RESEARCH ARTICLE

Can Deliberation Reduce Political Misperceptions? Findings from a Deliberative Experiment on Immigration

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How can deliberative democracy contribute to our understanding of political misperceptions? Findings from the field of political sophistication suggest that misperceptions are difficult to change and corrective measures often fail. However, this field of research has paid little attention to deliberation as a mechanism to reduce political misperceptions. Using a deliberative experiment on immigration where participants engaged in either mixed or likeminded group discussions, we find some evidence of deliberation’s corrective potential, especially in mixed groups, i.e. groups where individuals with different opinions on the matter discuss these with each other. By conducting the first exploratory study on deliberative democracy’s potential for reducing misperception, we hope to advance the empirical discussion on the precise function of deliberation in the age of disinformation.

Keywords: misperceptions; deliberation; democracy; experiment; immigration

Introduction

Political misperceptions have played a prominent role in some of the most important policy debates in the past few years (Flynn et al. 2017: 128). Recent studies find that misperceptions are widespread across the citizenry and various political issues, with the prevalence of fake news and disinformation in social media as its most well known instantiation (Lazer et al. 2018; Lewandowsky et al. 2017). Increased partisan polarisation has been identified as an important driver of these trends, particularly in the US (e.g., Iyengar & Westwood 2015). Since representative politics hinges on a shared understanding of political realities among decision-makers and citizens (Delli Carpini & Keeter 1996), perceptions of reality that diverge along partisan lines pose a serious threat to democratic societies.

Can political misperceptions be reduced? The scholarship is inconclusive. Nyhan and Reifler (2010) show that corrective information can actually make false beliefs stronger. They call this phenomenon the ‘backfire effect’ (Nyhan and Reifler 2010: 307–308). Others question their findings and point out that a reduction of misperceptions varies between circumstances (e.g., Wood & Porter 2018). Summarising the scholarship, Lewandowsky et al. (2017: 355) conclude that corrections are seldom fully effective and that misperceptions are quite persistent.

We are inspired by the epistemic turn in democratic theory, where deliberative processes are ascribed potent truth-tracking capabilities (Landemore 2017). Deliberation increases the pooling and critical examination of information by giving each argument an equal opportunity to be heard and evaluated by a diverse group of participants (Landemore 2012; Marti 2006). Hence, deliberation should be better than other democratic processes at filtering falsehoods and reducing erroneous assumptions. Empirical research suggests that participating in a deliberative forum typically changes opinions and increases knowledge of an issue (Fishkin 2009; Grönlund et al. 2010). However, deliberation has so far received almost no attention in the scholarly literature on political misperceptions.

We contribute by linking the discussion on the epistemic value of deliberation to the growing research on political misperceptions. We use data from an experimental deliberative forum for the first exploratory study on deliberative democracy’s potential to reduce misperceptions. Our analysis is intended as a primer for future research, which will hopefully provide more detailed tests than can be accomplished here. We find that deliberation does not result in a backfire effect and, in some cases, even reduces misperceptions. However, according to our findings, the level of error reduction produced by deliberation is relatively limited and further research is needed to establish the usefulness of deliberation as a means for reducing political misperceptions.

Misperceptions and Political Attitudes

The distinction between ignorance and misperception is key in understanding how political misperception works. Those who are ignorant simply do not hold some specific
piece of information, while those who are misinformed perceive and utilise false beliefs as if they were correct (Kuklinski et al. 2000). Put another way, misinformed individuals are 'not just in the dark, but wrongheaded' (Kuklinski et al. 2000: 793). Studies have shown that people often reject information which does not support their existing beliefs (e.g., Taber & Lodge, 2006). The idea that underlying goals and motives affect human reasoning has long been established in political psychology (Kunda 1990: 283; Festinger 1957). Misperceptions are typically driven by directionally motivated reasoning, which refers to the human tendency to look for and accept information that is compatible with the desired conclusion (Kunda 1990). In political behavior, motivated reasoning is often driven by partisanship and policy attitudes (e.g., Taber & Lodge 2006; Haglin 2017: 1).

Inspired especially by Nyhan and Reifler (e.g., 2010, 2015), the literature has focused on when and how corrective information manages to reduce false beliefs. The results are mixed. Many have examined the backfire effect found by Nyhan and Reifler (2010) in a study concerning false beliefs about the hazards of vaccines. A replication study, which relied on different sampling, could not confirm their finding (Haglin 2017). Using survey data about political rumours, Weeks and Garrett (2014) also challenged the backfire effect. They found no difference between Democrat and Republican supporters in their willingness to accept corrective information about the other party's candidates. Running three experiments, Thorson (2016), found that preexisting beliefs were quite resistant against corrective information.

Despite these early efforts, the question of when and how corrective information is most efficient remains. Amid inconclusive evidence, Redlawsk et al. (2010) have suggested a middle-ground position, arguing that there might be a tipping point in motivated reasoning after which even the most die-hard partisans abandon their false beliefs in the face of corrective information. The tipping point is reached in situations where the decision at hand is difficult and causes anxiety for the individual. In these instances, where the decision-making environment is perceived as more threatening, people tend to abandon motivated reasoning and spend more time processing information, even if it contradicts existing beliefs (Redlawsk et al. 2010: 589). In other words, when things get serious enough, corrective information starts to penetrate into political reasoning.

Nyhan and Reifler (2018), meanwhile, set the stage for further research by showing that corrective information in graphic format offers promising results for debunking misinformation. Using experimental setups, they demonstrate that graphical information is more effective than textual information, a finding that is yet to be explored in more detail by subsequent research. However, their finding underlines the significance of the mode of communication for correcting misperceptions. Turning next to the suggestion that deliberative democracy may offer yet another means for correcting misperceptions, our present analysis also looks at the corrective potential of a largely unexplored mode of communication: discussion.

**Deliberative Democracy as a Corrective Measure**

Deliberative processes have epistemically desirable functions (Marti 2006; Estlund 2008; Landemore 2013), including truth-tracking to reduce misperceptions. Deliberative democracy rests on the idea that opinions and decisions are formed through a process of exchanging viewpoints and critically examining the reasons and information that support these viewpoints (Habermas 1996; Cohen 1997; Chambers 2003). Due to its communicative nature, this process increases the exchange and pooling of information and, subsequently, the relevant knowledge available to those participating in the process (cf. Bohman 1996: 27). If a process makes more information available, it will likely also increase the chance of the correct information being available to all who take part. The public examination of different viewpoints is also likely to improve the detection of factual and logical mistakes in reasoning about the world. It is more likely that false beliefs will be exposed and called out by others during deliberation. Similarly, justifying oneself in front of others can filter out irrational preferences, since it encourages participants to reflect on their own opinions (cf. Nino 1996: 113 & Warren 1995: 169). Explaining one's views to others encourages the speaker to examine the basis of these views, and is therefore more likely to uncover any weaknesses they may have. Moreover, it has been argued that due to what Elster (1997) calls the 'civilizing force of hypocrisy,' individuals in a social context avoid expressing self-serving interests and partisanship to maintain credibility. None of these characteristics of deliberation can be guaranteed to generate the correct answer to a specific question per se, but they affect how information is gathered and evaluated, and thereby they should increase the availability of information and reduce the influence of false beliefs.

According to Bohman (2007), the epistemic value of deliberation lies primarily in its error-reducing capabilities, not in its potential for truth-tracking. While a deliberative process may not be able to discover or establish a particular fact by itself, it should be good enough at reducing erroneous estimates. According to this line of reasoning, deliberation is likely to be a better measure of correction for issues that can benefit from a reduction of errors, than ones that rely on a specific correct answer. However, a deliberating group may uncover particular facts indirectly, simply by being better at excluding what is apparently false. In sum, deliberation fuels accuracy-motivated reasoning (Kunda 1990), rather than the directionally motivated reasoning that is often associated with political misperceptions (Nyhan & Reifler 2010).

Underlying several of the assumptions regarding the epistemic qualities of a deliberative process is an expectation that deliberation takes place in an environment of inclusion and cognitive diversity, i.e. deliberation involves communication between different perspectives (Grönlund et al. 2015). Indeed, as a number of experimental studies in the field of deliberative democracy have shown, the context or conditions for deliberation appear to be critical for producing deliberative outcomes. Karpowitz, Mendelberg and Shaker (2012) show that the composition
of the deliberating group strongly influences interaction dynamics, while Himmelroos and Christensen (2018) find that groups where different opinions meet induce more reflection among the participants. Similarly, Druckman’s (2004) experimental work illustrates that framing effects are less likely to occur when a discussion group is heterogeneous — i.e. including participants who have initially been exposed to different frames — as this will likely lead to the introduction of alternative perspectives. He also finds that discussion among like-minded people can ‘reiterate the frames, resulting in an exaggerated effect’ (Druckman 2004: 674). Schadke et al. (2010) also show that discussions among like-minded participants can amplify preexisting opinions. However, participating in a deliberative forum where different opinions are present, tends to improve the participants’ knowledge (Fishkin 2009; Grönlund et al. 2010). In one of the few studies connecting discussion to misperceptions, Herda (2017) demonstrates that open classroom discussion on minorities could provide a way to correct false beliefs. It seems likely that instead of only hearing the information, in discussions students process and contemplate the information, which makes their perceptions more accurate. Active engagement with information, rather than passive reception, could plausibly be the key factor that makes (deliberative) discussion effective in correcting misperceptions.

Conflicting Expectations

The above discussion suggests three basic assumptions about the relationship between deliberation and misperceptions. First, a generic assumption that deliberation improves truth-tracking and reduces the levels of misperceptions. Second, based on the idea that inclusion and diversity lead to more accurate estimations, it can be assumed that truth-tracking and the reduction of misperceptions will be more pronounced in deliberating groups with greater viewpoint diversity. Hence, the magnitude of the corrective impact of deliberation on misperceptions should depend on the composition of the deliberating group.

However, based on the findings from the literature on political misperceptions, it would not be unreasonable to turn the second assumption around and assume that meeting with people with opposing views would result in people defending their initial opinions more forcefully. Given that people place more importance on protecting their cultural identity than on factual accuracy in political discourse, identity protective cognition can plausibly lead people to resist corrections that are identity-threatening (Kahan 2013, 2017). Hence, one could also entertain the competing assumption that deliberation in mixed groups would produce the kind of backfire effect uncovered by Nyhan and Reifler (2010). We put these assumptions to the test in our study, which was specifically designed to study the relationship between deliberation and political misperception.

Material and Methods

The data used for this study was collected in a deliberative experiment on enclave deliberation, arranged in 2012 (see Grönlund et al. 2015; Himmelroos et al. 2017). The experiment compared deliberation in (1) groups with like-minded participants and (2) groups whose participants had clearly differing opinions on immigration. Broadly, the aim of this experiment was to test the effect of opinion polarisation in deliberative processes by comparing like-minded and mixed opinion groups, but the experiment also allows us to compare the effects of misperceptions across these two different deliberative settings.

Immigration is in many ways an ideal issue for research on political misperceptions. Like in most Western democracies, the issue of immigration has become increasingly politicised in Finland in recent years. At the time of the experiment the populist right-wing party, The Finns Party, had recently won a considerable victory in the parliamentary elections, with a campaign very much based around issues of immigration (Välimäki 2012). Moreover, research shows that misperceptions about immigrants and immigration are quite common (e.g., Hopkins, Sides & Citrin 2019).

The recruitment of participants occurred in several stages involving mail-in surveys, theory-driven selection and random sampling (for details see Karjalainen & Rapeli 2015). From the initial sample of 12,000 adults from the Turku/Åbo region in South West Finland, 207 participated in the deliberative event. The experiment has a single factorial design with two levels (like-minded and mixed groups). Thus, before random assignment to either like-minded groups or mixed groups, participants were stratified into two enclaves based on their initial opinions regarding immigration. One enclave was the permissive group (‘pro’ enclave), which refers to respondents with a positive view of immigration, and the other enclave (‘con’) was a restrictive group comprising respondents with a negative view of immigration (Table 1). The enclaves only included respondents with a positive or negative view of immigration; the respondents with a neutral opinion on the issue were not invited to take part in the experiment. The opinions from the enclaves were measured using a battery of 14 items, all loading on a single factor (for details see Grönlund et al. 2015). The participants were randomly assigned to one of 26 small groups. The mixed groups had an equal balance of four pro and four con participants each, while the like-minded groups consisted of between seven and nine either pro or con participants.

The participants were first briefed on basic facts related to immigration in Finland and given a short information package. The information was based on highly reliable and widely recognised sources, such as Statistics Finland, the Finnish Immigration Services and the Ministry of the

| Table 1: Design of the experiment. |
|-----------------------------------|
| Randomisation                     |
| Like-minded                      |
| Mixed                             |
| Stratification                    |
| Con                               |
| Con like-minded                   |
| Con mixed                         |
| Pro                               |
| Pro like-minded                   |
| Pro mixed                         |

| n = 119                          |
| n = 88                           |
| n = 42                           |
| n = 44                           |
| n = 77                           |
| n = 44                           |
The participants' political knowledge was measured before they were briefed on basic facts about immigration (survey t3) and at the end of the deliberative event (t4) with ten knowledge items. Two items on immigration were open-ended, i.e. the participants had to fill in their own estimates. The correct answers to the two immigration-related questions were not provided in the briefing material. Translated from Finnish, the items read as follows:

1. If an immigrant is unemployed after being granted a residence permit, he/she is eligible for integration assistance, which is the equivalent of the labour market subsidy. How much in your estimation was integration assistance on average per month in 2011?
   Correct information = 750 euros

2. In 2011 the overall unemployment rate in Finland was on average 7.8%. How high would you estimate the unemployment rate was among immigrants at the same time?
   Correct information = 27%

We first analysed how well the participating group as a whole and different subsets of this group knew the factual answers to the two items, and whether their collective estimates changed and improved between the two measurement points (t3 and t4). This represents the truth-tracking ability of the deliberating group. However, we are not merely interested in whether deliberation helps the group as a whole come closer to the correct answer, but also whether deliberation reduces misperceptions at the individual level. Rather than examine whether corrective information as such has an effect on misperceptions, we tested whether deliberation could reduce misperceptions even without explicitly ‘treating’ participants with corrective information. While the participants were not provided with the correct answers in the briefing material, we expected larger errors in particular to be reduced as a result of them learning more about the issue through discussion and deliberation.

The error-reducing capabilities of deliberation were measured by assessing how wrong individual participants were on average in their answers to the two questions before deliberation (t3) and after deliberation (t4). The level of misperception is the distance from the correct answer of 750 euros (e.g., an estimate of 600 or 900 would equal a misperception value of 150 for the item on integration assistance) at each measure point. We compared the changes between the different measure points, as well as changes within the treatments and the enclaves (within the treatments).

Results

We begin the analysis by looking at the truth-tracking capability for the group as a whole, the two experimental treatments and for the treatments across the two opinion enclaves. The first observation is that participants are on average better at estimating the level of unemployment among immigrants (Figure 1), than they are at estimating the level of integration assistance (Figure 2). The average estimate for the unemployment level is, in fact, only off by one percentage point (a four percent deviation from the correct answer). The average estimate for integration assistance is off by more than 130 euros (a 17% percent deviation).

![Figure 1: Estimates for unemployment (%) among immigrants measured before (t3) and after deliberation (t4); p-values indicate significant change in estimate.](image-url)
Do the estimates improve as a result of the deliberations? We find little improvement in average factual knowledge in our data. The adjustments result in significant change between t3 and t4 for the estimates regarding immigrant employment, but it mainly indicates a change from a slight overestimation to a slight underestimation. The average estimate is actually slightly worse after deliberation. It is worth noting that the estimate is reduced across all subgroups. For the estimates on integration assistance, where the average estimates were less accurate to begin with, there are no significant changes as a result of the deliberative process.

Next, we look at the individual-level misperceptions and the error-reducing capabilities of deliberation. Figures 3 and 4 indicate that on average the participants missed the correct answer by almost 300 euros for integration assistance and roughly 12 percentage points for the unemployment level among immigrants. The individual-level misperceptions are fairly similar for integration assistance (37% deviation from the correct answer) and immigrant unemployment (44%). Given that the participants on average estimated the unemployment level among immigrants fairly correctly yet missed the actual level of integration assistance by some margin, the
finding underlines the quite different characteristics of the two misperception measurements used. The first measure is merely a mean of all estimates, while the second one looks at the deviation from the correct answer regardless of the direction of the estimate.

Moreover, we find that although the average estimates of integration assistance remained largely unchanged before and after deliberation, there was a significant improvement when it came to the level of misperception for this item. Overall, the participants were on average almost 30 euros closer to the correct answer in their estimates of integration assistance after the deliberations. Looking closer at the two deliberative treatments, we find that it was participants from the pro enclave within the mixed deliberation treatment who displayed reduced levels of misperception after having deliberated. However, analyses of the levels of change between the different subgroups indicate no significant differences (F(3,191 = 0.15, p = 0.93)). In other words, there are significant changes between the two measurement points for mixed groups (p < 0.10) and for the pro enclave within the mixed groups in particular (p < 0.01), but these changes are not significantly different from the changes in like-minded deliberation. For immigrant unemployment we find no significant changes in misperceptions. The significant changes found in the average estimate do not translate into an increase or reduction in individual-level misperceptions.

**Discussion**

This study presents an early attempt to connect two active research areas: deliberative democracy and political misperceptions. Analysis of previous research gave rise to conflicting expectations about what we would find in our empirical analysis. On the one hand, previous research on political misperceptions is rather pessimistic when it comes to the possibility of correcting misinformed views. On the other hand, deliberation seems to have characteristics that could reduce misperceptions, but this has not yet been empirically tested. Our research aims to advance this line of enquiry at a time when solutions for political polarisation and disinformation are most needed.

We find only partial support for the broad assumption that misperceptions would decrease as a result of taking part in a deliberative process. Overall, changes in the participants’ misperceptions were quite small, suggesting little support for public deliberation as a truth-tracking tool in our data. Nevertheless, we find that deliberation can affect individual-level misperceptions, as we see a significant reduction in the errors made for the item on integration assistance. These findings lend tentative support to Bohman’s (2007) notion of deliberation as a tool for error avoidance.

The reduction in misperceptions is most evident for the question measuring knowledge of integration assistance in groups composed of individuals representing mixed opinions. However, a similar effect cannot be identified for the question measuring knowledge of immigrants’ unemployment level. It is also worth noting that neither mixed nor like-minded deliberation resulted in increased levels of misperceptions. Hence, we find no evidence of backfiring due to identity-protection when existing beliefs are challenged by conflicting views and information (see Kahan 2013, 2017), nor any evidence of amplification errors as result of ideological preconceptions (Schadke et al. 2010).

Despite the mixed results, we are cautiously optimistic about deliberative democracy’s potential to reduce misperceptions. As suggested by multiple theoretical accounts within deliberative democracy (e.g., Landemore
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Findings from a Deliberative Experiment on Immigration  
(1996).

Deliberative democratic theory.  
(2015). Does

The circumstances in which some form of deliberation can be used to reduce political misperceptions are, of course, quite varied and our analysis presents only the first piece of evidence. As for all experiments a degree of self-selection among the participants cannot be avoided, thereby making the external validity of the findings hard to assess. Further experiments are needed before stronger conclusions can be reached about the impact of deliberation on misperceptions. This research could not touch upon all relevant theoretical aspects or provide extensive empirical evidence about the relationship between deliberation and misperceptions, but hopefully it will help initiate a wider scholarly debate.

Notes
1 Grönlund, K. Citizen deliberation on immigration: Survey data 2012 Finnish social science data archive. http://urn.fi/urn:nbn:fi:fsd:T-FSD2958
2 We have removed two outliers from all of our analysis of integration assistance. Since the estimates were absurdly high (10,000 euros/month) and immigration assistance is a contentious issue, we concluded that they reflected deliberately misleading responses rather than genuine misperceptions.
3 While a closer examination of the content of the group discussions is beyond the scope this paper, a review of about 20 percent of the transcripts suggests that the discussion regarding facts about integration assistance and employment remained at a fairly abstract level, e.g., do immigrants get too much economic assistance or not.

Competing Interests
The authors have no competing interests to declare.

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