

Knowledge, Trust or Perspectives? A Causal Mediation Analysis of How a Citizens' Jury Affected Voting Intentions in the General Public

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Abstract

Previous studies suggest that information from deliberative mini-publics helps voters make informed and reflected judgements and act accordingly. Despite a growing body of literature, the causal mechanisms remain unclear. This study examines three causal mechanisms for affecting voting intentions in a referendum: 1) factual knowledge, 2) trusted information proxy, or 3) perspective-taking of the opinions of others. The data come from a referendum on a municipal merger in Korsholm, Finland. In a field experiment, a statement from a citizens' jury on the merger was released to a treatment group and differences in opinions and voting intentions were compared with a control group that did not receive the statement. Causal mediation analysis examines which of the three causal mechanisms best explains how the jury's statement affected intended voting behaviour. We find that reading the statement increased factual knowledge, trust, and perspective-taking, but only increased factual knowledge affected voting intentions.

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Zusammenfassung

Bisherige Studien deuten darauf hin, dass Informationen von deliberativen Mini-Publics den Wähler*innen helfen, fundierte und reflektierte Urteile zu bilden und dementsprechend zu handeln. Obwohl sich die Forschung diesem Themenkomplex zunehmend widmet, sind die kausalen Mechanismen immer noch unklar. Die vorliegende Studie untersucht drei kausale Mechanismen, die Wahlabsichten bei einem Referendum beeinflussen könnten: 1) Faktenwissen, 2) vertrauenswürdiger Informationsproxy und 3) Perspektivübernahme der Meinung anderer. Die Daten wurden im Zusammenhang mit einem Referendum über eine Gemeindefusion in Korsholm, Finnland erhoben. In einem Feldexperiment wurde eine Stellungnahme einer Bürgerjury über die Fusion der Behandlungsgruppe vorgelegt und Unterschiede in Meinungen und Abstimmungsabsichten mit einer Kontrollgruppe verglichen, die die Stellungnahme nicht erhalten hatte. Anhand von Mediationsanalysen wurde überprüft, welcher der drei Mechanismen am besten erklärt, wie sich die Stellungnahme der Jury auf das beabsichtigte Abstimmungsverhalten ausgewirkt hat. Wir stellen fest, dass das Lesen der Stellungnahme Faktenwissen, Vertrauen und Perspektivenübernahme erhöhte, aber nur erhöhtes Faktenwissen die Abstimmungsabsichten beeinflusste.

Résumé

La littérature suggère que les informations produites par des mini-publics délibératifs aident les électeurs et les électrices à faire des jugements informés et réfléchis et à voter en conséquence. Néanmoins, les mécanismes de causalité qui expliquent cet effet restent à l'ombre. Cette étude examine trois mécanismes causaux qui peuvent affecter les intentions de vote des citoyens lors d'un référendum: 1) les connaissances factuelles, 2) la confiance en un proxy d'information, et 3) la prise en compte des perspectives d'autres personnes. Les données proviennent d'un référendum sur une fusion de communes à Korsholm, en Finlande. Dans une expérience de terrain, une déclaration d'un jury citoyen sur la fusion a été

communiquée à un groupe de traitement et leurs opinions et intentions de vote ont été comparées à celles d'un groupe de contrôle n'ayant pas reçu la déclaration. L'analyse de médiation causale examine lequel des trois mécanismes causaux explique le mieux comment la déclaration du jury a affecté les intentions de vote. Nous constatons que la lecture de la déclaration augmente les connaissances factuelles, la confiance et la prise de perspective, mais que seule l'augmentation des connaissances factuelles affecte les intentions de vote.

KEYWORDS

Deliberation, Referendums, Citizens' juries, Causal mechanisms, Factual knowledge

INTRODUCTION

Deliberative mini-publics may create benefits not only for the participants, but also for a wider public (Boulianne, 2018; Ingham & Levin, 2018; Suiter & Reidy, 2019; Suiter et al., 2020; Már & Gastil, 2020; van der Does & Jacquet, 2021). They may hereby be able to help people make informed and considered judgements on key political issues. Democratic theory presupposes that the public can make such considered judgements, even if it is often disputed whether citizens possess this ability to an adequate extent (Delli Carpini & Keeter, 1996; Oscarsson, 2007; Achen & Bartels, 2016). It is therefore of central concern to determine whether and how the public is able to make reasonable judgements in political matters.

The necessity of a well-considered public opinion is accentuated when citizens are directly involved in political decision-making, for example when voting in referendums. Some argue that referendums frequently fail to improve the functioning of democracy both in terms of policy outcomes and enhancing civic capabilities among citizens (Voigt & Blume, 2015; Achen & Bartels, 2016). Deliberative mini-publics may potentially correct misperceptions and improve the factual knowledge of voters of mass-publics in democracies (Warren & Gastil, 2015; Gastil et al., 2018; Knobloch et al., 2020; Már & Gastil, 2020). For this reason, the combination of referendums and deliberation seemingly provides an appealing alternative for involving citizens in political decision-making.

However, while previous studies demonstrate that deliberative bodies can affect public opinion and behaviour, the causal mechanisms underpinning the observed effects remain unclear. It is important to establish causal mechanisms to understand whether and how a proposed intervention (such as a deliberative mini-public) can achieve the intended goals when implemented on a large scale (Linden & Karlson, 2013).

This study contributes to this research agenda by examining three potential causal mechanisms for how a citizens' jury affected vote intentions in a referendum on a potential municipal merger. Previous literature suggests different plausible causal mechanisms for how deliberative mini-publics can influence behaviour. One mechanism points to the role of factual knowledge, as mini-publics may influence behaviour by correcting misunderstandings and misperceptions (Gastil & Dillard, 1999; Suiter & Reidy, 2019; Már & Gastil, 2020). Another potential mechanism points to the role of trust and posits that mini-publics can affect intentions and actions by providing a trustworthy source of information actions (MacKenzie & Warren, 2012; Warren &

Gastil, 2015). Finally, deliberative mini-publics may work by inducing perspective-taking and consideration of the opinions of others (Morrell, 2010; Muradova, 2020).

These three mechanisms provide plausible ways in which mini-publics may affect behaviour. While previous studies have ascertained that deliberative mini-publics can affect all three aspects, there is still a lack of evidence on their role in shaping voting intentions in referendums.

This study therefore examines whether these three mechanisms can help explain how a deliberative mini-public affected intended voting behaviour. Our data come from a field experiment conducted in conjunction to a citizens' jury discussing a potential merger in the Finnish municipality of Korsholm. We sent the statement from the citizens' jury to a treatment group prior to the public release and compare attitudes and intended behaviour to a control group that did not receive the statement. This allows us to maximise both experimental control and external validity when examining which of the three causal mechanisms explain how reading a statement from the citizens' jury affected vote intentions.

The results show that the causal impact of deliberative mini-publics on vote intentions is generated by enhancing the factual knowledge of citizens. These results support the notion that mini-publics can help ensure that voters in popular votes make informed choices that are based on factual knowledge.

CAN DELIBERATIVE MINI-PUBLICS AFFECT PUBLIC ATTITUDES?

A growing body of literature examines the impact of deliberative mini-publics on public opinion and behaviour (Boulianne, 2018; Ingham & Levin, 2018; Suiter & Reidy, 2019; Suiter et al., 2020; Már & Gastil, 2020). Some focus on how mini-publics may affect perceptions of political decision-making (Boulianne, 2018; Ingham & Levin, 2018). While the final verdict is still unclear due to a limited number of studies, there is at least some evidence to suggest that mini-publics can affect public opinion under certain circumstances (van der Does & Jacquet, 2021).

A related line of research examines the possibility of combining direct democratic instruments with deliberative bodies (Gastil & Richards, 2013; Gastil et al. 2014; Chambers, 2018; Gastil et al. 2018; Suiter & Reidy, 2019; Knobloch et al., 2020; Már & Gastil, 2020; Suiter et al., 2020). When citizens take part in political decision-making, it becomes particularly pertinent that they make well-thought-out decisions. The use of direct-democratic instruments and in particular referendums has faced criticisms because it is unclear whether or not the electorate understand the implications of their vote choices (Voigt & Blume 2015; Achen & Bartels, 2016; Chambers, 2018). A pertinent question for the present purposes is whether citizens can comprehend the complex issues involved and make reasonable vote decisions. Some question whether ordinary citizens can make rational political decisions (Brennan, 2016), while others point to the difficulty of finding trustworthy information since existing partisan information sources offer one-sided and manipulative accounts (Kriesi, 2012; Renwick et al., 2019). These issues become even more acute when actors target specific groups on social media and offer biased views (Deibert, 2019). Referendums may therefore not resolve problems in a manner appreciated by the general population. Instead of people coming together and moving on, referendums often result in deeply rooted affective polarization that casts shadows for years to come (Brummel, 2020; Hobolt et al., 2020).

By combining referendums with deliberative mini-publics, it may be possible to avoid some of the potential pitfalls associated with referendums (Fishkin, 2009; Gastil & Richards, 2013; Warren & Gastil, 2015; Gastil et al., 2018; Suiter & Reidy, 2019; Knobloch et al., 2020; Már & Gastil, 2020; Suiter et al., 2020). “Deliberative mini-publics” is a broad concept that includes a diverse range of deliberative bodies such as citizens' assemblies, citizens' juries, planning cells

and deliberative polls (Ryan & Smith, 2014). Despite important differences, these bodies share a common aim of involving ordinary citizens in political decision-making by providing opportunities for dialogue, reflection and articulation of opinions. When combining mini-publics with direct democracy, the aim is necessarily or primarily not to give a vote recommendation. Instead, the aim may be to help people make well-informed decisions based on facts and different viewpoints, which can be expected to enhance the legitimacy of the outcome.

Several studies examine the role of deliberative mini-publics in democratic systems (Fishkin, 2009; Warren & Gastil, 2015; Suiter & Reidy, 2019). Deliberative bodies may provide input into decision-making or even make decisions, but their impact can also be more indirect by informing public debates and shaping public opinion (Goodin & Dryzek, 2006: 228–229). Jacquet et al. (2016) examine the macro-political uptake of the G1000 in Belgium, which was a citizens' summit where citizens discussed important issues. The authors scrutinize aspects such as media mentions, public awareness, and reactions from political parties and parliaments. Some studies rely on survey experiments to demonstrate that deliberative mini-publics can affect public opinion (Ingham & Levin, 2018; Suiter et al., 2020). Some evidence also suggests that deliberative mini-publics can influence public opinion in conjunction to referendums (Knobloch et al., 2020; Már & Gastil, 2020; Suiter et al., 2020). For example, Suiter and Reidy (2019) argue that deliberative mini-publics in Ireland delivered informed electorates that voted in accordance with their core values.

While these studies provide important insights by showing that deliberative mini-publics may affect opinions and behaviour among the general public, it remains unclear exactly how such effects come about. In other words, the studies generally fail to establish causal mechanisms. Importantly, it remains unclear how effects on opinions in turn affect intended voting behaviour, which is arguably the more important issue. This study therefore builds on these previous efforts to examine not just whether mini-publics affect behaviour, but also how they do so. While changes in vote intention are not a requirement from the perspective of deliberative democracy, it is nevertheless important to identify and appreciate the causal mechanisms since these have important implications for our normative understanding of what the changes entail for democracy.

Causal mechanisms are defined as a process in which a causal variable of interest, i.e., a treatment variable, influences an outcome (Imai et al., 2011: 765). While several studies aim to identify causal relationships, they frequently fail to identify how they arise, which requires the specification of an intermediate variable or a mediator that lies on the causal pathway between treatment and outcome variable (Imai et al., 2011: 765). It is important to understand causal mechanisms if one wants to appreciate whether and how a proposed intervention (such as a deliberative mini-public) can achieve the intended goals when implemented on a large scale (Linden & Karlson, 2013).

This study therefore examines the validity of three potential mechanisms for how deliberative mini-publics affect behaviour: 1) by increasing factual knowledge among citizens, 2) by creating a trustworthy information source, or 3) by enhancing the ability to see issues from different perspectives. While this list of potential mechanisms is not exhaustive, they have featured prominently in the debate on the potential effects of deliberate mini-publics. Here, we focus on the effect on voting intention in the referendum. While deliberative theories do not posit a particular effect on vote intention, it is nonetheless important to examine the extent to which deliberative bodies can affect not only the reasons for voting in a particular manner, but also how people vote.

The first potential mechanism contends that deliberative mini-publics enhance the factual knowledge of voters (Már & Gastil, 2020). When people learn more about facts, they may update their beliefs and adapt their behaviour to choose the optimal option by voting differently. Much of the research on deliberative mini-publics implicitly or explicitly highlights the potential for correcting misperceptions and increasing factual knowledge (Gastil & Dillard, 1999; Suiter

& Reidy, 2019). Ordinary citizens generally have low levels of factual political knowledge and this affects political behaviour (Delli Carpini & Keeter, 1996; Oscarsson, 2007). Deliberative mini-publics can help citizens learn by providing easily accessible and fact-checked information, and this should encourage citizens to adapt their behaviour accordingly. In other words, according to the proponents of this causal mechanism, deliberative mini-publics influence voter choice by increasing factual knowledge (H1).

The second mechanism states that people use the deliberative mini-public as a trusted information source to guide their actions (MacKenzie & Warren, 2012; Warren & Gastil, 2015). MacKenzie and Warren (2012: 96) argue that this trust relationship entails that mini-publics serve as trusted information proxies for citizens. According to Boulianne (2018: 122), citizens recognise that the participants in the mini-public possess greater knowledge and therefore follow their recommendations. Ordinary citizens may feel that a body composed of their peers is more trustworthy than information coming from authorities. According to our argument here, this trust mechanism does not require people to learn the facts and increase their knowledge, as is required by the knowledge mechanism. Instead, they can choose to trust the deliberative body and follow the explicit recommendation that it offers, or simply make up their own mind based on some of the arguments provided in its statement. This causal mechanism entails that deliberative mini-publics influence voter choice by creating trust in the mini-public (H2).

The third and final mechanism contends that mini-publics create awareness of the perspective of others and people therefore adapt their behaviour to reflect this. Morrell (2010) argues that empathic reasoning should be a key concern for democratic decision-making. Although the empathic process involves more than perspective-taking, or the ability and propensity to contemplate others' experiences, it forms a pivotal part of it (Morrell, 2010: 14). Multiple studies have documented benefits of perspective-taking for negotiating in intergroup contexts (Todd et al., 2012; Todd & Galinsky, 2014). The ability to take the perspectives of others may be a central component in explaining why people react strongly to the output of mini-publics. The latter's statements entail balanced arguments considering pros and cons regarding the issue. Some of these arguments may be entirely new for voters reading the statement, which may make them consider issues from entirely new perspectives (Muradova, 2020). Many may engage with such multifaceted information and arguments only in this context, and it may therefore have a strong effect on behaviour. For this reason, the final causal mechanism is that deliberative mini-publics influence voter choice by inducing perspective-taking (H3).

These possibilities are not necessarily exhaustive, nor are they mutually exclusive. It is also possible that different explanations interact to shape outcomes. For example, it has been suggested that trust in the jury is a precondition for learning factual knowledge from the statement (Warren & Gastil, 2015). Nevertheless, we mainly focus on the three separate mechanisms individually. It is also worth noting that their effects may influence respondents in different ways. For example, increasing factual knowledge may lead some to oppose the merger while others become more favourable, depending for example on their previous knowledge or other background characteristics. Despite these complications, this study examines the individual contribution of each causal mechanism in influencing the voting intention of the public in connection to a referendum on a municipal merger in Korsholm, Finland.

THE MERGER REFERENDUM IN KORSHOLM

Korsholm is a municipality in the region of Ostrobothnia in Finland with about 19,000 inhabitants, about two thirds of which are Swedish-speaking Finns. The municipality forms the outskirts to the City of Vaasa, which has a population of about 67,000, two thirds of which are Finnish speaking.

A municipal merger with Vaasa had been debated for years, but it was difficult to find agreement both among local elites and inhabitants. It was a sensitive issue involving language divides, urban and rural populations, and uncertain future developments. However, when economic forecasts and the general political climate in Finland in 2016 and 2017 suggested that a merger would be the best way to ensure a viable future for the region, negotiations between the two parts started.

Demands for an advisory referendum on a municipal merger quickly emerged in Korsholm, whereas the interest was low in Vaasa. Referendums on municipal mergers are common in Finland, but they are not mandatory according to Finnish law (Jäske, 2017). However, both local politicians and an inhabitants' initiative demanding a referendum made it clear that a referendum would be difficult to avoid. The local council in Korsholm therefore decided to arrange an advisory referendum on the issue.

Considering these long-standing disagreements, there were every reason to believe that the negative implications for long-term political legitimacy would be severe regardless of what side would win. Inspired by the experiences from the Oregon Citizens' Initiative Review (CIR), the research team arranged a citizens' jury¹ to discuss the pros and cons of the merger and thereby alleviate the potential problems associated with the referendum.

A citizens' jury gathers a small group of randomly selected citizens who are representative of the general population to deliberate on a particular issue or issues (Ryan & Smith, 2014). The CIR was introduced in Oregon to evaluate ballot measures and provide voters with trustworthy and balanced information. In a CIR, 24 voters are invited to study a ballot proposal and assess the arguments related to it. Pro and con campaigners present their case and are questioned by participants, while independent experts provide additional information.

Based on this evidence, the participants produce a statement containing key facts, arguments to vote for the measure, and arguments to vote against it. Originally, the CIR statement also included a result of the panel vote on the measure, which could have functioned as a recommendation for how to vote. According to Warren and Gastil (2015: 568), mini-publics are particularly likely to serve as a trusted decision proxy when they offer a consensus or supermajority recommendation. There are also alternative designs of mini-publics that provide direct recommendations to voters or even place items on the ballot (see e.g. Warren & Pearse, 2008; Fishkin et al., 2015). However, the latest versions of the CIR process removed the panel vote on the ballot measure and the jury statements now do not include the panel's stance on the measure (Healthy Democracy, 2022).

The citizens' jury in Korsholm mimicked the Oregon CIR process on most accounts. The jury included 21 participants selected from a random sample ($n = 1,400$) to resemble the general population in terms of age, language, gender, and place of living, while also reflecting a wide range of opinions for and against the merger. The jury convened on two weekends (9–10 and 16–17 February 2019) to gather the evidence and deliberate on the issues. The jury was tasked to assess the evidence for and against the merger by its relevance and reliability. Based on the process, the jury produced a statement that summarised key findings and provided three main arguments for and against the municipal merger.² This statement was sent to about 14,800 voters in Korsholm about three weeks before the referendum day on 17 March 2019. In the end, the result of the referendum was conclusive since 61.3% voted against the merger (turnout 76.4%), and the local council in Korsholm confirmed this decision some weeks later, officially terminating the plans for a merger.

¹We use the term citizens' jury rather than CIR since elites rather than citizens initiated the referendum.

²An English translation of the statement is included in appendix 1 in the Supplementary Material.

The subsequent question is how the citizens' jury affected attitudes and behaviour in the merger, and whether it helped assure that the inhabitants understood the complex issues when deciding how to vote. While the CIR has been successful in the US, it cannot be taken for granted that it functions under all circumstances. Furthermore, the case that we examine constitutes a hard case for examining the impact of mini-publics. The issue of a merger boils down to a yes or no decision, with little room for compromises or nuances in the outcome. Deep-rooted cleavages surrounded the Korsholm merger and the future of the municipality literally hinged upon the outcome. Also, the jury took place after the process had been on-going for years, making it even harder to affect opinions considering the merger. This context therefore constitutes a challenging test for combining referendums and deliberation. If mini-publics can affect opinions in this situation, it is very likely that they will also be able to do so under less dire circumstances.

RESEARCH DESIGN

We first present the data for our study, then the operationalization of the key variables, before concluding with a discussion of the methods used.³

Data

The data come from a field experiment administered to a random selection of inhabitants of Korsholm. Since the city of Vaasa did not organize a referendum on the issue, it did not form part of the study. Previous studies have used different approaches to gauge the impact of deliberative mini-publics on public opinion and behaviour. Knobloch et al. (2020) use a two-wave panel survey to measure developments before and after a statement was read. Már and Gastil (2020) use a field experiment in which they sent the statement to a treatment group while the control group only got the survey. A problem was that about 25% of the respondents reported to have seen the statement previously, which makes it difficult to settle causal effects. Suiter et al. (2020) use a similar strategy, but rely on a survey experiment mimicking the original statement from a deliberative mini-public. While this strategy avoids problems of contamination, it may compromise the external validity since it is not clear whether the effects would be similar in a real-world setting.

We adopt a similar approach to Már and Gastil (2020) and use a small-scale field experiment. Before the general release of the statement to the public, we sent it to a small part of the population whom we then surveyed to gauge the impact of reading the statement. We compared the results to a control group who only got a survey but not the statement, so that we are able to assert the impact of reading the statement. To avoid problems with contamination of the control group, we launched the field experiment six days before the public release of the jury's statement. This allows us to combine experimental control and realism, strengthening the external validity of the results.

This approach avoids the need to re-interview people, thereby risking a substantial attrition in responses. We excluded online surveys since it was impossible to recruit a sufficient number of online respondents. Using traditional mail to administer surveys means that we cannot ascertain whether respondents actually read or understood the statement, increasing the risk of false negatives due to failure to administer the treatment. Nevertheless, any differences that we do observe are attributable to the treatment. A potential drawback is the risk for including posttreatment bias in our analyses (Montgomery et al., 2018). However, since we mainly include socio-demographic covariates that are unaffected by the treatment,

³The data for this study is available at [osf.io: https://doi.org/10.17605/OSF.IO/ZK2MN](https://doi.org/10.17605/OSF.IO/ZK2MN) (Setälä et al., 2021).

this is unlikely to cause problems. Our mediator variables pose potential problems, but the methods we employ are particularly well-suited to address this problem (Montgomery et al., 2018: 772).

The field experiment initially included a random sample of 1000 inhabitants obtained from the Finnish population register. The treatment group ($n = 500$) got the statement from the citizens' jury ($n = 500$) together with a survey with instructions to read the statement before answering the questions. The control group ($n = 500$) received a survey to fill in without any reading material. Although we are unable to observe compliance with the treatment, this design should ensure that any observed differences between the groups are due to the statement since the groups should be identical in all aspects except reading the statement (Stoker, 2010; John, 2017).⁴

This presumes that randomization eliminates all competing explanations. It was in this case a particular problem to ensure that the control group returned the survey quickly to avoid contamination by people in the control group reading the statement after the public release of the statement on 25 February 2019. The respondents in the control group therefore only had 4–5 days to return the surveys, since we had to discard surveys returned later to avoid possible contamination.

Due to the strict deadlines, the response rates were low in both the treatment and control groups compared to traditional surveys in Finland: 127 returned the survey in the treatment group (25.4%) and 130 in the control group (26.0%). Nevertheless, these figures are slightly higher than the response rates reported by Már and Gastil (2020). However, due to delays in the postal service, it was impossible to confirm whether some surveys in the control group were returned before the public release of the statement. To ensure that there was no contamination, the results reported exclude all surveys received after 27 February 2019, meaning the valid n in this group was 77. In the treatment group, the release of the statement does not necessarily invalidate the results, so it was possible to include more respondents in this group. However, to ensure that answers were not affected by any intermittent factors such as reporting in the news, all answers received after 1 March 2019 were excluded, meaning the valid number in this group was reduced to 97 respondents. This reduction did not affect the composition of the groups when it comes to age, gender, education, language, and place of living (see appendix 3). We also fitted the models with all respondents who returned the survey and got similar substantial results, as shown in appendix 4. Based on calculations in *G*Power* (Faul et al., 2009), the 174 valid respondents mean that we can detect direct effect sizes (Cohen's f^2) in multiple regression analyses of about 0.06 with a power of 0.95, as shown in appendix 5. Although larger sample sizes would be preferable, this should still allow us to probe the causal mechanisms.

It is still necessary to test whether the missing responses and exclusion of answers resulted in systematic differences in the composition of the treatment and control groups. Table 1 shows results examining differences when it comes to the basic socio-demographic characteristics age, gender, language, area of living, and education.

The results show that for gender and education, there are slight differences between the treatment and control groups are similar, since women are overrepresented in the control group, while respondents in the treatment group on average had slightly higher education. While the differences are slight, in the analyses we adjust for the potential impact of these factors by including them as covariates (Wang et al., 2017).⁵

⁴Non-compliance would entail that there are no observable differences between the treatment and control groups.

⁵The results were generally similar regardless of whether we adjusted for gender and education or not, as shown in appendix 4, but it is noted in conjunction to the analyses whenever larger differences occurred.

TABLE 1 Composition of control and treatment groups

	Treatment	Control	Total	Significance	Register data Korsholm population
Age in years (Mean [SE])	58.1 (1.6)	57.6 (2.1)	57.9 (1.3)	0.417	42.2
Education (Mean 0–4 [SE])	2.0 (0.1)	1.6 (0.1)	1.9 (0.1)	0.030	1.5
Gender (%)				0.094	
<i>Male</i>	53.6	40.8	48.0		50.1
<i>Female</i>	46.4	59.2	52.0		49.9
Language (%)				0.378	
<i>Swedish</i>	71.1	68.4	69.9		69.1
<i>Finnish</i>	26.8	31.6	28.9		28.3
<i>Other</i>	2.1	0.0	1.2		2.6
Area of living (%)				0.634	
<i>Kvevlax</i>	16.5	13.2	15.0		18.4
<i>Skärgården</i>	11.3	9.2	10.4		10.9
<i>Norra Korsholm</i>	17.5	10.5	14.5		16.7
<i>Smedsby/Böle</i>	34.0	38.1	35.8		29.5
<i>Solf</i>	12.4	18.4	15.0		13.9
<i>Södra/Östra Korsholm</i>	8.3	10.5	9.3		10.6

Note: Significance tests: χ^2 for categorical data, t-test for mean values (two sample with equal variances assumed). Source for Register data for Korsholm: Statistics Finland.

Variables

The outcome variable is the stated vote intention reported by the respondent. In one sense, vote intention is very simplistic because it boils down a complicated reasoning process to a simple “approve” or “reject” decision. Thus, this measure might conceal important developments in opinions and beliefs that do not lead to a change in the voting decision since they cancel each other out. However, since we are ultimately interested in the prospects of combining deliberative reasoning processes with referendums, the vote intention is an appropriate measure. Our interest lies ultimately in explaining what causal mechanism informs the decision to vote for or against the referendum topic. In this sense, our results can help establish whether the decision is based on solid reasoning and empirical facts, or some other mechanism led to the intended vote.

Furthermore, this variable does not necessarily measure the actual voting, but it does capture the mood of the respondent when filling in the survey. One question asked respondents to indicate whether they intended to vote yes, no, or no position (which was also an option on the ballot). Only 10 respondents indicated no position, and the question was therefore recoded to only include those who were certain to vote yes ($n = 74$; 45.4%) or no ($n = 89$; 54.6%). Hence, we focus exclusively on individuals who had made up their mind about how to vote at the time of filling in the survey, even if they were uncertain beforehand.⁶

⁶Nine of the uncertain respondents were in the control group and only one in the treatment group. While this indicates that the statement may have been able to sway the undecided voters, the few respondents do not allow us to draw firm conclusions on this.

The treatment variable is whether the respondent was part of the treatment group, where participants read the statement before filling in the survey, or the control group, where participants only filled in the survey.

We measure the first mediator, factual knowledge, with 10 factual questions concerning the circumstances of the potential merger (all questions are included in appendix 2 together with correct answers and distributions). For each question, the respondents indicated whether they thought it was ‘definitely not true’, ‘probably not true’, ‘don't know’, ‘probably true’ or ‘definitely true’. To focus exclusively on factual knowledge rather than certainty, the answers were subsequently dummy coded to indicate whether the respondent leaned towards the correct answer or not (e.g. scoring ‘probably true’ or ‘definitely true’ on a correct statement). We constructed an index based on these 10 items to measure the extent of factual knowledge about the merger, which we recoded to vary between 0–1 with higher scores indicating truer and more certain knowledge (1 = higher knowledge certainty; mean = 0.53, SD = 0.23).

For the second mediator, trust in the citizens' jury, we use a single item where respondents indicated their level of trust in the citizens' jury as a source of information on a scale 0–10, subsequently recoded to vary between 0–1 (1 = higher trust; mean = 0.55, SD = 0.24).

The third and final mediator is the degree of perspective-taking. Different measures gauge individual differences in empathy and the propensity to consider different perspectives more generally (Davis, 1983; Todd et al., 2012; Todd & Galinsky, 2014). However, we were interested in the extent to which respondents considered this specific issue from different perspectives rather than the general inclination to do so. To measure this, we constructed a sum index based on three questions asking how much time the respondent spent thinking about other people's perspective when deciding how to vote in the referendum: “Q1. How much time did you spend evaluating proposals, values and worries among people who **OPPOSE** the merger before deciding how to vote?”; “Q2. How much time did you spend evaluating proposals, values and worries among people who **SUPPORT** the merger before deciding how to vote?”, and “Q3. How sympathetic were you towards people whose life situation is completely different from yours?”. All answers included five categories (“No time at all” – “Very much time”). The index was subsequently recoded to vary between 0–1 (1 = higher degree of perspective taking; Cronbach's alpha = 0.76, mean = 0.50, SD = 0.23).⁷

The potential confounders gender and education are also measured with survey questions. For gender, a dummy indicates whether the respondent was male or female (48% Male, 52% Female), while educational attainment is measured on a scale with five categories coded 0–1 (1 = university studies; Mean = 0.46, SD = 0.32).

Methods of analysis

To establish the causal mechanisms, the analysis proceeds in the three steps:

1. Differences in voting intention between treatment and control group to ascertain that the statement affected intended voting behaviour.
2. Differences in factual knowledge, perspective-taking and trust in citizens' jury between treatment and control group to ascertain that the statement affected the mediators.

⁷We tested an alternative index that also included certainty by scoring each item 0–4 with a higher score indicating a certain correct answer. The substantive results were similar, but here we only report the former results since we focus on the knowledge aspect. The statement included answers to three of the questions while others concerned facts widely circulated in media and reports.

3. Causal mediation analysis of the mediated effects via knowledge, trust, and/or perspective-taking to ascertain which mechanism is most important in explaining intended voting behaviour.

The first two steps involve uncontroversial analyses of differences in mean scores between the two groups, but the third step involves mediation analyses where it is necessary to develop the line of reasoning. Mediation analysis decomposes the total effect of the treatment variable on the outcome under scrutiny into an indirect effect that is transferred via a mediator and a conditional direct effect (Baron & Kenny, 1986). Several computational methods options are available (Imai et al., 2010, 2011, 2013; Linden & Karlson, 2013). The choice depends on several factors, e.g., whether the treatment and outcomes are continuous or discrete variables. For this reason, the mediation analyses here combines two approaches: Structural equation modelling (SEM) and the causal mediation approach of Imai et al. (2010), which has been included in the mediation package for Stata (Hicks & Tingley, 2011).

The SEM approach to causal mediation analysis is a straightforward application of the work of Baron and Kenny (1986) where each mediator is on the treatment variable and possible confounders, and then the outcome model regresses the outcome on all mediators as well as on the treatment and confounders (Linden & Karlson, 2013: 89). While popular, Linden and Karlson (2013) find that SEM can yield biased results when the outcome variable is dichotomous. Nevertheless, SEM makes it possible to gauge the impact of several mediators simultaneously, which is important here and it therefore provides a suitable first step in the mediation analysis. The SEM analysis is performed in Stata 15.1 and includes all three linkages simultaneously to get a broad overview of the linkages.

Linden and Karlson (2013: 102–103) find that the approach developed by Imai et al. (2010) is among the best performers overall, is directly formulated in the potential outcomes framework, and can be applied to most scenarios often met in applied research. This therefore provides the next step in the mediation analysis, where we assess the extent of mediation for each mechanism with the mediation package of Hicks and Tingley (2011). This simulates predicted values of the mediator or outcome variable and calculates the average causal mediation, direct effects, and total effects with the help of an algorithm that is a function of the theoretical results linking the sequential ignorability assumption and the mediation effect (Hicks and Tingley 2011: 608).

EMPIRICAL ANALYSIS

The first analysis concerns differences in vote intention between the treatment and control groups. The results suggest that reading the statement on average increased the probability of intending to vote “no” in the treatment group with about 16 percentage points when adjusting for age and education ($B = 0.162$, $p = .045$). The unadjusted effect is slightly lower ($b = 0.129$, $p = .079$), but the substantial conclusions are similar.

Figure 1 shows that this entails that about 61% in the treatment group were inclined to vote “no”, compared to about 45% in the control group, and the differences are significant at a $p < .05$ threshold after adjusting for possible confounders.

This result is noteworthy for at least three reasons. The effect size (Cohens' d) is 0.32 and it produces a 16 percentage-points difference in “yes” votes between treatment and control group. Second, this difference is consequential since in the control group a slight majority in favour of a merger did not read the statement, while in the treatment group a clear majority against a merger did read the statement. Finally, it is noteworthy that the result in the treatment group, which resembles the real-world voting situation where the statement was available

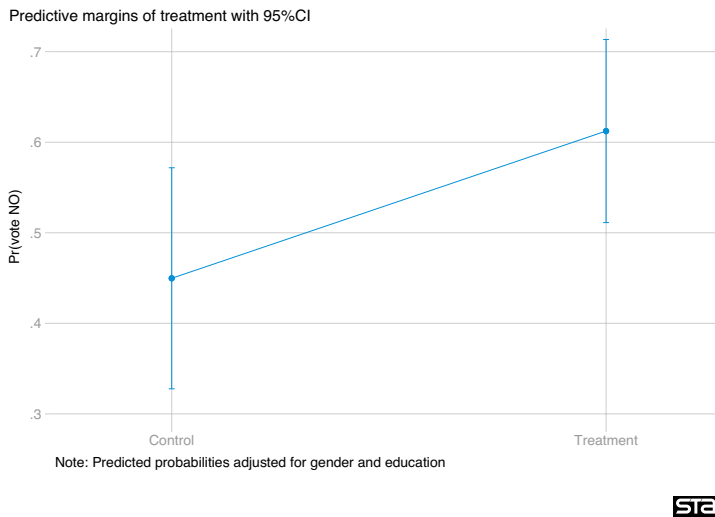


FIGURE 1 Predictive mean scores for vote intentions in treatment and control groups adjusted for gender and education

to all, corresponds rather well to the actual outcome of the referendum where 61.3% voted “no” to the merger.

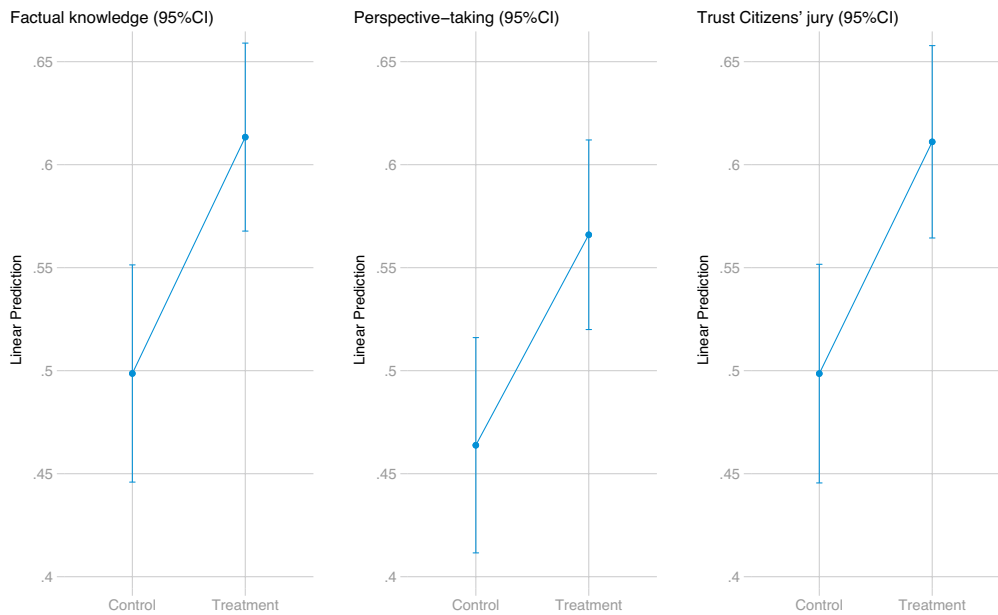
All of this suggests that the statement affected opinions on the merger. The subsequent question is whether reading the statement also affected trust in the citizens' jury, knowledge and perspective-taking. Figure 2 shows differences between the control group and the treatment group in this regard.

For knowledge, differences between the treatment and control group were significant: the coefficient ($B = 0.11$, $p = .002$) translates into an effect size (Cohen's d) of 0.53, which entails that the adjusted mean in the treatment group is 0.61 compared to 0.50 in the control group on the index ranging from 0–1.⁸ For perspective taking, the effect of reading the statement ($B = 0.10$, $p = .005$, Cohens $d = 0.48$) results in an adjusted mean score of 0.57 for the treatment group compared to 0.46 for the control group. For trust in the citizens' jury as a source of reliable information, there is also a strong positive effect of reading the statement ($B = 0.11$, $p = .002$, Cohens' $d = 0.50$), which means that the treatment group scored 0.61 on average while the control group achieved an adjusted mean score of 0.50. Hence, reading the statement increased knowledge, induced perspective-taking and created trust in the jury. These results are important because the differences between the treatment and control groups are significant and therefore increase our confidence that most in the treatment group actually read the statement before filling in the survey, since there is no other plausible way to account for these substantial differences.

The final step is to establish causal mechanisms by examining whether these differences can be connected to the differences in voting intentions. As a first step, this is examined with a SEM model shown in Figure 3. To make results comparable, we do not model the latent constructs of perspective taking and knowledge in the SEM model, but include the same indexes as used in other analyses.⁹

⁸Since we do not use a pre-test post-test design, it is not possible to ascertain the exact extent of knowledge gains. Nevertheless, closer inspection shows that the treatment group performed better on the three questions the answers to which can be found in the statement. This increases our confidence that the differences are a direct result of reading the statement.

⁹This analysis is therefore strictly speaking a path analysis even if it is performed with SEM software since it does not include latent variables.



Note: Adjusted for gender and education

STATA

FIGURE 2 Predicted mean scores for factual knowledge, trust in citizens' jury and perspective-taking in treatment and control groups adjusted for gender and education

The SEM results confirm the previous results that the treatment affected knowledge, perspective taking and trust in the citizens' jury. While the Satorra-Bentler scaled χ^2 test indicates an acceptable model fit ($\chi^2 = 7.19$ [df = 3], $p = .066$), other model fit indexes are less encouraging (e.g. CFI = 0.89). However, as we are mainly interested in testing the partial correlations, the overall model fit is less of a concern (Bollen & Pearl, 2013: 324). The results show that the only causal path to vote intention is via knowledge ($B = 0.17$, $p = .041$), while the links from perspective taking and trust are both weak and insignificant at any reasonable threshold.¹⁰ This suggests that it is mainly by increasing knowledge that the statement made people become more likely to vote “no”. The SEM also shows that the effect of the treatment is weakened and becomes insignificant when including the mediators, which suggests that the model includes the primary causal linkages.

While this provides an overview of the linkages, SEM has important limitations when it comes to causal mediation analysis (Curtis & Nielsen, 2018). This approach relies on the two-part sequential ignorability (SI) assumption that the treatment and mediator are exogenous and that no omitted variables confound the mediation effect (Imai et al., 2013). It is impossible to test this directly, but Hicks and Tingley (2011) offer a sensitivity analysis which explores the sensitivity of results by estimating the correlation size between the errors (ρ) at which the observed causal mediation is no longer significant. In Table 2, we decompose the effect of the statement into direct, indirect, and total effects for knowledge, trust, and perspective taking, and show the rhos at which the estimates would lose significance.

¹⁰Warren and Gastil's (2015) idea of facilitative trust entails that an indirect path should exist from trust via knowledge. We tested this assertion by including a causal path from trust to knowledge, but the estimate was insignificant and negative ($B = -0.11$, $p = .136$). While this is hardly conclusive evidence against the idea, we do not explore this option in any further detail here.

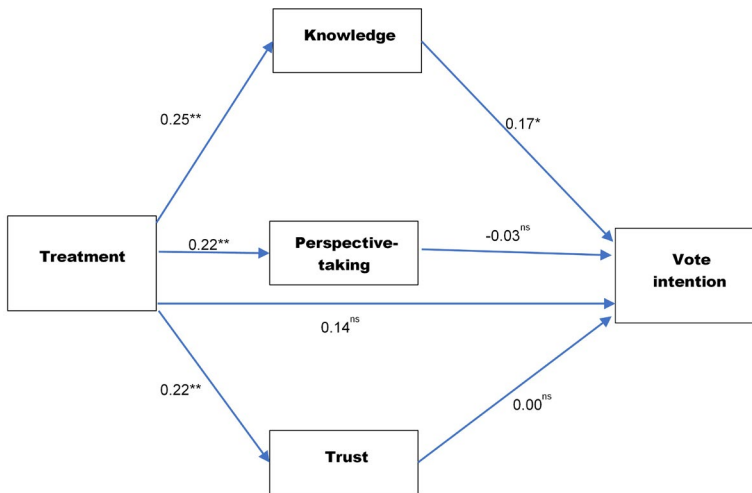


FIGURE 3 Structural equation model (sem) of causal paths

Note: Entries are standardized coefficients and standard errors with Satorra–Bentler adjustment. *: $p < 0.05$, ** $p < 0.01$, ***: $p < 0.001$. Gender and education are included as covariates, but the results are not reported for simplicity.

TABLE 2 Direct, indirect, and total effects on vote intention

	KNOWLEDGE			PERSPECTIVE-TAKING			TRUST		
	Mean	95% CI		Mean	95% CI		Mean	95% CI	
Average Causal Mediation Effect (ACME)	0.039	0.000	0.093	-0.004	-0.042	0.026	0.001	-0.046	0.044
Average Direct Effect	0.133	-0.031	0.300	0.134	-0.032	0.301	0.134	-0.031	0.304
Total Effect	0.172	0.014	0.326	0.129	-0.030	0.290	0.134	-0.027	0.290
% of Total Effect mediated	0.217	0.102	1.345	-0.029	-0.255	0.324	0.005	-0.020	0.055
Rho at which ACME = 0	0.30			0.00			0.00		

Factual knowledge mediates about 22% of the total effect of the statement, whereas the percentage is much lower for perspective taking and trust in the jury as the mediated effect is negligible for both.

Although the confidence interval for the mediated effect via knowledge includes zero, meaning that the impact comes with some uncertainty, factual knowledge is the only causal mechanism that receives any support. Furthermore, the sensitivity analysis shows that for the estimate of the mediated effect to be zero, the correlation between the error terms must be 0.3. In other words, an unobserved confounder must have a correlation with either the treatment or vote intention of 0.3 to invalidate the results. There is no established threshold for acceptable levels of rho, but this result is in line with, or exceeds, values reported elsewhere (Curtis, 2014; Ojeda, 2015; Curtis & Nielsen, 2018), implying that a fairly strong correlation is needed. The fact that the treatment and control groups were randomised makes such a confounder implausible,

which underlines that the statement in this case affected vote intention by increasing factual knowledge.

CONCLUSIONS AND DISCUSSION

The results clearly demonstrate that the Korsholm citizens' jury's statement increased factual knowledge about the merger, boosted trust in the jury, and encouraged people to think about the issue from the perspectives of others. For all three measures, mean scores were considerably higher in the treatment group that read the citizens' jury's statement, compared to the control group which did not read the statement. These effects are important for the prospects of creating more legitimate decision-making through deliberation. Furthermore, these results confirm that deliberative mechanisms not only have effects on participants but can also have wider effects on public opinion (Boulianne, 2018; Ingham & Levin, 2018; Suiter & Reidy, 2019).

We also found that the statement affected vote intentions, since the treatment group on average became more likely to vote “no” to the merger compared to the control group. Similar effects of CIR-style deliberative mechanisms on voting have been reported elsewhere (Gastil et al., 2014; Suiter et al., 2020). Nonetheless, it is noteworthy that we are able to replicate these results in a field experiment arranged in an entirely different setting where such effects were arguably less likely to occur.

Furthermore, our study took an important additional step by examining whether the changes in vote intentions after reading the statement were caused by the statement's impact on knowledge, on trust, or on perspective-taking. It is important to understand how information from deliberative mini-publics affect public behaviour to be able to scale up deliberation and implement such bodies on a more permanent basis (Linden & Karlson, 2013).

The results revealed that only knowledge gains induced changes in voting intentions, while the developments in trust and perspective-taking had little impact on vote intentions. This result seems encouraging from a democratic perspective, since it shows that deliberative bodies can help ensure that citizens engage with the important issues under scrutiny based on solid knowledge, rather than relying on beliefs and prior opinions. A likely interpretation is that those with lower knowledge from the outset were also less certain about how to vote. Consequently, it was easier to sway their opinion by providing some key facts.

Contrary to the pessimistic accounts of public ignorance and incapacity to learn (Achen & Bartels, 2016; Brennan, 2016), these results show that it is possible for the public to learn and update their intended behaviour accordingly. That knowledge gains induce changes in intended behaviour is in line with basic norms of deliberative democracy (Chambers, 1996). The study shows that deliberative mini-publics can enhance such learning processes among the wider public, and in this respect the effects can be ‘scaled up’ (Niemeyer, 2014).

The findings contradict the accounts emphasising the pivotal role of trust for conveying the full effect of the jury's statement. However, since the statement did not include a vote recommendation, it is possible that the trust mechanism was muted since the citizens' jury did not provide shortcuts or direct cues to voters. We can therefore not entirely exclude the possibility that deliberative mini-publics can affect vote intentions through a trust mechanism, only observe that it seems unlikely to have been the case in the CIR-type procedure in Korsholm.

This finding regarding the role of trust seems important given some recent criticisms of trust-based uses of mini-publics (Lafont, 2015). According to these critics, the use of mini-publics as information proxies entails that people blindly defer judgments to a few selected citizens. Our findings suggest that this not case. Instead, the effects of reading the statement were

based on factual learning, which is more in line with the argument by Warren and Gastil (2015: 566–68) who maintain that mini-publics can help citizens take full advantage of their cognitive resources when making political decisions.

We obtained these results in a polarised political climate where heated political and public debates had been ongoing for years. This further boosts our confidence that deliberative mini-publics provide a viable alternative for creating a more vibrant democracy where citizens contribute to taking informed decisions. An interesting question for future research is whether other mechanisms for enhancing knowledge among citizens lead to similar outcomes or whether it makes a difference that the statement comes from a deliberative body constituted by ordinary citizens.

Despite these noticeable findings, it is important to recall that Korsholm constitutes a particular case, and this study cannot ascertain that similar mechanisms operate elsewhere. While the situation constituted a hard test for the impact of deliberative mini-publics, it still has to be examined whether it is possible to obtain similar results elsewhere and with different deliberative mechanisms.

The information in the statement here may unintentionally have been biased in favour of the merger. A CIR jury is designed to consider all arguments in an equitable manner based on their relevance and reliability. However, the key facts included in the statement may not be exactly balanced in presenting different aspects of policy choices and their consequences, and the arguments may not be the ones that would best convince the public at large. For example, in our case the arguments in favour of the merger were rather technical and emphasized potential economic benefits. Therefore, there is a need to examine further how deliberative bodies work to come up with statements or recommendations to understand the impact on public opinion.

It is also worthwhile to examine the heterogeneity of the treatment effects, i.e., whether the causal mechanisms affect voting intention similarly or differently depending on other individual and/or contextual factors. Finally, the interplay between causal mechanisms is an interesting topic that merits further study. While we examined the interplay between trust and knowledge, other potential explanations may well interact to determine the outcome. The relatively small sample sizes also means that some findings come with uncertainties. Future studies should endeavour to examine similar questions in different contexts and with larger sample sizes to ascertain the results.

Despite these uncertainties, the results show that the combination of different participatory procedures can help produce legitimate democratic decision-making even in times of turmoil.

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OPEN RESEARCH BADGES



This article has earned an Open Data and Open Materials badges for making publicly available the digitally-shareable data necessary to reproduce the reported results. The data is available at <https://doi.org/10.17605/OSF.IO/ZK2MN>.

DATA AVAILABILITY STATEMENT

The data for this study is available at [osf.io: https://doi.org/10.17605/OSF.IO/ZK2MN](https://doi.org/10.17605/OSF.IO/ZK2MN) (Setälä et al., 2021).

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REFERENCES

- Achen, C. H., & Bartels, L. M. (2016). *Democracy for realists: Why elections do not produce responsive government*. Princeton University Press.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182.
- Bollen, K. A., & Pearl, J. (2013). Eight myths about causality and structural equation models. In Morgan, S. L. (Ed.), *Handbook of causal analysis for social research* (pp. 301–328). Springer.
- Boulianne, S. (2018). Mini-publics and public opinion: Two survey-based experiments. *Political Studies*, *66*(1), 119–136.
- Brennan, J. (2016). *Against democracy*. Princeton University Press.
- Brummel, L. (2020). ‘You can’t always get what you want’: The effects of winning and losing in a referendum on citizens’ referendum support. *Electoral Studies* *65*, 102155
- Chambers, S. (1996). *Reasonable democracy: Jürgen habermas and the politics of discourse*. Cornell University Press
- Chambers, S. (2018). Making referendums safe for democracy: A call for more and better deliberation. *Swiss Political Science Review*, *24*(3), 305–311.
- Curtis, K. A. (2014). In times of crisis: The conditions of pocketbook effects. *International Interactions*, *40*(3), 402–430.
- Curtis, K. A., & Nielsen, J. H. (2018). Predispositions matter...but how? Ideology as a mediator of personality’s effects on EU support in five countries. *Political Psychology*, *39*(6), 1251–1270.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, *44*(1), 113–126.
- Deibert, R. J. (2019). The road to digital unfreedom: Three painful truths about social media. *Journal of Democracy*, *30*(1), 25–39.
- Delli Carpini, M. X. & Keeter, S. (1996). *What Americans know about politics and why it matters*. Yale University Press.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*, 1149–1160.
- Fishkin, J. (2009). *When the people speak: Deliberative democracy and public consultation*. Oxford University Press.
- Fishkin, J., Kousser, T., Luskin, R. C., & Siu, A. (2015). Deliberative agenda setting: Piloting reform of direct democracy in California. *Perspectives on Politics*, *13*(4), 1030–1042.
- Gastil, J., & Dillard, J. P. (1999). Increasing political sophistication through public deliberation. *Political Communication*, *16*(1), 3–23.
- Gastil, J., Knobloch, K. R., Reedy, J., Henkels, M., & Cramer, K. (2018). Assessing the electoral impact of the 2010 oregon citizens’ initiative review. *American Politics Research*, *46*(3), 534–563.
- Gastil, J., & Richards, R. (2013). Making direct democracy deliberative through random assemblies. *Politics & Society*, *41*(2), 253–281.
- Gastil, J., Richards, R., & Knobloch, K. (2014). Vicarious deliberation: How the oregon citizens’ initiative review influenced deliberation in mass elections. *International Journal of Communication*, *8*, 62–89.
- Goodin, R. E. & Dryzek, J. S. (2006). Deliberative impacts: The macro-political uptake of mini-publics. *Politics & Society*, *34*(2), 219–244.
- Hicks, R., & Tingley, D. (2011). Causal mediation analysis. *The Stata Journal*, *11*(4), 605–619.
- Hobolt, S. B., Leeper, T. J., & Tilley, J. (2020). Divided by the vote: Affective polarization in the wake of the brexit referendum. *British Journal of Political Science*, 1–18.
- Imai, K., Keele, L., & Tingley, D. (2010). A general approach to causal mediation analysis. *Psychological Methods*, *15*(4), 309–334.
- Imai, K., Kelle, L., Tingley, D., & Yamamoto, T. (2011). Unpacking the black box of causality: Learning about causal mechanisms from experimental and observational studies. *American Political Science Review*, *105*(04), 765–789.
- Imai, K., Tingley, D., & Yamamoto, T. (2013). Experimental designs for identifying causal mechanisms. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, *176*(1), 5–51.
- Ingham, S., & Levin, I. (2018). Effects of deliberative minipublics on public opinion: Experimental evidence from a survey on social security reform. *International Journal of Public Opinion Research*, *30*(1), 51–78.

- Healthy Democracy. (2022). Citizens' Initiative Review. <https://healthydemocracy.org/programs/citizens-initiative-review/> [Accessed 02.03.2022]
- Jacquet, V., Moskvic, J., Caluwaerts, D., & Reuchamps, M. (2016). The macro political uptake of the G1000 in Belgium. In Reuchamps, M. & Suiter, J. (Eds.), *Constitutional deliberative democracy in Europe* (53–73). ECPR Press.
- Jäske, M. (2017). 'Soft' forms of direct democracy: Explaining the occurrence of referendum motions and advisory referendums in Finnish local government. *Swiss Political Science Review*, 23(1), 50–76.
- John, P. (2017). *Field experiments in political science and public policy: Practical lessons in design and delivery*. Routledge.
- Knobloch, K. R., Barthel, M. L., & Gastil, J. (2020). Emanating effects: The impact of the Oregon citizens' initiative review on voters' political efficacy. *Political Studies*, 68(2), 426–445.
- Kriesi, H. (2012). *Political communication in direct democratic campaigns: Enlightening or manipulating?*. Palgrave Macmillan.
- Lafont, C. (2015). Deliberation, participation, and democratic legitimacy: Should deliberative mini-publics shape public policy? *Journal of Political Philosophy*, 23(1), 40–63.
- Linden, A., & Karlson, K. B. (2013). Using mediation analysis to identify causal mechanisms in disease management interventions. *Health Services and Outcomes Research Methodology*, 13(2), 86–108.
- MacKenzie, M. K., & Warren, M. E. (2012). Two trust-based uses of mini-publics in democratic systems. In Parkinson, J. & Mansbridge, J. (Eds.), *Deliberative systems* (Vol. 2012, 95–124). Cambridge University Press.
- Már, K., & Gastil, J. (2020). Tracing the boundaries of motivated reasoning: How deliberative minipublics can improve voter knowledge. *Political Psychology*, 41(1), 107–127.
- Montgomery, J. M., Nyhan, B., & Torres, M. (2018). How conditioning on posttreatment variables can ruin your experiment and what to do about it. *American Journal of Political Science*, 62(3), 760–775.
- Morrell, M. E. (2010). *Empathy and democracy - Feeling, thinking and deliberation*. Pennsylvania State University Press.
- Muradova, L. (2020). Seeing the other side? Perspective-taking and reflective political judgements in interpersonal deliberation. *Political Studies*, 69(3), 644–664.
- Niemeyer, S. (2014). Scaling up deliberation to mass publics: Harnessing mini-publics in a deliberative system. In K. Grönlund, A. Bächtiger, & M. Setälä, (Eds.), *Deliberative mini-publics* (pp. 177–202). ECPR Press.
- Ojeda, C. (2015). Depression and political participation. *Social Science Quarterly*, 96(5), 1226–1243.
- Oscarsson, H. (2007). A matter of fact? Knowledge effects on the vote in Swedish general elections, 1985/2002. *Scandinavian Political Studies*, 30(3), 301–322.
- Renwick, A., Palese, M., & Sargeant, J. (2019). Information in referendum campaigns: How can it be improved? *Representation*, 56(4), 521–537.
- Ryan, M., & Smith, G. (2014). Defining mini-publics. In K. Grönlund et al. (Eds.), *Deliberative mini-publics: Involving citizens in the democratic process* (pp. 9–26). ECPR Press.
- Stoker, G. (2010). Exploring the promise of experimentation in political science: Micro-foundational insights and policy relevance. *Political Studies*, 58(2), 300–319.
- Suiter, J., Muradova, L., Gastil, J., & Farrell, D. M. (2020). Scaling up deliberation: Testing the potential of mini-publics to enhance the deliberative capacity of citizens. *Swiss Political Science Review*, 26(3), 253–272.
- Suiter, J., & Reidy, T. (2019). Does deliberation help deliver informed electorates: Evidence from Irish referendum votes. *Representation*, 56(4), 539–557.
- Todd, A. R., Bodenhausen, G. V., & Galinsky, A. D. (2012). Perspective taking combats the denial of intergroup discrimination. *Journal of Experimental Social Psychology*, 48(3), 738–745.
- Todd, A. R., & Galinsky, A. D. (2014). Perspective-taking as a strategy for improving intergroup relations: Evidence, mechanisms, and qualifications. *Social and Personality Psychology Compass*, 8(7), 374–387.
- van der Does, R., & Jacquet, V. (2021). Small-scale deliberation and mass democracy: A systematic review of the spillover effects of deliberative minipublics. *Political Studies*. Online first: <https://doi.org/10.1177/00323217211007278>
- Voigt, S., & Blume, L. (2015). Does direct democracy make for better citizens? A cautionary warning based on cross-country evidence. *Constitutional Political Economy*, 26(4), 391–420.
- Wang, Y. A., Sparks, J., Gonzales, J. E., Hess, Y. D., & Ledgerwood, A. (2017). Using independent covariates in experimental designs: Quantifying the trade-off between power boost and type I error inflation. *Journal of Experimental Social Psychology*, 72, 118–124.
- Warren, M. E., & Gastil, J. (2015). Can deliberative minipublics address the cognitive challenges of democratic citizenship? *The Journal of Politics*, 77(2), 562–574.
- Warren, M.E., & Pearse, H. (2008). Designing deliberative democracy. In *The British Columbia citizens' assembly*. Cambridge University Press.
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