of the studies included.

When considering whether misperceptions vary along the dimension of political ideology, we find examples of studies that support this idea, and others that do not. In sum, statistically significant differences in misperceptions between ideological groups are documented for the vast majority of the studies included in Table 3. Starting with beliefs about inequality, people with both left- and right-wing political leanings tend to inaccurately assess the level of inequality in society; however, their perceptions are statistically different from each other, as reported in, e.g., Norton and Ariely (2011), Chambers et al. (2014), Boudreau and MacKenzie (2018), and Stantcheva (2021). Thus, misperceptions contribute to political polarization in the sense that they create an artificial disagreement between ideological groups in how they perceive objective facts. Similarly, Alesina et al. (2018) report that liberals, on average, overestimate the probability that children of

poor families remain in the bottom income quintile when growing up, while conservatives underestimate it (c.f. also Chambers et al., 2015; Davidai and Gilovich, 2015; Kraus and Tan, 2015; Cheng and Wen, 2019). When looking at which group - right/left, conservative/liberal, Republican/Democrat - is more likely to be correct, the results vary: Chambers et al., (2014) and Stantcheva (2021) find that political liberals overestimate inequality more than political conservatives, but Norton and Ariely (2011) and Boudreau and MacKenzie (2018) show that conservatives are more likely than liberals to underestimate inequality. Moving to social mobility perceptions, the same divergence appears: while Chamber et al (2015) find that misperceptions are more pronounced among liberal participants than moderates and conservatives, Davidai and Gilovich (2015) and Kraus and Tan (2015) find that conservatives are more likely than liberals to overestimate social mobility.

Misperceptions concerning tax rates also tend to differ with political ideology. Stantcheva (2021) reports that while both Republicans and Democrats misestimate tax levels, Republicans tend to overestimate the top tax rate, as well as the share of income people in the top tax brackets pay in taxes. However, while Republicans tend to more correctly estimate the top tax rate, Democrats tend to more correctly estimate the share of income those in the top brackets pay in taxes. Studies on the estate tax report similar findings, with Democrats being more likely than Republicans to overestimate things like the threshold for the estate tax (c.f. Krupnikov et al., 2006; Kuziemko et al., 2015). Stantcheva (2021), however, does not find any differences among Republicans and Democrats.

The difference in misperceptions according to ideology is very pronounced in relation to minorities and other disadvantaged groups in society. For example, people at both ends of the political spectrum have different perceptions about: (i) the share of, and socioeconomic

characteristics of, immigrants in society (Herda et al., 2019; Alesina et al., 2023); (ii) the existence of labor market discrimination related to immigrant status and race (Haaland and Roth, 2020; 2023); and (iii) the gender income gap (Settele, 2020). In general, people on the right side of the political spectrum tend to be more inaccurate in their perceptions of these things than people to the left: for instance, they are more like to overestimate the number of immigrants (Herda, 2019) and to inaccurately assess both impact of immigration on the labor market (Haaland and Roth, 2020) and the discrimination Black people face in the labor market (Haaland and Roth, 2023).

Groups of people in different income brackets demonstrate substantially fewer differences in misperceptions than groups of people at opposite ends of the political spectrum: only roughly 50 percent of the cases studied in Table 2 indicate richer and poorer individuals displaying statistically significant differences in misperceptions. Stantcheva (2021) find that lower- and higher income respondents do not differ in most misperceptions of tax rates and inequality, and Alesina et al. (2018) document no difference across income groups regarding certain aspects of social mobility. Other studies, however, report a difference in misperceptions by income regarding the level of inequality in society (Norton and Ariely, 2011; Kuhn, 2017; Campos-Cazquez et al., 2022) and social mobility (Davidai and Gilovich, 2015; Kraus and Tan, 2015; Alesina et al., 2018; Cheng and Wen, 2019). Findings are inconclusive regarding which groups are more incorrect in their perceptions. For instance, while Norton and Ariely (2011), Kuhn (2017) and Davidai and Gilovich (2015) find that richer individuals are more likely correctly estimate inequality, Davidai and Gilovich (2015) find that richer individuals are more likely to *over*estimate inequality. Additionally, Campos-Cazquez et al. (2022) find that poor people are more likely to correctly estimate income levels (of rich and poor people), while rich people are more likely to correctly estimate the distribution of rich and poor people.

The issue of how minority groups are (mis-)perceived is also a mixed picture. Haaland and Roth (2020; 2023) find that poorer and richer individuals differ significantly in their misperceptions regarding the prevalence of racial discrimination in the labor market, with richer individuals being more pessimistic; however, the same does not hold true for perceptions of discrimination in housing. Similarly, documenting mixed findings, Alesina et al., (2023) find that different income groups display the same misperceptions about, e.g., the proportion of immigrants in society and the proportion of immigrants who are highly educated. Nevertheless, there are some differences. For example, poorer people tend to be more pessimistic regarding the immigrant unemployment rate, as well as the proportion of immigrants living in poverty.

Several of the studies we review investigate whether poorer and richer individuals differ in their misperceptions about their own relative income. Most studies find that they do, but that these misperceptions do not have a polarizing effect. Rather, they lead to people of different income groups perceiving themselves to be more similar than they are. The reason is a persistent "*middle-class bias,*" meaning that poorer people tend to overestimate their relative position to at least some extent (i.e., they believe that they are closer to the middle class than they actually are), while richer people correspondingly underestimate their rank (see Cruces et al., 2013; Karadja et al., 2017; Engelhardt and Wagener, 2018; Hoy and Mager, 2021a; Fehr et al., 2022; and Mu, 2022). A similar pattern investigated in far fewer studies relates to taxes. For example, Blaufus et al. (2013) and Gideon (2017) find that respondents with lower incomes overestimate their own marginal tax rate, while respondents with higher incomes underestimate it, again resulting in the two groups believing their marginal tax rates are more similar than they actually are.

Several studies document that misperceptions differ by gender. Settele (2019) shows, for example, that women tend to be more pessimistic than men about the gender wage gap. Likewise,

Alesina et al. (2023) find that men and women differ in their misperceptions regarding the share of immigrants in society. At least equally often, however, men and women share a common (mis)-perception of reality, e.g., related to discrimination (Haaland and Roth, 2023), tax rates (Blaufus et al., 2013; Ballard et al., 2018), or their own relative income position (Karadja et al., 2017; Engelhardt and Wagener, 2018; Fehr et al., 2022).

There are significantly fewer studies investigating whether misperceptions vary by race, but those that exists depict race as a highly polarized dimension. Perceptions of social mobility, for example, differ greatly different between Black and White individuals, with the former generally more optimistic, and generally less correct, about the future prospects of children from low-income families (see Davidai and Gilovich, 2015; Alesina et al., 2018, Cheng and Wen, 2019). By contrast, White Americans are generally more optimistic about racial wealth equality (Kraus et al., 2019) and more pessimistic about the impact of immigration on the jobs of high-skilled workers (Haaland and Roth, 2020; 2023). However, Haaland and Roth (2023) find no significant differences between blacks and whites in their beliefs about discrimination in the labor market and housing.

In conclusion, we find that most studies reporting on a heterogeneity analysis regarding misperceptions about objective facts in society find that different groups (most often different ideological groups) differ in their misperceptions. This implies that the groups perceive society differently. In this sense, misperceptions often have a polarizing effect. On the other hand, misperceptions regarding facts about an individual, e.g., regarding individual relative income or tax rates, appear to have the opposite effect of making people of different groups perceive themselves as more similar than they are.

3.3. The Causal Effect on Information Provision on Polarization

Given that misperceptions are common, there is ample room to provide people with information to correct them. The growing literature on information provision experiments takes advantage of this fact. Generally, researchers first measure people's perceptions, about, e.g., their place in the income distribution, and then provides correct information to a randomly selected subset of participants. In this way, researchers can vary perceptions without providing false information. They can use this tactic to shed light on a wide variety of policy-relevant questions by examining the causal link between, first, information and perceptions, and second, information and preferences/opinions. Haaland et al. (2023) provide an in-depth discussion of this method and its applications in a diverse set of fields, ranging from finance to labor economics.

24 of the studies in our review about misperceptions related to inequality and other topics feature experiments with information provision treatments. They are outlined in Table 4, and they share the common trait of investigating whether information has heterogeneous effects, i.e., impacts people differently depending on whether they have lower and higher income or different political views. This allows us to assess whether various information treatments have polarizing or depolarizing effects.

It is important to note that the mere existence of heterogeneous treatment effects does not mechanically imply that polarization is affected. Rather, the net effect on divergence between groups depends on which groups are affected by information, and in what direction. An information intervention could cause one or more groups to adjust perceptions and/or preferences in the direction of other group(s), thereby reducing polarization. However, it is also possible that information could lead to one or more groups becoming more extreme in their perceptions and/or preferences, which could mean that information provision increases polarization.

INSERT TABLE 4 HERE

The studies in Table 4 provide information to respondents about a range of different facts to create random variation. While some inform respondents of facts about inequality levels, or about social mobility patterns (e.g., Hoy and Mager, 2021a; Alesina et al. 2018), others provide more specific information, e.g., about the wage gap between women and men (e.g., Settele, 2020). Other studies provide personalized information, most often about the respondent's own relative income rank, to treated individuals (e.g., Karadja et al., 2017; Fehr et al., 2023). The most common dimensions along which heterogeneous effects are considered are political ideology and income.[10] As mentioned above, it is important to emphasize that our analysis is limited to what the authors of the original studies chose to include in their published work (authors, could, for example, have looked for heterogeneous effects along other dimensions, but not reported the results). It should also be noted that while the studies we examine do explicitly look for heterogeneous treatment effects, they do not consider polarization as an outcome variable. This is instead an extra lens through which we view the studies.

Some of the studies in Table 4 use information treatments to measure the effect of information on both perceptions and preferences, while others assess only the effect of information on preferences. Starting with the former, we find only one study, Grigorieff et al. (2020) that documents a case where information reduces polarization both in perceptions and policy preferences. Here, respondents in the United States who affiliate with either the Republican or Democratic Party are provided with information about the volumes and characteristics of immigration. In this sample, Republicans have a more negative view of immigrants than Democrats before treatment. The information treatment moves both perceptions in the correct direction and

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[10] There are some exceptions: Settele (2019) looks for heterogeneous effects by gender, and Lergetporer et al. (2018, 2020) study race and gender.

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leads Republicans to report more positive views on immigrants. In this way, both perceptions and opinions about immigrants become less polarized between Republicans and Democrats.

Using other studies, we reach less optimistic conclusions on the depolarizing role of information: Hopkins et al. (2019), Haaland and Roth (2020), Mu (2022), and Alesina et al. (2023) find no heterogeneous effects of information on either perceptions or opinions, and their information provisions leave the sample as polarized by political ideology as it was prior to the information treatment. Others document a null effect of information on polarized perceptions, but find that preferences and opinions become more polarized. One example is the study by Alesina et al. (2018). This study finds that providing left- and right-wing respondents (who, on average, before treatment both believe that the chances of upward income movement for children in low-income families are greater than what is actually the case) with objective information on social mobility reduces misperceptions to a similar degree for both groups, thus having a net null effect on polarization. The effect on political preferences is one of increased polarization, however, as left-wing voters react to the information by increasing their demand for redistribution, while right-wing voters (who, prior to the treatment, wanted less redistribution than those to the left) do not. Similar patterns emerge in Settele (2019), as well as in Haaland and Roth (2023).[11]

We turn now to the studies that do not measure perceptions post treatment, and hence study only the effect of information on political preferences and opinions. Regarding the effect of information on polarization by political ideology, Karadja et al. (2017) find that providing Swedish

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[11] Settele (2019) finds no heterogeneous effects of information about the actual size of the gender wage gap on perceptions, either by political ideology or by gender, but document heterogeneous effects on policy preferences: the information treatment increases polarization by affecting the policy preferences of respondents who support the Democrats and who, prior to the treatment, were more likely to support policies that aim to decrease the income gap between men and women. Haaland and Roth (2023) provide treated respondents with information about racial discrimination and find that perceptions are neither more nor less polarized post treatment. The information provided does however lead Republican respondents to reduce their support for pro-black policies, thereby increasing polarization. The finding of Haaland and Roth (2023) is an example of how information can backfire, in the sense that providing positive information about a group can lead to respondents to dislike the group more. Such back-fire effects are, however, quite rare in the literature as documented in another review of the literature (c.f. Nyhan, 2020).

voters with truthful information about their relative income rank in Sweden increases polarization. They document that the vast majority of Swedes, both to the right and to the left of the political center, underestimate their relative income before the treatment, and hence believe themselves to be poorer, relative to others, than they actually are. When receiving information that corrects this misperception, right-wing voters reduce their (already lower) demand for redistribution, while left-wing voters do not change their views. The net effect is hence that the opinions of the respective group move further away from each other.

Very few studies report that information provision decreases polarization in preferences between different ideological groups. One example is the study by Fehr et al. (2022), which finds that left-wing respondents in Germany were more likely than right-wing respondents to decrease their support for redistribution after receiving accurate information about their place in the income distribution. This ultimately led to the opinions of the left and the right being brought closer together by the information. Similar results are documented in Boudreau and MacKenzie (2018), Hoy and Mager (2021b) and Hope et al. (2022).

Considering heterogeneous effects by income rather than political ideology, several studies document that information provision treatments merely lead richer individuals to demand even less redistribution than before treatment (Engelhardt and Wagener, 2019; Naumann and Stoetzer, 2018; Martinangeli and Windsteiger, 2019; Bastani and Waldenström, 2021) and poorer individuals to demand even more redistribution (Cruces et al., 2013). The result is increased polarization, in the sense that the political opinions between low- and high-income individuals move further apart.

Overall, while there are some instances where providing accurate information decreases polarization, it more commonly appears to increase polarization. Of the 34 cases of heterogeneous

effects (that are not null effects, which are also common) reported in the 24 papers in Table 4, we find that information more often increases polarization than decreases it. This finding stands in sharp contrast to the beliefs documented in Section 2 from the survey, where information provision is overwhelmingly believed to have a depolarizing effect.

4. Discussion

For information to potentially affect polarization, a necessary – albeit not sufficient – condition is that the information is incorporated by the recipient. In this section, we discuss what the literature says about the circumstances under which information uptake seems more or less likely.

A first, and very intuitive, reason why individuals update their perceptions, beliefs, or preferences is that they move from being uninformed to being informed. Once the information is provided, they update their perceptions (akin to a Bayesian learner) and align their policy preferences. According to most political economy models, self-interest motives are a main driver. For instance, Cruces et al., (2013) find that poor people ask for more redistribution when they are informed that they are poorer than they previously believed. Bastani and Walderstrom (2021) find that wealthy individuals reduce their support for estate taxation when they are informed that they will be a net payer. Similar findings are found in Fehr et al. (2023); Lergetporer et al. (2021); Haaland and Roth (2020); Martinangeli and Windsteiger (2022) and Naumann and Stoetzer (2018).

However, the effect of information on preferences is often muted, for several underlying reasons. Information may, for example, be too difficult for respondents to process. The reason may be that the information is presented in a suboptimal way or that the respondents analytical reasoning skills are limited (c.f. Norton and Ariely, 2011; Eriksson and Simpson, 2012; Blaufus et al., 2015; 2020; Pennycook and Rand, 2019b; Haghtalab et al., 2021). Several of the studies

included in our review also discuss how difficulty connecting information with specific policies may lead to perceptions being updated (indicating that treated respondents do incorporate the information) while preferences and opinions remain unchanged (see e.g. Kuziemko et al., 2015; Haaland and Roth, 2020; Lergetporer et al., 2020). One way of overcoming this channel may be to present information in a more direct and accessible way. For example, Engelhardt and Wagener (2017) find that information that explicitly connects the income position of the respondent with the resulting effect on their status as net payer or net beneficiary of economic redistribution more effectively influences preferences than merely providing the relative income information.

Another way to increase the effectiveness of the information uptake is to provide a bundle with several pieces of information. While Hopkins et al. (2019) find that providing only statistical information about the size of the immigrant population has little effect on attitudes and opinions, Grigorieff et al. (2020) experience greater success presenting a bundle of information on the immigrant population (e.g., not only the size of the population, but also immigrants' characteristics, such as education levels, unemployment rates, etc.). Presenting information as stories or narratives, rather than isolated facts, has been also found effective in other contexts (Graetz and Shapiro, 2011; Larsen and Levy, 2016; Duffy, 2018; Stantcheva et al., 2023). Finally, Hope et al. (2022) and Pellincer et al. (2019) discuss how providing information together with a reference point (e.g., increase in the top rate tax over time or inequality levels in other places) facilitates information processing.

In addition to the way in which information is provided, another reason respondents may not update their beliefs or preferences in response to information is that they may not consider the source of the information to be trustworthy. This can explain why, when information is disseminated into the "*wild*" (e.g., within organizations or firms) (Perez-Truglia, 2020; Islam et

al., 2021; Cullen and Perez-Truglia, 2022) or by neutral institutions (e.g., Boudreau and MacKenzie, 2018), it seems to have a greater chance of changing perceptions and opinions.

As a general rule on the source of the information, the literature shows that people tend to trust information from those they perceive as in-group members, e.g., politicians or peers with the same political leaning or from close networks (Mackie et al., 1990; Brulle et al., 2012; Brundage et al., 2022). This is particularly relevant in contexts like social media, where information from various sources is inconsistent or delivered through an entity that might have an explicit political agenda (see e.g. Levendusky, 2009; Jerit and Barabas, 2012; Swire et al., 2017; Tesler, 2018; Tucker et al., 2018; Brady et al., 2019; Druckman and McGrath, 2019; Pennycook and Rand, 2019a; Wilson et al., 2020; Nyhan, 2020, 2021).

Motivated reasoning can also help determine which information is used for updating. The reason is that people tend to be more willing to accept and incorporate information that is consistent with their social identity (c.f. Kunda, 1990; Lodge and Taber, 2013; Benabou and Tirole, 2016; Epley and Gilovich, 2016; Flynn et al., 2017). This can help us understand self-serving misperceptions and preferences along political ideological lines. Several studies highlight the general relationship between partisan-motivated cognition and information updating and underline how motivational biases can be especially relevant for understanding polarization along political ideology lines (Nyhan and Reifler, 2010, 2013; Flynn et al., 2017). Indeed, many of the studies reviewed in the present work focus on this topic (see e.g. Nair, 2018; Karadja et al., 2017; Alesina et al., 2018; Hoy and Mager, 2021b; Haaland and Roth, 2023). It is also worth noting that motivated reasoning is not only related to political ideology, but also to other dimensions like race. For instance, Kraus et al. (2019) and Alesina et al. (2021) argue that motivated cognition leads White Americans to remain ignorant of racial economic inequality and react differently to information provided.

Several studies have investigated how manipulating and changing the saliency of social identities can improve information uptake and reduce motivated reasoning (c.f. Landrum et al., 2017; Nyhan and Reifler, 2010; Cohen et al., 2000; Esberg et al, 2020; Van Bavel et al., 2020). For example, Levendusky (2018) show that when a joint American national identity is made salient, individuals see members of the opposing party as fellow Americans rather than rival partisans.

Importantly, motivated reasoning does not necessarily imply illogical updating or biased statistical reasoning. The same information can have different implications depending on which model of the world it enters. This may also imply that unbiased Bayesian updating can lead different groups to react differently to the same piece of information (see Benoit and Dubra, 2019). For example, Karadja et al.'s (2017) finding that people to the right of center (but not those to the left) react to information suggesting they are richer than they previously believed can be traced to different beliefs from the right and left about the role of luck and effort in generating economic success.[12] Similarly, individual beliefs about whether the government can capably solve societal problems may also affect the way in which information is incorporated or ignored (Alesina et al., 2018; Mu, 2002; Kuziemko et al., 2015). Alesina et al. (2023), Haaland and Roth (2023) and Hopkins et al. (2019) find that information about immigration affects different groups differently depending on their attitude toward minority groups.

In Section 2, we introduced our survey of the general population sample. In that survey, we also asked respondents to indicate how trustworthy they would find information from different sources, and how helpful they think various types of information are for reducing polarization. To a large extent, the results comport with the discussion above. The majority of respondents indicated

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[12] People to the left of center tend to place more weight on the role of luck in individual economic success, while people to the right of center put greater weight on effort. Karadja et al., (2017) argue that these previously held beliefs interact with the information that an individual is richer, relative to others, than they thought: people to the right (but not people to the left) may understand this information as telling them that they have worked harder, relative to others, than what they previously believed. This could, in turn, lead them to decrease their demand for redistribution. See also Alesina et al., 2018; Trump, 2018 and Fehr et al., 2022.

believing that information can help reduce polarization. We asked these respondents how important certain characteristics are in achieving the desired effect. Respondents said that it was most important for the information to come from a trustworthy source, be easy to understand, and be presented in a consistent fashion by several sources.[13] We also asked all respondents the circumstances under which they would support the idea of launching an informational campaign with the purpose of reducing polarization. They reported, on average, that this would be a good idea if several political parties or several media outlets launched the campaign together, or if an NGO launched it (They believed it would be a bad idea if the campaign were launched by governmental agency or by one party or one media outlet on their own).

5. Conclusions

Given that (i) many people harbor misperceptions regarding key facts about society; and (ii) political polarization is increasing, it is intuitively appealing to believe that better informing citizens would lead to a less polarized society, and that information provision can help decrease divisiveness. Indeed, this line of reasoning has been advanced by many policymakers. Here, we use an incentivized survey, with a sample of N=900 self-described liberals, moderates and conservatives from the United States, to show that the general population also seems to share this belief.

We conduct a comprehensive review of the literature on misperceptions to investigate whether societal beliefs about misperception being linked to polarization are empirically

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[13] The N=714 respondents (79%) who expressed the belief that polarization in society would decrease at least somewhat in response to truthful information provision to all voters were asked to rate the importance of the following informational characteristics (presented in random order): 1) That the information comes from a politically neutral source (rated on average 7.62 on a scale from 1-9, where 1 indicates that it is not important at all and 9 that it is very important), 2) That the information comes from a source that is regarded as trustworthy (8.16), 3) That the information is easy to understand (8.14), 4) That the information is presented in the form of statistics and numbers (6.12), 5) That the information is presented as part of a narrative to explain the world (6.18), 6) That several different sources present coherent information (7.91), 7) That the information comes from a scientific study (6.29).

supported. While these studies did not originally aim to investigate polarization, many nonetheless look for heterogeneities in misperceptions and/or investigate heterogeneous treatment effects. We take advantage of this to better understand the relationships between misperceptions, information provision, and polarization. The patterns we find are more complex than the beliefs displayed by our survey respondents. The respondents believe, firstly, that a more informed society is a less polarized one. We show that this is quite often true (for example, when different political groups hold misperceptions about minority group characteristics that push the group apart in their perceptions). However, sometimes the opposite holds, as in the case of relative income misperceptions, where bias often leads people to perceive themselves as closer to others than they actually are.

Regarding how information provision affects polarization, our survey respondents expressed the belief that information can decrease polarization. Empirical studies, however, paint a much more complex picture. While some studies have shown that information can have a depolarizing effect, they are not the majority. More commonly, information either does not affect polarization or causes heterogeneous reactions to information in a way that increases polarization. The latter happens when information leads one group to adjust their preferences in a way that moves them further away from the center in their opinions.

While our work has identified specific lenses – misperceptions and information – through which to analyze polarization, it has several limitations. First, we restrict our analysis to misperceptions on inequality and preferences for redistribution, despite the fact that many others facts can also be considered (e.g., health issues). However, our goal was to produce a living resource linking the available evidence on misperceptions to polarization in both conceptual and empirical terms.

Second, most studies refer to the Western World, and the US more specifically, and thus the evidence listed over-represents populations from this region. While we include a couple of studies conducted in the Global South (e.g., Mexico and China), the generalizability of our conclusions to other regions of the world needs to be studied much more thoroughly.

Finally, it should be noted that the empirical literature discussed here is still young. Hence, despite the effort of our study and of recent others (Kozyreva et al., 2022; Voelkel et al., 2022), it remains an open question the exact circumstances under which information has polarizing or depolarizing effects. At this point, it is important for those interested in reducing polarization to remember that not all misperceptions are associated with polarization, and that even when misperceptions are widespread, correcting them is not a foolproof tool for bringing people closer together. While it is intuitively appealing to think that providing truthful information about society is a net positive, and that it will surely bring people together, in practice much empirical work shows that the opposite is often true.

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Main tables

Table 1: Survey Results

	Full Sample	**Liberals**	**Moderates**	**Conservatives**
Current US polarization	7.52	7.50	7.50	7.57
1-9 scale: No polarization (1), extremely polarized (9)	(0.05)	(0.08)	(0.08)	(0.08)
Polarization now compared to 10y ago	7.61	7.73	7.54	7.56
1-9 scale: Much less polarized (1), much more polarized (9)	(0.05)	(0.09)	(0.10)	(0.10)
Is polarization good or bad?	7.16	7.25	7.34	6.90
Definitely good (1), Definitely bad (9), 1-9 scale	(0.06)	(0.10)	(0.10)	(0.12)
Less polarization would be beneficial	7.48	7.60	7.57	7.20
Definitely disagree (1), definitely agree (9), 1-9 scale	(0.06)	(0.10)	(0.10)	(0.11)
Current US polarization, population	7.23	7.27	7.19	7.26
1-9 scale: No polarization (1), extremely polarized (9)	(0.05)	(0.08)	(0.08)	(0.09)
Current US polarization, politicians	7.60	7.67	7.66	7.45
1-9 scale: No polarization (1), extremely polarized (9)	(0.05)	(0.08)	(0.09)	(0.09)
Current US polarization, media	7.44	7.18	7.45	7.71
1-9 scale: No polarization (1), extremely polarized (9)	(0.05)	(0.09)	(0.09)	(0.10)
Who is responsible for polarization?	5.27	6.87	5.29	3.64
1-9 scale: Left/liberals (1), both sides equally (5), right/conservative (9)	(0.07)	(0.10)	(0.10)	(0.12)
How informed are voters?	3.96	3.89	3.94	4.06
1-9 scale: Not well informed at all (1), very well informed (9)	(0.05)	(0.09)	(0.09)	(0.10)
Who is better informed?	4.78	3.09	4.69	6.57
1-9 scale: Left/liberals (1), right/conservative (9)	(0.07)	(0.09)	(0.08)	(0.10)
Where will polarization be higher?	7.31	7.76	7.16	7.01
1-9 scale:In well informed society (1), in poorly informed society (9)	(0.06)	(0.10)	(0.10)	(0.11)
Effect of information provision on polarization	3.10	2.87	3.12	3.30
1-9 scale: Decrease in polarization (1), no change (5), increase (9)	(0.06)	(0.10)	(0.09)	(0.11)
Effect of information provision on average opinion	4.87	3.37	4.66	6.57
1-9 scale: Average opinion moving left (1), no change (5), moving right (9)	(0.07)	(0.08)	(0.08)	(0.09)
Liberals willing to reconsider opinions w new info?	4.39	6.03	4.3	2.81
1-9 scale: Not at all willing (1), very willing (9)	(0.08)	(0.12)	(0.13)	(0.12)
Moderates willing to reconsider opinions w new info?	6.47	6.43	6.72	6.25
1-9 scale: Not at all willing (1), very willing (9)	(0.06)	(0.10)	(0.11)	(0.11)
Conservatives willing to reconsider opinions w new info?	3.54	2.52	3.22	4.88
1-9 scale: Not at all willing (1), very willing (9)	(0.08)	(0.10)	(0.11)	(0.14)
N	900	300	300	300

Table notes: Averages (standard errors); Source: own data

Table 2: Review on the sign and size of misperceptions

A: INEQUALITY AND TAXES

	Country(-ies)	Fact(s) About Which (Potential) Misperceptions are Assessed	Result	Experimental Study?
Alesina et al (2018)	FRA, ITA, SWE, GRB; USA	Social mobility (transition probability)	Overestimation (USA) and underestimation (Europe)	Yes
Ballard and Gupta (2018)	USA	Own average income tax	Overestimation	No
Boudreau and MacKenzie (2018)	USA	Income inequality	Underestimation	Yes
Blaufus et al. (2013)	DEU	(i) Average (ATR) for different income groups; (ii) own marginal tax rate (MTR)	(i) Overestimation of the ATR for the poor, underestimation of the ATR for the rich; (ii) Underestimation of own MTR	No
Campos-Vazquez et al. (2022)	MEX	(i) Minimum income needed to be rich; (ii) Poverty line; (iii) Share of poor and rich people in population; (iv) social mobility (transition probabilities)	(i) Overestimation; (ii) Correct; (iii) Overestimation; (iv) Correct estimation of persistence rates, overestimation of social mobility	Yes
Chambers et al. (2014)	USA	(i) Income inequality (present and over time) (ii) Average incomes of the top and bottom 20% (present and overtime)	(i) Overestimation; (ii) Underestimation.	No
Chambers et al. (2015)	USA	Social mobility (transition probability)	Underestimation	No
Cheng and Wen (2019)	USA	Social mobility (child rank relative to parent)	Underestimation	No
Cruces et al. (2013)	ARG	Own national relative income rank	Overestimation (30% of respondents) and underestimation (55%)	Yes
Davidai and Gilovich (2015)	USA	Social mobility (transition probability)	Overestimation of upward mobility and underestimation of downward mobility	No
Engelhardt and Wagener (2017)	DEU	Own national relative income rank	Overestimation (70% of people in lowest decile) and underestimation (100% in highest decile)	Yes
Fehr et al. (2023)	DEU	Own national relative income rank; (ii) Own international income rank	Overestimation (50% of respondents) and underestimation (50% of respondents), (ii) Primarily underestimation	Yes
Gemmell et al. (2004)	GRB	Income tax and Value Added Tax (VAT)	Overestimation	No
Gideon (2017)	USA	(i) Income and (ii) Dividend marginal tax rate (MTR) for households in top tax brackets; (iii) Own average and marginal tax rate	(i) Underestimation of the top MTR on income; (ii) Overestimation of the top MTR on dividends; (iii) Overestimation of own MTR.	No
Gimpelson and Treisman (2017)	40 countries	(i) Income inequality; (ii) Share of wealth held by the rich; (iii) Average incomes; (iv) Own relative income rank	(i) Overestimation and underestimation (depending on country); (ii) Overestimation; (iii) Underestimation; (iv) Middle class bias	No

Hoy and Mager (2021a)	AUS, IND, MEX, MAR, NGA, NLD, ZAF, ESP, GRB and USA	Own national relative income rank	Overestimation among the poor (85% of respondents)	Yes
Karadja et al. (2017)	SWE	Own national relative income rank	Underestimation (85.8% of respondents)	Yes
Kraus and Tan (2015)	USA	Social mobility (transition probability)	Overestimation	No
Krupnikov et al. (2006)	USA	Share of population to which the estate tax applies	Overestimation	No
Kuhn (2017)	27 countries	CEO compensation	Underestimation	No
Kuziemko et al. (2015)	USA	Share of population to which the estate tax applies	Overestimation	Yes
Lergetporer et al. (2018)	DEu, Usa	Level of spending per student of teachers' salaries	Underestimation	Yes
Mu (2022)	CHN	Own national relative income rank	Overestimation (21.2% of respondents) and underestimation (69.2% of respondents)	Yes
Nair (2018)	USA	(i) Own international relative income rank; (ii) Global median income	(i) Underestimation (86% of respondents), (ii) Overestimation	Yes
Norton and Ariel (2011)	USA	Wealth inequality	Underestimation of the share of wealth of the top 20%	No
Osberg and Smeeding (2006)	27 countries	Salaries in five occupations from bottom to top in income distribution	Underestimation of top incomes	No
Slemrod (2006)	USA	Share of population to which the estate tax applies	Overestimation	No
Stantcheva (2021)	USA	(i) Top tax rate currently and in 1950s; (ii) Share of tax paid by median households; (iii) Share of taxes paid by top tax bracket; (iv) Share of household in top tax bracket; (v) Share of households not paying taxes; (vi) Top tax income threshold; (vii) Share of income earned by top 1%; (viii) Estate tax rate currently and in 1950s; (ix) % of wealth inherited; (x) Number of households paying estate taxes; (xi) Estate tax exemption threshold; (xii) Share of wealth held by top 1% and bottom 50%.	(i) Underestimation; (ii) Overestimation; (iii) Underestimation; (iv) Overestimation; (v) Underestimation; (vi) Underestimation; (vii) Overestimation; (viii) Underestimation; (ix) Underestimation; (x) Overestimation; (xi) Underestimation; (xii) Overestimation.	Yes

B: MINORITY GROUP CHARACTERISTICS

	Country(-ies)	Fact(s) About Which (Potential) Misperceptions are Assessed	Result	Experimental Study?
Alesina et al. (2023)	FRA, DEU, ITA, SWE, GRB, USA	(i) Share of immigrants; (ii) Share of Muslim immigrants; (iii) Share of Christian immigrants; (iv) Share of immigrants with a college degree; (v) Share of non-immigrants with a college degree; (vi) Unemployment rate, immigrants; (vii) Unemployment rate, non-immigrants; (viii) Poverty rate, immigrants; (ix) Poverty rate, non-immigrants	(i) Overestimation; (ii) Overestimation (except in France); (iii) Underestimation; (iv) Underestimation; (v) Overestimation; (vi) Overestimation; (vii) Overestimation; (viii) Overestimation; (ix) Overestimation	Yes
Blinder (2013)	GRB	Reasons for migrating	Overestimation of asylum seeking as main migration reason	No
Citrin and Sides (2008)	21 countries	Share of immigrants	Overestimation	No

Davidai and Walker (2022)	USA	Transition probability for Whites and Blacks	Underestimation of the Black–White disparity in economic mobility	No
Gorodzeisky and Semyonov (2019)	17 countries	Share of immigrants	Overestimation	No
Grigorieff et al. (2020)	USA	(i) Share of immigrants; (ii) Share of undocumented immigrants; (iii) Immigrants' average unemployment rate; (iv) Immigrants' average incarceration rate; (v) Proportion of immigrants without proficient in English	(i) Overestimation; (ii) Overestimation; (iii) Overestimation; (iv) Overestimation; (v) Overestimation.	Yes
Haaland and Roth (2020)	USA	(i) Negative effect of immigration on wage and employment on low-skill domestic workers; (ii) Negative effect of immigration on wage and employment on high-skill domestic workers	(i) Overestimation; (ii) Correct	Yes
Haaland and Roth (2023)	USA	(i) Racial discrimination in labor markets (calls-backs to interviews); (ii) Racial discrimination in housing markets (rejection rates on Airbnb)	(i) Underestimation (35% of respondents) and overestimation (54.7%) of the racial discrimination in labor market; (ii) Underestimation (19%) and overestimation (81%) of the racial discrimination in housing market	Yes
Herda (2010)	22 countries	Share of immigrants	Overestimation	No
Herda (2015)	FIN	Origins of immigrants	1 in 5 is wrong on the origin of immigrants	No
Herda (2019)	USA	Share of immigrants over time	Overestimation	No
Hopkins et al. (2019)	USA	Share of immigrants	Overestimation	Yes
Kraus el at. (2019)	USA	Racial economic inequality	Undestimation	No
Martinangeli and Windsteiger (2022)	DEU	(i) Number of individuals living below the poverty line; (ii) number of individuals born abroad	(i) Underestimation; (ii) Overestimation	Yes
Naumann & Stoetzer (2018)	NOR, DEU, NLD	Share of immigrants	Overestimation in Germany and the Netherlands, correct in Norway	Yes
Settele (2022)	USA	Gender income gap	Underestimation (20%) and overestimation (20%)	Yes
Sides and Citrin (2007)	20 countries	Share of immigrants	Overestimation	No

Notes: Documented misperceptions reported here are for the full sample of the respective study. Heterogeneities, when such are investigated, are reported in Table 3. Country codes follow the three-digit alphabetical codes assigned by the International Organization for Standardization (ISO) (Statistics Division of the United Nations Secretariat).

Table 3: Review on how misperceptions vary by groups

A: INEQUALITY AND TAXES

	Fact(s) About Which Misperceptions are Assessed	Are the Documented Misperceptions Different by Groups?
Alesina et al (2018)	Social mobility (transition probability)	Yes, by political ideology, income, gender, and race
Ballard and Gupta (2018)	Own average income tax	Yes, by income, but not by political ideology, gender, or race
Blaufus et al. (2013)	(i) Average (ATR) for different income groups; (ii) own marginal tax rate (MTR)	(i) ATR is overestimated differently by gender, but not by income; (ii) Own MTR is underestimated differently by income, but not by gender
Boudreau and MacKenzie (2018)	Income inequality	Yes, by political ideology
Campos-Vazquez et al. (2022)	(i) Minimum income needed to be rich; (ii) Poverty line; (iii) Share of poor and rich people in population; (iv) social mobility (transition probabilities)	(i) No; (ii) Yes, by income; (iii) Yes, by income; (iv) Yes, by income
Chambers et al. (2014)	(i) Income inequality (present and over time) (ii) Average incomes of the top and bottom 20% (present and overtime)	(i) Yes, by political ideology; (ii) Yes, by political ideology
Chambers et al. (2015)	Social mobility (transition probability)	Yes, by political ideology
Cheng and Wen (2019)	Social mobility (child rank relative to parent)	Yes, by political ideology, income, and race but not gender
Cruces et al. (2013)	Own national relative income rank	Yes, by income
Davidai and Gilovich (2015)	Social mobility (transition probability)	Yes, by political ideology, income, and race
Engelhardt and Wagener (2017)	Own national relative income rank	Yes, by political ideology and income, but not by gender or race
Fehr et al. (2023)	(i) Own national relative income rank; (ii) Own international income rank	(i) Yes, by income (but not gender or political ideology; (ii) Yes, by income
Gideon (2017)	Own average and marginal tax rate	Yes, by income
Hoy and Mager (2021a)	Own national relative income rank	Yes, by income
Karadja et al (2017)	Own national relative income rank	Not by political ideology, income or gender
Kraus and Tan (2015)	Social mobility (transition probability)	Yes, by political ideology and income
Kuhn (2017)	CEO compensation	Yes, by income, gender and race
Kuziemko et al. (2015)	Share of population to which the estate tax applies	Yes, by political ideology
Krupnikov et al. (2006)	Share of population to which the estate tax applies	Yes, by political ideology
Mu (2022)	Own national relative income rank	Yes, by income
Nair (2018)	Global median income	Yes, by income
Norton and Ariel (2011)	Wealth inequality	Yes, by political ideology, income and gender

Stantcheva (2021)	(i) Top tax rate currently and in 1950s; (ii) Share of tax paid by median households; (iii) Share of taxes paid by top tax bracket; (iv) Share of household in top tax bracket; (v) Share of households not paying taxes; (vi) Top tax income threshold; (vii) Share of income earned by top 1%; (viii) Estate tax rate currently and in 1950s; (ix) % of wealth inherited; (x) Number of households paying estate taxes; (xi) Estate tax exemption threshold; (xii) Share of wealth held by top 1% and bottom 50%.	(i) Yes, by political ideology (current top tax rate only); (ii) No; (iii) Yes, by political ideology; (iv) Yes, by political ideology; (v) Yes, by political ideology; (vi) Yes, by income; (vii) Yes, by political ideology; (viii) Yes, by political ideology (in the 1950s only); (ix) Yes, by political ideology; (x) No; (xi) Yes, by political ideology and income; (xii) Yes, by political ideology and income; (xiii) Yes, by political ideology and income (top 1% only)

B: MINORITY GROUP CHARACTERISTICS

	Fact(s) About Which Misperceptions are Assessed	Are the Documented Misperceptions Different by Groups?
Alesina et al. (2023)	(i) Share of immigrants; (ii) Share of Muslim immigrants; (iii) Share of Christian immigrants; (iv) Share of immigrants with a college degree; (v) Share of non-immigrants with a college degree; (vi) Unemployment rate, immigrants; (vii) Unemployment rate, non-immigrants; (viii) Poverty rate, immigrants; (ix) Poverty rate, non-immigrants	(i) Yes, by gender; (ii) Yes, by political ideology; (iii) Yes, by political ideology and gender; (iv) Yes, by political ideology and gender; (v)Yes, by gender; (vi) Yes, by political ideology, income and gender; (vii) Yes, by income and gender; (viii)Yes, by political ideology, income and gender; (ix) Yes, by income and gender
Davidai and Walker (2022)	Transition probability for Whites and Blacks	No differences by race
Gorodzeisky and Semyonov (2019)	Share of immigrants	Yes, by income and gender
Haaland and Roth (2020)	(i) Negative effect of immigration on wage and employment on low-skill domestic workers; (ii) Negative effect of immigration on wage and employment on high-skill domestic workers	(i) Yes, by political ideology and race, but not by income and gender
Haaland and Roth (2023)	(i) Racial discrimination in labor markets (calls-backs to interviews); (ii) Racial discrimination in housing markets (rejection rates on Airbnb)	(i) Yes, by political ideology and income, but not by gender and race; (ii) No
Herda (2010)	Share of immigrants	Yes, by gender and race, but not by income
Herda (2015)	Origins of immigrants	Yes, by gender but not by income
Herda (2019)	Share of immigrants over time	Yes, by political ideology, gender and race
Kraus et al. (2019)	Racial economic inequality	Yes, by income and race, but not by political ideology and gender
Settele (2022)	Gender income gap	Yes, by political ideology and gender

Notes: Only those studies from Table 2 that include heterogeneity analysis of misperceptions are included here. Under Facts are only those facts reported for which the paper investigates heterogeneities in misperceptions by political ideology, income, gender and/or race. Hence, there are occasionally different facts reported for a given study here than for the same study in Table 2. The heterogeneities reported (existing or non-existing) are those that are investigated for in the original study (i.e. if, for example, the category gender is not mentioned for a particular study it means that the study does not investigate heterogeneities by gender).

Table 4: Review on survey experiments that include information treatment(s) and investigate for heterogeneous treatment effects

	Country(-ies)	Information Provided	Treatment Impact, and Heterogeneous Effects	Effect on Polarization
Alesina et al. (2018)	FRA, ITA, SWE, GRB; USA	Social mobility (transition probabilities)	Treatment affects perceptions of social mobility but does not affect redistributive policy preferences. Heterogeneous treatment by **political ideology**: left-wing respondents treated with information increase their redistributive policy preferences.	The treatment has **no effect** on polarization of perceptions of right and left-wing individuals but it **increases** polarization in redistributive policy preferences.
Bastani and Walderstrom (2021)	SWE	Share of inherited wealth in the full population, among highest incomes groups, and among billionaires	Treatment increases support for inheritance taxation, perceptions on the economic importance of inherited wealth and increases the perception of the role of luck for economic success. Heterogeneous effects are not found by education, income or political ideology, but by wealth: wealthy individuals reduce their support for inheritance taxation.	The treatment has **no effect** on polarization of preferences for inheritance taxation by education, income and political ideology. The treatment **increases** polarization in preferences for inheritance taxation between the more and less wealthy.
Boudreau and MacKenzie (2018)	USA	Increases in California inequality	Treatment affects positively (negatively) the support for a progressive (regressive) income (sales) tax. Heterogeneous effects by **political ideology**: Republicans increase their support for a progressive income tax and Liberals reduce their support for a regressive sales tax.	The treatment **decreases** polarization of tax preferences.
Cruces et al. (2013)	ARG	Own national income rank	Treatment reduces demand for redistribution. Heterogeneous effects by income: Poor individuals treated with information demand more redistribution.	The treatment **increases** polarization in redistributive policy preferences.
Engelhardt and Wagener (2017)	DEU	Own national income rank and whether it makes individual a net contributor to/beneficiary of the tax-transfer system	Treatment has no effect on demand for redistribution. Heterogeneous treatment effects by **income**: Rich individuals treated with information demand less redistribution	The treatment **increases** polarization in redistributive policy preferences.
Fehr et al. (2023)	DEU	Own national and international income rank	Treatment does not change average preference for redistribution significantly. Heterogeneous effects by **political ideology**: Left-wing respondents reduce their support for national and international redistribution.	The treatment **decreases** polarization in redistributive policy preferences.

Hoy and Mager (2021a)	AUS, IND, MEX, MAR, NGA, NLD, ZAF, ESP, GRB, USA	Own national income rank	Treatment reduces concern about inequality but do not affect redistributive preferences in most countries. Heterogeneous effects by income: Poor individuals treated with information reduce concerns about inequality	The treatment **decreases** polarization in concerns of inequality and has **no effect** on polarization of redistributive preferences.
Hoy and Mager (2021b)	USA, GRB, ESP, NLD, DNK	Wealth inequality and mobility	Treatment reduces (increases) demand for redistribution in the USA (in the UK and Denmark) and has no effect in the Netherlands and Spain. Heterogeneous treatment effects by **political ideology**: non-right-wing individuals in the US (UK) who do not believe that a high level of inequality exists reduce (increase) their demand for redistribution.	The treatment **decrease** (**increase**) polarization in redistributive policy preferences in the US (UK).
Hope et al. (2022)	USA	(i) Whether respondent pays top federal income tax; (ii) Wealth inequality between richest Americans and bottom 50%; (iii) social mobility (transition probability to top 1%); (iv) lack of trickle-down effects	(i) No effect of treatment on preferences for cutting the top federal income tax rate. (ii)-(iv): Treatment decreases support for top federal income tax rate cuts. Heterogeneous effects by **political ideology**: Democrats reduce support for top tax rate cut in (ii) and Republicans increase support for tax increase in (ii) and (iv).	(i) No effect; (ii) Info about wealth inequality **increases** polarization in preferences for cutting the top federal tax rate and **decreases** polarization in preferences for increase the top federal tax rate. (iii) No effect; (iv) Info on the lack of trickle-down effects **decrease** polarization in preference for tax increase.
Karadja et al. (2017)	SWE	Own national income rank	Treatment reduces demand for redistribution and increases reported propensity to vote for conservative party. Heterogeneous effects by **income and political ideology**: Individuals who are richer, and/or to the right of center before treatments demand less redistribution.	The treatment **increases** polarization in redistributive policy preferences.
Lergetporer et al (2018)	DEU, USA	(i) Public spending per student; (ii) Teacher salaries; (iii) The tradeoff between reducing class sizes and increasing teacher salaries	(i) Treatment increases support for educational spending; (ii) Treatment reduces support for increases in teacher salaries; (iii) Treatment increases support for class size reduction over teacher salary increases. No heterogeneous effect by race, income, gender and political ideology.	(i) - (iii): The treatment has **no effect** on polarization of preferences.
Lergetporer et al (2020)	DEU	Gap in math proficiency in 15-year old in the lowest and highest socioeconomic status decile.	Treatment increases concerns about educational inequality but has no effect on support for educational redistributive policies. No heterogeneous effects found by race, income, gender and political ideology.	The treatment has **no effect** on polarization of concerns for inequality and redistributive policy preferences.
Mu (2022)	CHN	(i) Own national income rank; (ii) information about wealth inequality	(i-ii) The treatments affect negatively perceptions of fairness (importance of hard work over luck and family background and social connections), positively perceptions of inequality but do not affect redistributive policy preferences. Heterogeneous effects by **income**: richer individuals treated with information reduce their perception of fairness.	The treatment **decreases** polarization in perceptions of fairness but has **no effect** on polarization in perceptions of inequality and redistributive policy preferences.

Nair (2018)	USA	Own international income rank	Treatment increases support for foreign aid, donations to international charity and support for cuts in agricultural trade protections. Heterogeneous effects by **political ideology**: Liberals increase their support for higher spending on foreign aid and donation.	The treatment **increases** polarization in the support for foreign aid and charitable donations but has **no effect** on support for cuts in agricultural trade protections.
Pellincer et al (2019)	ZAF	(i) Economic differences between neighborhoods in Cape Town (local inequality); (ii) the rich-poor ratio in South Africa, and in a selection of other (low- and high-income) countries.	(i) The treatment has no effect; (ii) Treatment increases inequality concerns and redistributive policy preferences and reduces the perception that inequality is inevitable. No heterogeneous effects by race.	The treatment has **no effect** on polarization of inevitability beliefs and preferences by race.

B: MINORITY GROUP CHARACTERISTICS

	Country(-ies)	**Information Provided**	**Treatment Impact, and Heterogeneous Effects**	**Effect on Polarization**
Alesina et al. (2023)	FRA, DEU, ITA, SWE, GRB, USA	Priming treatment, and information on (i) the share of immigrants; (ii) the origins of immigrants + a narrative about a hard-working immigrant	(i) and (ii) Treatments affect perceptions and decrease preferences for redistribution except for the narrative treatment which increases support for educational spending. No heterogeneous treatment effects by **political ideology, education or gender**.	The treatments have **no effect** on polarization of perceptions and preferences.
Grigorieff et al. (2020)	USA	Share of immigrants, share of undocumented immigrants, immigrant unemployment rate, incarceration rate of immigrants, and proportion of immigrants without English proficiency	Treatment affects perceptions about legal immigrants in a positive direction but has no effect on immigration policy preferences. Heterogeneous treatment effects by **political ideology**: Republicans reduce their misperceptions on immigrants and increase their positive opinions on immigrants.	The treatment **decreases** polarization in perceptions and policy preferences.
Haaland and Roth (2020)	USA	Research evidence of the null effect of immigration on domestic wages and employment	Treatment corrects beliefs about the labor market impact of low-skilled and high-skilled immigration, and increases and support for immigration. Heterogeneous treatment effects cannot be detected in **political ideology**.	The treatment has **no effect** on polarization of perceptions and preferences.

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Haaland and Roth (2023)	USA	(i) Racial discrimination in labor markets (calls-backs to interviews); (ii) Racial discrimination in housing markets (rejection rates on Airbnb)	(i) and (ii) Treatment corrects perceptions on the rate of discrimination, increases donations to civil rights organizations among treated underestimators, and has no effect on support for pro-black policy. Heterogeneous treatment effects cannot be detected in **political ideology** on perceptions. Heterogeneous effects by **political ideology** on preferences: Treated non-Republican underestimators increase their donations, and treated Republican underestimators decrease their support for pro-black policies.	The treatment has **no effect** on polarization of perceptions on the rate of discrimination along the political ideology dimension. The treatment **increases** polarization in the level of donation of non-Republicans and policy preferences of Republicans.
Hopkins et al. (2019)	USA	Share of immigrants	Treatment corrects misperceptions but has no effect on attitudes towards immigration. No heterogeneous effects by **political ideology or education**	The treatment has **no effect** on polarization of perceptions and preferences.
Lergetporer et al. (2021)	DEU	Level of education among refugees	Treatment affects perceptions on refugees' educational level, affects positively concerns for labour market competition (caused by immigration), affects negatively concerns for fiscal burden (caused by immigration), affects positively positive attitudes towards refugees. Heterogeneous treatment effects by **political ideology**: Right-wing individuals treated with information reduce their misperceptions about refugees' educational level and increase their labour market and fiscal burden concerns.	The treatment increases polarization in labour market concerns, fiscal burden concerns and attitudes towards refugees.

Martinangeli and Windsteiger (2022)	DEU	(i) Share of population born abroad (Immigration condition); (ii) share of population that is poor (the poverty condition); (iii) both info from (i) and (ii); (iv) Info from (i) and (ii) and info about share of population that was both born abroad and lives on an income below the poverty line.	(i)-(iv) Treatments have no effect on preferences for redistribution, but (ii) increases the desired level of public spending in education. Heterogeneous treatment effects by **income:** high income earners want less progressive tax schedule and more spending on education in (i)-(iv) while low income earners exhibit the opposite reaction	The immigration, poverty and both conditions treatments **increase** polarization in redistributive preferences.
Naumann & Stoetzer (2018)	NOR, DEU, NLD	Share of immigrants	Treatment has no effect on average preferences for redistribution. Heterogeneous treatment by **income**: high income respondents reduce their preferences for redistribution.	The treatment **increases** polarization in redistributive preferences.
Settele (2022)	USA	Gender income wage gap	Treatment affects perceptions of the gender wage gap, increases concern for the gap and increases support for statutory affirmative action and equal pay legislation. Heterogeneous effects by **political ideology (but not by gender)**: Democrats and Independents increase their support for a stricter pay legislation.	Treatment has **no effect** on polarization of perceptions. Treatment **increases** polarization of policy preferences by political ideology, but does not increase polarization by gender on policy preferences.

Notes: Papers from Table 2 and 3 are included here if they contain an information experiment, and report heterogeneous effects from that information experiment. This table also contains additional studies, not included in Tables 2 and 3. These studies do not assess misperceptions pre-treatment. The heterogeneities reported (existing or non-existing) are those that are investigated for the in original study. Country codes follow the three-digit alphabetical codes assigned by the International Organization for Standardization (ISO) (Statistics Division of the United Nations Secretariat).