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Christensen, Henrik Serup

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How citizens evaluate participatory processes:
A conjoint analysis

Henrik Serup Christensen
Samforsk, Department of Political Science
Åbo Akademi University
Henrik.christensen@abo.fi

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Abstract

This study examines how characteristics of participatory processes affect citizens' evaluations of such processes and thereby establish what kind of participatory process citizens demand. The literature on democratic innovations has proposed different criteria for evaluating participatory innovations. What remains unclear, however, is how citizens evaluate these participatory mechanisms. This is here examined in a conjoint analysis embedded in a representative survey of the Finnish population (n=1050). The conjoint examines the impact of inclusiveness, popular control, considered judgement, transparency, efficiency, and transferability on citizens' evaluations of participatory processes. Furthermore, it is examined whether the evaluations differ by policy issue and process preference of the respondents. The results show that people want transparent participatory processes with face-to-face interaction among participants and expert advice to deal with complicated issues. The participatory processes should also be advisory and not include too many meetings. These effects appear to be uniform across policy issues and do no depend on the process preferences of citizens.

Introduction

The introduction of democratic or participatory innovations is a popular method for enhancing democratic credentials (Smith 2009; Geissel and Newton 2012; Geissel and Joas 2013; Grönlund, Bächtiger, and Setälä 2014; Kuyper and Wolkenstein 2019). However, while it seems clear that citizens demand more involvement, it remains unclear exactly how they want to be involved.

Previous studies have examined similar issues from different perspectives. Some assess the merits of participatory mechanisms by assessing their pros and cons (Fung 2003; 2006; Smith 2009; Geissel 2013; Rowe and Frewer 2000; Caluwaerts and Reuchamps 2016). This approach provides us with insights into what democratic benefits a participatory mechanism can provide but fails to consider how citizens evaluate these mechanisms and their characteristics. Other studies examine popular attitudes towards specific types of participatory mechanisms (Goldberg, Wyss, and Bächtiger 2019; Jacquet 2018; Christensen and von Schoultz 2019), or differences in process preferences, i.e. how political decision should be made (Bengtsson and Christensen 2016; Gherghina and Geissel 2017; Font, Wojcieszak, and Navarro 2015). While these studies provide important insights, they do not show what participatory mechanisms citizens want or how specific design features of these mechanisms affect citizens' evaluations of them. Appreciating what participatory features appeal to citizens is important for knowing what processes are likely to succeed in broadening popular involvement in political decision-making.

This study examines how features of participatory mechanisms affect their popularity with a conjoint analysis that makes it possible to test multidimensional causal effects of several treatment components simultaneously (Knudsen and Johannesson 2018; Hainmueller, Hopkins, and Yamamoto 2014). The study relies on a representative sample of the Finnish population (n=1050) to examine the effects of seven central attributes of participatory innovations that are likely to affect whether citizens would like to see them introduced: 1) Inclusiveness, 2) Popular control, 3) Considered judgement, 4) Transparency, 5) Efficiency, 6) Transferability, and 7) Policy issue. It is also examined whether the effects of the features differ across policy issue or depending on whether respondents prefer citizens or representatives as decision-makers.

The results show that the attributes affect how citizens evaluate participatory procedures. People generally prefer transparent participatory processes that include face-to-face interaction among participants and expert advice to deal with complicated issues. At the same time the participatory processes should be advisory and not include too many meetings. These effects appear to be uniform across policy issues and do no depend on the process preferences of citizens.

The article proceeds as follows. In the following section, it is explained why the participatory features of democratic innovations are likely to affect citizens' attitudes towards their introduction and hypotheses on causal relationships are outlined. The following section explains how these hypotheses are tested with a conjoint experiment, before moving on to the empirical analyses. The final section discusses the results and their implications for the study of participatory mechanisms.

What participatory mechanisms do people want?

Democratic innovations, or 'institutions specifically designed to increase and deepen citizen participation in the political decision-making process' (Smith 2009, 1), have been implemented at

different political levels all over the world. The common idea is that increasing citizen involvement in political decision-making ensures that policy outcomes reflect the will of citizens, or that at the very least participants feel that decision-makers have demonstrated a will to listen to their demands.

Despite these commonalities, there are also important differences between the democratic innovations that reflect adherence to the fulfilment of different democratic ideals. Even when different normative conceptions see participation as beneficial, there can be important differences in what democratic goods they aim to achieve (Chambers, 2003; Mutz, 2006; LeDuc, 2015). According to Chambers (2003, p. 308) vote-centric democratic theory sees democracy as an arena where fixed interests and preferences compete via fair mechanisms of aggregation of votes to ensure that all decisions are backed by the majority of citizens. Talk-centric theories focus on the communicative processes of opinion and will-formation that precede voting. This perspective incorporates different versions of deliberative democracy whereby participation should aim to ensure the quality of decisions by changing preferences through a process of deliberation (Bengtsson and Christensen 2016; Setälä 2017; Kuyper and Wolkenstein 2019; Jacquet 2018).

This distinction has direct consequences for how democratic innovations work (Rojon, Rijkens and Klandermans 2019). Direct-democratic mechanisms are moulded on a vote-centric conception of democracy and give citizens the right to make decisions directly (Altman 2011; Qvortrup 2013). Talk-centric deliberative mechanisms rarely make citizens formal decision-makers, but help citizens discuss the issues and thereby achieve enlightened understanding of the underlying problems (Grönlund, Bächtiger, and Setälä 2014; Setälä 2017; Kuyper and Wolkenstein 2019). While both goals are laudable from a democratic perspective, implementing participatory mechanisms entail trade-offs as they are rarely able to achieve all goals simultaneously (LeDuc 2015). For example, making citizens the final decision-makers may undermine their willingness to be respectful and engage in genuine dialogue when they are not forced to defend their position in public (Smith 2012, 129-130). However, it remains unclear what goals citizens would prefer participatory processes to achieve. Do they want decisive vote-centric institutions where citizens can make decisions as they see fit, or are they willing to engage in more demanding talk-centric mechanisms where the emphasis is on developing a better understanding of the issues at hand?

It has been difficult to ask ordinary citizens how they feel about democratic innovations since most citizens are unfamiliar with the participatory mechanisms on offer. For example, it makes little sense to simply ask people whether they would like to see more deliberative mini-publics without carefully explaining what they entail (Goldberg, Wyss, and Bächtiger 2019). Previous studies relying on surveys have asked more generally whether a respondent supported the use of public discussions in connection to decision-making (Christensen, Himmelroos, and Grönlund 2017; Christensen and von Schoultz 2019). However, this at best provides a crude assessment of support for the use of mini-publics since these also involve other feature such as rules or expectations for how participants conduct themselves during discussions (Grönlund, Bächtiger, and Setälä 2014).

The approach suggested here instead entails to examine how features of participatory processes affect citizens' evaluations of them. Although differences exist in the proposed evaluation criteria (Geissel 2013), previous research on democratic innovations have established sets of criteria for evaluating the functioning of participatory innovations (Fung 2003; 2006; Smith 2009; Geissel 2013; Rowe and Frewer 2000; Caluwaerts and Reuchamps 2016). All participatory processes constitute a

bundle of different participatory features, or central design characteristics that determine what they can achieve. These features provide a basis for identifying what people want since they shape citizens' evaluations of democratic innovations.

It may be countered that it is irrelevant what kind of participation people want since normative democratic goods should not be evaluated by their popularity. However, even when a specific participatory innovation could potentially deliver every imaginable democratic good, it would still need citizens' support to be able to fulfil this potential. Not only are people less likely to support its introduction in the first place, they are also less likely to take advantage of the possibility to take part once in place (Gherghina and Geissel 2017; Bengtsson and Christensen 2016; Christensen and von Schoultz 2019). Hence, although popularity does not alter the proposed advantages of a participatory mechanism, it affects the possibility to bring the hypothetical advantages to fruition.

This study therefore study relies on a conjoint experiment to assess what aspects of participatory practices are valuable from a citizen perspective. The aim is to examine how citizens' evaluations of participatory mechanisms are shaped by central design features. The study is inspired by the scheme developed by Smith (2009), which arguably constitutes the starting point for empirical evaluations of democratic innovations and has influenced subsequent work in the field.[1] While this framework does not on all accounts allow for a one-to-one comparison between talk-centric and vote-centric designs, it nonetheless on most accounts highlights important differences between these two perspectives. In his work, Smith (2009) relies on six criteria for evaluating democratic innovations:

1) **Inclusiveness**: *who can take part?*
2) **Popular control**: *how much influence over policy outcomes?*
3) **Considered judgement**: *Do participants decide independently or interact with each other or experts?*
4) **Transparency**: *is decision-making open to public scrutiny?*
5) **Efficiency**: *what are the costs of participation?*
6) **Transferability**: *how easy is it to take part?*

According to Smith (2009, 12), the first four items are explicit democratic goods, whereas the last two are institutional goods that consider the feasibility of participatory innovations. This calls attention to the fact that it is also important to consider the practical implications of introducing of introducing novel participatory mechanisms. The intention is not to test how well this framework captures popular attitudes since it is considerably more nuanced than what can be accommodated here. Instead, it makes it possible to identify key aspects that are likely to affect how citizens evaluate participatory mechanisms.

The following outlines what aspects are particularly relevant for each criterion and outlines hypotheses on the effects on the favourability of participatory procedures.

[1] Most frameworks include similar features with some exceptions (Geissel 2013, 16). Some, including Geissel (2013), include criteria such as legitimacy and political support, but this is inappropriate for the present purposes since it constitutes a (possible) consequence of introducing a democratic innovation rather than a build-in feature. Agenda-setting is also included by some (Caluwaerts and Reuchamps 2016). However, since people in general are likely to always prefer an open agenda, it was less relevant to include here where the emphasis is on criteria where all alternatives may be considered preferable to some.

Inclusiveness concerns a fundamental choice with down-stream repercussions for the whole process. This aspect is often highlighted since it is debated whether participatory innovations can help alleviate or will further exacerbate existing participatory inequalities (Young 2000, 35). Participatory mechanisms can be placed on a continuum ranging from arrangements open to all wanting to take part on one end to more exclusive arrangements where only selected stakeholders can take part on the other end (Fung 2006, 67–68). Vote-centric instruments such as referendums stress the formal equality of all citizens to take part, but although this may appear to be the most inclusive, this is not the case when equality of usage is lacking (Dalton, Cain, and Scarrow 2006). It can therefore be more inclusive to purposefully select participants to ensure the inclusion of groups otherwise unlikely to attend, as is often highlighted by talk-centric deliberative mechanisms. This can be secured through random selection of participants to ensure descriptive representation of all segments of society (Gastil and Wright 2019). Nevertheless, considering the intuitive appeal of open arrangements, ***H1a is that more inclusive procedures increase favourability compared to exclusive procedures.***[2]

For *popular control*, vote-centric instruments of direct democracy where citizens become final decision-makers constitute one extreme (Altman 2011; Qvortrup 2013). Involvement is sometimes not enough to ensure legitimacy, since it is imperative to ensure that participants can actually have a say over decision-making outcomes (Ulbig 2008). However, most participatory instruments that are introduced today give citizens the chance to provide input but leaves the final decision-making powers in the hands of elected representatives (Geissel and Newton 2012). It is again debated what arrangements are preferable for democratic legitimacy. Some chide advisory participatory processes for being nothing more than windows dressing that give an appearance of popular influence, but in the end are of no consequence at all (Blaug 2002). However, even when we trust the capabilities of citizens to take part, some issues are so complex that people prefer not to let them be decided by ordinary citizens without the necessary expertise (Bengtsson and Christensen 2016). Moreover, there is a potential problem with accountability when there are no elected representatives to hold accountable (Setälä 2006). People may prefer a more advisory role while leaving the final decision in the hands of accountable representatives with access to the necessary expertise. Nevertheless, the hypothesis is that people will intuitively prefer more decisive arrangement, meaning ***H1b is that procedures where participants make final decision increase favourability compared to advisory procedures.***

When it comes to *considered judgement*, a basic distinction exists between voting based on existing preferences and taking decisions based on deliberation to form enlightened opinions. The former principle is in line with vote-centric democratic theory and. While electoral campaigns provide some information, it is believed that people can process this information independently and cast their vote based on this (LeDuc, 2015). The talk-centric perspective emphasizes support for developing preferences. While different accounts exist, Fishkin (2009) incorporates the central elements in stating that a high-quality deliberative process includes information, balanced opinions, diversity, and equal consideration of the merits of arguments regardless of who offers them. This principle then highlights the value of neutral information and exchange of arguments as necessary in political decision making. This makes it possible for citizens to form enlightened opinions that do not

[2] This study was preregistered at OSF: https://osf.io/tjac8. The numbering and phrasing of some hypotheses were altered compared to the plan to ease interpretation, but the causal expectations are identical. When other deviations occur from the preregistered plan, these are explained in the text.

necessarily correspond to their opinion before the deliberative process started. Based on previous studies of process preferences in Finland (Bengtsson and Christensen 2016; Christensen and von Schoultz 2019), ***H1c is that procedures where participants can rely on dialogue and expert before making decisions increase favourability compared to procedures where participants rely on own judgements***.

Transparency is usually considered beneficial from both vote-centric and talk-centric perspectives since it is assumed that participatory processes should be open to public scrutiny for the general population to trust them (Smith 2009, 25–26; Fung 2013; Woolley and Gardner 2017). However, some argue that secrecy and closed doors enhance the effectiveness of decision-making (Thompson 1999; Stasavage 2004) and may enhance deliberative quality (Chambers, 2007). In a similar vein, Naurin (2007) finds that publicity does not necessarily enhance deliberative quality, while de Fine Licht (2011) finds that transparency does not necessarily lead to greater public acceptance and trust (de Fine Licht 2011). Hence, people may recognise that there is a trade-off between transparency and effectiveness when it comes to participatory innovations and therefore be willing to accept discussions that take place behind closed doors. Nevertheless, ***H1d is that procedures enhancing openness increases favourability compared to less transparent procedures***.

The following two criteria are of a more practical nature and do not address the talk-centric or vote-centric division. For *efficiency*, Smith (2009) focuses on administrative costs and the demands they place on citizens. For the current purposes, the demands they place on citizens are especially relevant since they are likely to shape attitudes towards their usage, whereas it is difficult to establish anything more than a vague order of costliness of different procedures (Rowe and Frewer 2000, 17). What is likely to affect the evaluations is the time participants are expected to invest in the proceedings since this is easy to assess for the respondents and has been frequently debated in the literature (Verba, Schlozman, and Brady 1995). When assessing the merits of a specific participatory process, time requirements is an easily understandable feature that can be used as a proxy for the inconveniences that the introduction causes for fellow citizens. There are considerable differences between different types of participatory mechanisms in how much time they require from participants. Some mechanisms such as referendums only require participants to provide input at a single event. Other mechanisms, including some versions of deliberative mini-publics (Grönlund, Bächtiger, and Setälä 2014), require that participants invest considerable time over a longer period. Nonetheless, ***H1e is that procedures with more meetings decreases favourability compared to procedures with a single meeting.***

For transferability, Smith (2009) focuses on the question of scale and whether participatory mechanism can operate effectively at larger scale. The emphasis is here on examining the differences between online and offline participation since it has been contended that digital information and communication technologies (ICTs) can help resolve the problems size offers for democracy (Smith 2009). Online versions of participatory mechanisms may be able to transcend previous restrictions and make it possible to introduce them at a larger scale (Smith, 2009, pp. 143-144). While Smith (2009) is sceptical towards the promises of e-democracy, much has happened since the publication of this work. The advent of social media and smart phones has made the Internet and ICTs omnipresent in all spheres of life, including the political, and it is now difficult to imagine participatory reforms without taking advantage of the possibilities that technology offers (Coleman and Moss 2012; Carrara 2012; Neblo, Esterling, and Lazer 2018; Fung 2015). It therefore seems likely that whether a process

take place online or face-to-face will affect its popularity. Considering the apparent popularity of online possibilities, ***H1f is that online procedures increase favourability compared to face-to-face procedures***.

In addition to the criteria of Smith (2009), it is important to assesses whether citizens' evaluations differ depending on *policy issue* since previous studies show that this can affect preferences for participatory practices (Wojcieszak 2014; de Fine Licht 2014). Carmines & Stimson (2006) makes a distinction between easy and hard political issues. These labels are somewhat misleading since easy issues are not necessarily easier to resolve with a straightforward solution. On the contrary, they involve symbolic issues that are likely to be longstanding issues of conflict and deal with policy ends rather than means. However, they are easy in the sense that they do not require people to think deeply about them, allowing gut responses answers from both ill-informed and well-informed respondents since they can rely on established heuristics to decide their opinions. Hard issues on the other hand are difficult because they involve more technical issues where people are less likely to decide based on gut responses. Her they are forced to reflect on the issues and make rational and calculated decisions based on existing evidence and information (Carmines and Stimson 2006, 80). Based on the idea that people are more likely to favour involvement when issues are less technical and more straightforward, ***H1g is that procedures involving easy issues increase favourability compared to procedures involving hard issues***.

But these effects are not necessarily evenly distributed across all groups. Studies show that citizens' preferences for participatory practices differ across issues (Wojcieszak 2014; de Fine Licht 2014). Wojcieszak (2014) suggests that the effects of the features will be stronger for easy issues, where people will demand popular influence, whereas people are more willing to let representatives and expert make decisions for hard issues that require careful consideration. This is reflected in the hypothesis ***H2, which states that the effects of participatory features are stronger for procedures involving easy issues compared to procedures involving hard issues.***

The characteristics of the respondents may also affect what kind of participatory mechanisms they prefer. While several attributes can be of importance, the present study focuses on attitudes towards participation as a way of making political decisions and how this attitude shapes the effect of the participatory features. Previous studies show that people hold persistent preferences for how political decisions should be made and what actors should be involved (Bengtsson and Christensen 2016; Gherghina and Geissel 2017; Font, Wojcieszak, and Navarro 2015). A central question is whether ordinary citizens or elected representative should make the final decision on important political decisions (Wojcieszak 2014; Gherghina and Geissel 2019). The process preference of respondents may moderate the effects of the participatory features on favourability given that the issue is particularly salient for those who demand more involvement of ordinary citizens. This is explored in **H3**: ***The effects of participatory features are stronger for people who support citizen involvement in decision-making compared to people who prefer elected representatives to make decisions.***

Data, variables and methods

A conjoint experiment is used to test the hypotheses in Finland, which constitutes an optimal case for the current purposes. Studies have demonstrated that Finns have consistent preferences when it comes to process preferences and that there is a demand for more participation (Bengtsson and

Christensen 2016). Furthermore, various democratic innovations are used at both national and local levels, meaning that the issue of participatory mechanisms is familiar to many (Christensen et al. 2017; Jäske 2017; 2019). The respondents come from an online panel recruited through Qualtrics selected to be representative of the Finnish population with respect to age, gender and place of living (n=1050).[3] More information on sample size and the representativeness of the survey is in the supplementary file.

Conjoint analysis makes it possible to examine multidimensional causal effects of several treatment components simultaneously through relatively simple statistical analyses without unnecessary assumptions (Knudsen and Johannesson 2018; Hainmueller, Hopkins, and Yamamoto 2014). While conjoint analysis also has certain limitations (see for example Leeper, Hobolt and Tilley, 2019), the main advantage for the present purposes is that a conjoint experiment makes it possible to discern how characteristics of participatory mechanisms affect how citizens evaluate them. Furthermore, this choice does not depend on respondents being familiar with specific mechanisms such as deliberative mini-publics since it is not necessary to present actually existing alternatives. Finally, the answers are not affected by social desirability bias, which may otherwise bias the results when respondents feel pressured to select a certain type of process.

The choice-based conjoint analysis used here presents respondents with two alternative participatory processes that randomly vary the levels of the attributes. The attributes are the characteristics assumed to affect evaluations and the levels are discrete categories describing theoretically relevant values of the attribute in question. Each respondent evaluates five comparisons where they are asked to indicate what alternative they prefer, which is in line with the recommendations of Aguinis & Bradly (2014, 363).[4] The dependent variable is whether a specific process is chosen or not and the analyses examine the impact of the seven attributes on this choice: the six participatory features identified by Smith (2009) and policy issues. Table 1 summarises the attributes included in the conjoint experiment and the corresponding levels.[5]

[3] In the analyses, the unit of analysis is profiles evaluated rather than respondents, meaning n is 10500 since each respondent (1050) makes 5 comparisons of two alternatives (1050x5x2=10500).

[4] Bansak et al. (2018) show that treatment effects remain stable even with a large number of comparisons and attributes, meaning there is in practice rarely a specific upper limit to the number of comparisons.

[5] The ordering differed in the actual presentations in Qualtrics to make the alternatives more intuitive.

Table 1. Attributes and levels

Attribute		Levels (RF=Reference category)
H1a. Inclusiveness	The participants are…	a. All citizens willing to take part RF b. A group of citizens selected to reflect the general population c. Key stakeholders with an interest in the topic
H1b. Popular control	After reaching a decision, the outcome will…	a. be implemented directly RF b. serve as advice to elected officials who make the final decision
H1c. Considered judgement	Participants make up their minds based on…	a. Their own judgement and preferences RF b. Credible information from independent experts before deciding c. a moderated exchange of arguments between participants
H1d. Transparency	All gatherings in the process…	a. take place behind closed doors to allow for sensitive discussions RF b. are open to the public to allow for public scrutiny
H1e. Efficiency	The process involves the following number of gatherings	a. A single instance RF b. 2-5 instances c. 6-10 instances
H1f. Transferability	All gatherings take place…	a. online via official government platform RF b. in a public building
H1g. Policy issue	The decision concerns…	d. Vegan food in schools (Easy) RF e. Wolf protection (Easy) f. Regional government reforms (Hard) g. Measures to ensure long-term sustainable economic growth (Hard)

For *inclusiveness*, three levels capture what Fung (2006) considers the extremes of participatory inclusiveness (open to all-only key stakeholders) and an intermediate position (a selected group). The two levels for *popular control* consider whether the decision is implemented directly to approximate direct control or serves as advice to elected representatives who make the final decision to describe the advisory role. There are three levels for *considered judgement*, the first describes participants deciding based on their own judgement and preferences, the two others include more deliberative elements and include either credible expert advice or a moderated exchange of arguments before deciding (Grönlund, Bächtiger, and Setälä 2014; Fishkin 2009). For *transparency*, the two levels vary the extent of openness to the public. Since presenting a process where all meetings take place behind closed doors could negatively bias estimations, it is emphasised that this is done to allow sensitive discussions, whereas doors are open to allow for public scrutiny. To gauge the impact of *efficiency* and the number of times participants meet, the first level only involves a single gathering, while the two other levels gradually increases the number of gatherings to either 2-5 or 5-10. Since it is not the intention to examine the effect of more gatherings as such, it is chosen to limit the number of gatherings to under 10 still present plausible participatory processes. For *transferability*, gatherings are either described as taking place online on an official government platform or in a government building. It is emphasised that the online meetings are on an official platform to emphasise that the gatherings are still official meetings on par with meeting face-to-face in a government building. The conjoint includes four different *policy issues* that were newsworthy in Finland at the time of data collection to give the experiment more relevance to the real world and thereby improve external validity (Aguinis and Bradley 2014, 361). Two are considered hard issues that make it necessary to make rational decisions based on careful considerations. The first concerns measures to ensure long-term sustainable economic growth, which is topical and involves complicated economic and environmental issues that are typically categorized as a hard issue (Wojcieszak 2014). The other hard issue concerns regional government reform, which was debated at the time and with little agreement on the specific benefits and costs. Two other issues are considered easy issues in the sense of being largely symbolic and therefore likely to illicit gut responses. The first concerns wolf protection, which is an issue that is often regarded in symbolic terms with people being more likely to defer to gut

responses. The other easy issue is the provision of vegan food in schools, which is also a largely symbolic issues where people are unlikely to rely on rational calculations of nutrition values for deciding.

In conjoint analysis, some combinations of attribute levels may be impossible or highly implausible (Hainmueller, Hopkins, and Yamamoto 2014). In such situations, it is necessary to restrict the variation and exclude certain combinations from occurring. Although participatory practices also encounter such problems, none of the combinations are logically impossible and therefore no restrictions were added to the randomization, as is recommended (Hainmueller, Hopkins, and Yamamoto 2014, 20).[6]

Testing H3 makes it necessary to measure the extent to which people prefer citizens or elected representatives as principal decision makers (Bengtsson and Christensen 2016; Font, Wojcieszak, and Navarro 2015; Gherghina and Geissel 2017). This is here measured with a single item where respondents are asked whether they prefer ordinary citizens or elected representatives to make decisions on a scale from 0-10, where 10 indicates a preference for elected representatives (Wojcieszak 2014). For the moderation analyses, this is recoded into a categorical variable where all respondents scoring 0-3 are coded as preferring citizens (17% of respondents), 4-6 are considered intermediate (35% of respondents) and those scoring 7-10 are coded as preferring elected representatives (49% of respondents).[7]

The data is analysed using linear regression with standard errors clustered at the individual level to consider that each respondent makes five comparisons. Based on assumptions concerning the stability of observed effects and their independence from ordering and presentation, the causal effects of treatment components can be estimated using OLS regression (Hainmueller et al., 2014, p. 14-16) .[8] The estimated coefficients indicate the Average Marginal Component Effect (AMCE), or the average change in the probability that an alternative will win support when it includes the listed attribute value instead of the baseline attribute value. The AMCE was introduced by Hainmueller et al. (2014) and represents the marginal causal effect of an attribute averaged over the joint distribution of the remaining attributes. It is also possible to examine whether the causal effects of attributes are interdependent by including interaction effects between the attributes of interest to obtain the average component interaction effect (ACIE). This makes it possible to examine causal effects across subgroups, whereas the AMCE constitutes the average effect across the whole population. As (Leeper, Hobolt, and Tilley 2019) note, it is important to be careful when selecting the reference category for examining group differences with interaction effects. For this reason, the marginal means were also estimated. These did not lead to substantively different conclusions but are shown in the supplementary file and referred to in the analyses.

The survey also included measures on how interested the respondents are in the policy issues at hand and socio-demographic variables to ensure that the sample is representative: age, gender, and place of living. A few measures of various political orientations were collected to ensure that there are no systematic differences in this regard between attribute levels: left/right ideology, political interest,

[6] For example, it is in practice difficult to construct a highly deliberative process that is not both time consuming and place high demands on the participants. Nevertheless, while some of the combinations offered in this conjoint are less likely to be offered in practice, the phrasing means they are not logically impossible nor even unlikely to occur.

[7] This was supposed to be a dummy variable in the preregistered plan, but a more nuanced categorisation was chosen to ensure that the intermediate category did not differ. A dummy coding does not alter the substantive conclusions.

[8] For a formal presentation and evidence of the presented properties, see (Hainmueller, Hopkins, and Yamamoto 2014).

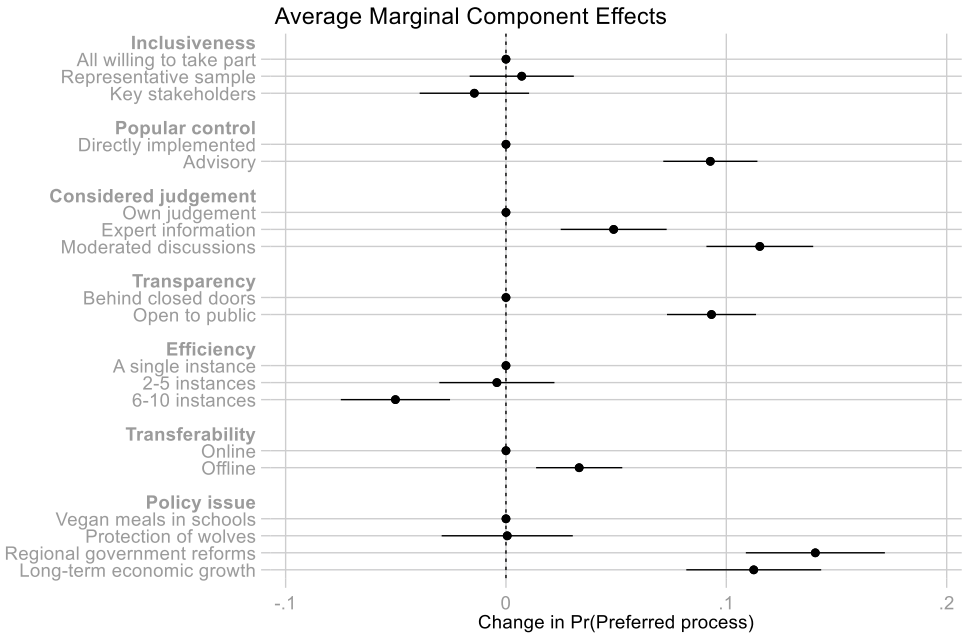
satisfaction with democracy and internal political efficacy. To examine this, ANOVA analyses was conducted to analyse mean scores across attribute levels for these attitudinal variables as well as age, gender and education (shown in supplementary file). Since all analyses show no differences in mean scores, the randomization succeeded and the potential confounders can be left out of all analyses, as is usually the case for this type of experiments (Mutz 2011; Hainmueller, Hopkins, and Yamamoto 2014).

The analysis proceeds in three steps. The first step involves testing H1a-H1g on how the attributes affect evaluations of participatory mechanisms with a linear regression analysis where respondents' choices are included as the dependent variable (coded profile chosen yes/no) and the attributes are included as categorical variables with the refence categories outlined above. All results are presented using coefficient plots, as recommended by (Hainmueller, Hopkins, and Yamamoto 2014). The second step concerns H2 on differences across policy issue, and here interaction effects are included to see whether the effects differ depending on the type of issue.[9] The final step concerns H3 and how the effects are shaped by whether respondents prefer citizens or representatives to make political decisions. This is examined by including interaction effects between the attributes and the categorical variable for process preferences explained above.

Analysis

The first step is examining H1a-H1g on the direct effects of the participatory features. Figure 1 shows the AMCEs of all attributes.

Figure 1. Average Marginal Component Effects (AMCEs) on preference for participatory process.



[9] The preregistered plan involves an interaction analysis with a dummy variable for easy and hard issues instead, including only all policy issues as a robustness test. However, since the results are unambiguous the results presented include all policy issues instead.

Contrary to the expectations of H1a, inclusiveness is irrelevant for how people evaluate participatory procedures since the effects for both processes with participants selected from a representative sample (β =0.007) and those that include key stakeholders (β =-0.014) do not alter the favourability compared to the reference category of processes where all can take part.

Advisory processes entail a boost in favourability of 9.3 percentage points compared to arrangements were participants can decide the outcome directly, which contradicts H1b by showing that advisory mechanism boost favourability rather than those with more decisive decision-making powers.

For considered judgement, the results support H1c since processes where participants decide based on expert information entail an increase in favourability of 5 percentage points while processes with moderated discussions among participants increase favourability by 11.5 percentage points. Transparency also matters as suggested by H1d since processes with closed doors entail a 9.3 percentage points reduction in favourability compared to more transparent processes.

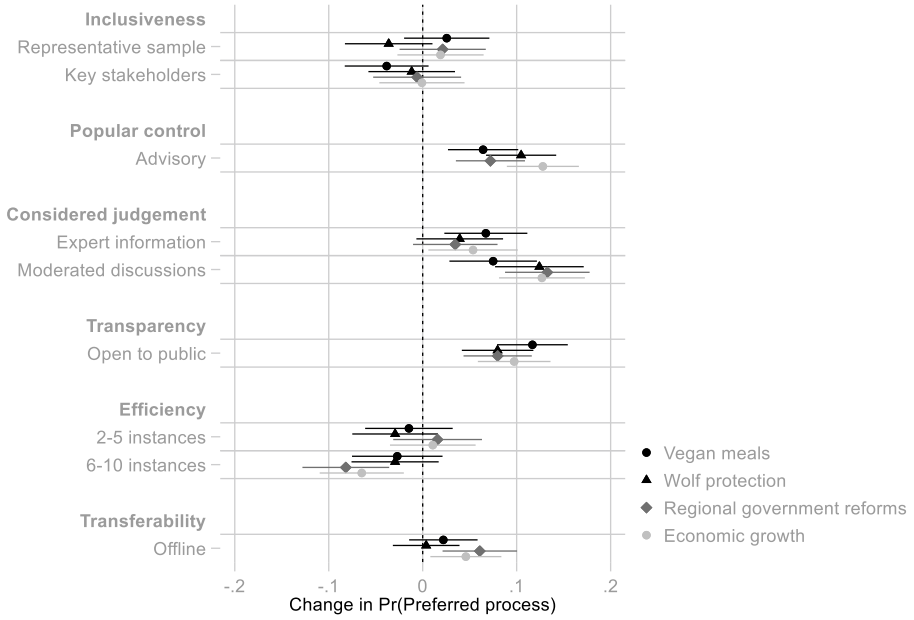
For the number of meetings, there is some evidence to support H1e, even if the effect is not particularly strong. Having 2-5 meetings has no discernible impact on favourability compared to meeting a single time (B=-0.004), but processes where participants meet 6-10 instances entail a five percentage-points reduction in the favourability of participatory processes compared to meeting a single time.

For transferability and the question of online versus face-to-face meetings, offline processes entail a 3.3 percentage points increase in favourability, which contradicts H1f since it entails that face-to-face meetings enhance the popularity of participatory processes compared to online meetings.

Finally, when it comes to policy issues, the coefficient for vegan meals in schools is small and insignificant, which shows that this does not affect favourability compared to the reference category protection of wolves. However, the effects for the hard issues are significant: regional government reform entails a 14 percentage points increase in favourability while economic growth leads to an 11 percentage points increase in favourability compared to vegan meals. While the effects are substantial, the direction of the effects run counter to H1g since people prefer participation for the hard issues while they are less interested when it comes to easy issues.

The second step involves examining whether there are differences in effects across policy issues and Figure 2 shows the ACIEs for the four policy issues. For simplicity, reference categories are excluded in figures 2 and 3.

Figure 2. Average Component Interaction Effects (ACIES) on preference for participatory process across four policy issues



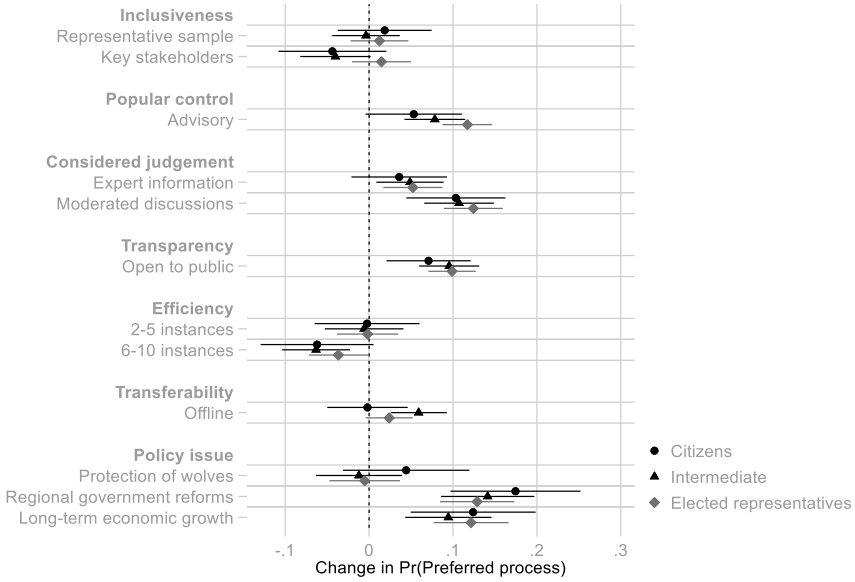
The effects are similar across policy issues, and when differences occur, they are generally of minor importance.[10] The coefficients for inclusiveness all remain insignificant across issues. For popular control, advisory processes have an even stronger effect on favourability when the issue concerns economic growth, but the effect remains in the same direction and magnitude. For considered judgement, processes involving moderated discussions are preferred to participants deciding independently for all issues. The results for expert advice are less clear-cut, but despite differences in significance, none of the interaction effects are statistically significant and the effects are of a similar magnitude and direction. Open processes are preferred over those behind closed doors regardless of issue. For efficiency, the negative effect of more meetings is only significant for the two hard issues, while the differences are less pronounced for easy issues. For transferability, offline meetings also only have significant effects for hard issues.

While these last two findings seem to indicate some differences, it is noteworthy that the marginal means (see supplementary file) show that hard issues (regional government reform and economic growth) have higher mean scores compared to the easy issues (wolf protection and vegan meals) for all attribute levels. This is, however, testimony to the strong direct effects of the policy issue rather than differences in effects among policy issues. On most accounts, the effects appear similar across policy issue and since there is no uniform trend for effects to be stronger for the easy issues as H2 suggests, this hypothesis is rejected.

The final step involves H3 and differences in effects depending on the extent to which respondents prefer citizens or elected representatives as decision-makers. The results in Figure 3 demonstrate that the effects again are similar on most accounts.

[10] One interaction effect was significant at $p<0.05$-threshold (advisory powers#economic growth) while three others achieved $p>0.10$ (Moderated discussion#regional government reforms, 6-10 instances#regional government reform, representative sample#protection of wolves).

Figure 3. Average Component Interaction Effects (ACIES) on preference for participatory process across process preferences.



Two significant interaction effects indicate differences in effects across process preferences. For popular control, the preference for advisory powers is weaker among those who prefer citizens as decision-makers (p=0.050). This difference is hardly surprising, and the most remarkable is that even for those who prefer citizens as decision makers there is no positive effect of directly implemented decisions. For transferability, the interaction effect for the intermediate category (p=0.039) entails that it is only for the intermediate category that offline processes have a positive effect on favourability, whereas the effects are negligible when people have clearer process preferences. The results otherwise resemble the general findings, and the marginal means lead to similar conclusions. Although some differences occur, H3 is rejected since there is again no uniform trend for stronger effects among those who support citizens as decision makers.

Discussion of results

These results have important implications for the use of participatory mechanisms. The following discussion highlights the most important results and their implications for future research.

First and foremost, the results highlight that the design features of participatory mechanisms shape citizens' evaluations of them. Furthermore, the effects were similar across policy issues and process preferences, suggesting that the effects are a relatively stable in society. The results are therefore able to give new insights into what type of participatory mechanisms ordinary citizens want to see introduced on a more detailed level compared to previous research that have examined either broad process preferences (Bengtsson and Christensen 2016; Gherghina and Geissel 2017; Font, Wojcieszak, and Navarro 2015) or attitudes to specific mechanisms (Goldberg, Wyss, and Bächtiger 2019; Jacquet 2018; Christensen and von Schoultz 2019).

Furthermore, the evaluations may well differ between scholars and ordinary citizens. A great deal of scholarly attention has focused on inclusiveness and how to ensure that all groups in society are

included (Young 2000; Dalton 2017; Gastil and Wright 2019). However, this aspect seems to be of little importance for ordinary citizens since it made little difference who could take part in the processes. While this result by no means entails that the scholarly preoccupation has been misguided, it is nonetheless noteworthy that people are not to a similar extent concerned about who are able to take part in participatory mechanisms. This may partly be because respondents failed to appreciate the differences between the choices offered in the conjoint analysis. But it may also be that people care more about chances to provide input into political decision-making, less about exactly who provides it.

Several results showed that people demand possibilities for participation in political decision-making, also when the involvement may be demanding. For example, processes involving hard policy issues were favoured over those involving easy issues (Wojcieszak 2014; de Fine Licht 2014). While the hard issues on offer here also have more important implications for society, it clearly shows that people want possibilities to take part for issues that matter to society rather than for symbolic issues where involvement may be windows-dressings (Blaug 2002). Furthermore, people expressed a preference for processes that involve more deliberative elements such as expert advice and discussions (Fishkin, (2009) over processes where participants decide independently.

However, other results also show that there are limits to how involved people want to be. Participation should not be too time-consuming since people rebuffed processes involving more than five meetings. And perhaps most surprising results was that people prefer advisory processes over those were participants make the final decision (Qvortrup 2013; Altman 2011). What people demand is possibilities for interaction with decision-makers, not necessarily for citizens to make decisions. Even for people who explicitly stated that they prefer citizens as decision-makers there was no discernible positive effect of directly implemented procedures when deciding between processes. In other words, the preferences revealed in the conjoint differed from the stated preferences when asking respondents directly. This highlights the difficulties involved in examining whether and how citizens want to participate. While the result could be problematic for the literature on process preferences, it should be acknowledged that the process preference was measured in a rather crude manner compared to the instruments used in previous studies (Bengtsson and Christensen 2016; Font, Wojcieszak, and Navarro 2015). Nevertheless, it is worth iterating that a demand for more participation does not necessarily entail a wish to become the final decision makers.

Overall, features associated with talk-centric innovations tend to boost favourability, which indicates that people prefer more talk-centric procedures over vote-centric direct-democratic procedures (Chambers, 2003; LeDuc, 2015). This contradicts the conclusions of Rojon et al. (2019), although they also find a positive effect from advisory meetings on support for participatory reforms. The results here suggest that people prefer procedures that give possibilities to develop preferences rather than decisive direct-democratic procedures that allow people to make decisions. This suggests that people recognise the need for reflection on the issues at hand rather than only wanting participatory mechanisms as a way to take power away from political elites. Hence, the demand for participatory mechanisms is in this case not primarily driven by dissatisfaction with the current political system, but is more likely to be a result of cognitive mobilization, i.e. citizens being willing and able to take an active role in decision-making (Dalton, Burklin, and Drummond 2001). Also, while this does not necessarily mean that people will also take part, it is clearly too early to dismiss the willingness of ordinary citizens to engage in more demanding forms of participation.

It is still necessary to ascertain whether similar effects can be found in other countries since the Finnish experience with advisory mechanisms could make them disposed to prefer these over more decisive processes (Christensen et al. 2017; Jäske 2017). Other countries such as Germany lack experiences with participatory mechanisms at the national level or as Switzerland has mainly experiences with more decisive direct-democratic procedures. Future studies should aim for comparisons across political systems to determine the extent to which participatory preferences are shaped by previous experiences with participatory instruments. The current study also only examines effects on what forms of participatory processes people want to see introduced, but this does not necessarily entail that they are willing to take part. A next step would therefore be to examine whether similar results are found when asking people what participatory processes they would like to participate in.

While it still must be examined whether the conclusions of this study are valid outside of Finland, or if other criteria play a more prominent role in shaping evaluations of participatory mechanisms, the results show that using conjoint analysis to examine preferences for participatory processes can provide valuable new insights into how citizens evaluate these mechanisms.

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Supplementary file

Sample size and characteristics

Conjoint analysis does not require large sample sizes to yield reliable estimates since the number of observations can be increased by enlarging the number of comparisons each respondent makes (Orme, 2010; Aguinis and Bradley, 2014). Orme (Orme, 2010, p. 64) recommends determining the number of respondents with the formula: (nta)/c>=500, where *n* is number of respondents, *t* is number of comparisons (here 5), *a* is number of alternatives to choose from (here 2) and c is the largest number of levels for any attribute (here 12 since analyses include a 3x4 interaction). According to this, the required number of respondents is 600. However, this is a minimum requirement that should not justify too small sample sizes (Orme, 2010, p. 65). Another rule-of-thumb is to include at least 200 respondents in each group when making comparisons across groups. Here the inclusion of interaction effects between policy issues and other attributes split respondents into four groups, which means there should be 800 respondents. It is also necessary to consider generalisability to the population of interest (Aguinis and Bradley, 2014). To ensure a representative sample of the Finnish population, the target sample size was 1000 individuals, which is sufficiently large to achieve credible and generalisable results without wasting resources or creating risks for Type I errors or false positives. In the end, 1050 respondents completed the survey and were included in the final sample. Table SF1 compares age, gender and place of living for the Finnish population and the sample.[11]

Table SF1. Characteristics of the population and sample

Characteristic	% in population	% in sample (n=1050)
Age		
18-19	*3.3*	*4.0*
20-29	*18.8*	*19.0*
30-39	*19.3*	*19.4*
40-49	*18.2*	*17.8*
50-59	*20.2*	*19.9*
60-69	*20.3*	*19.9*
Total	***100.0***	***100.0***
Gender (population aged 18–69)		
Male	*50.0*	*50.1*
Female	*50.0*	*49.9*
Total	***100.0***	***100.0***
Region		
Usimaa (incl. Helsinki area)	*30.0*	*32.9*
Western Finland	*13.0*	*21.0*
Ostrobothnia	*14.0*	*8.0*
Central Finland	*15.0*	*12.5*
South Finland	*10.0*	*9.0*
East Finland	*14.0*	*13.3*
Lapland	*4.0*	*3.3*
Total	***100.0***	***100.0***

Source: Statistics Finland 2017

The sample resembles the Finnish population well when it comes to age and gender, but Western Finland is overrepresented while Ostrobothnia is underrepresented. Nonetheless, all analyses are carried out without weighting data since there is no reason to expect this to bias the results.

[11] Regions were in the preregistered plan divided into four NUTS-2 regions, but since this division is not commonly known, a different categorisation was chosen to make it easier for respondents to pick the correct place of living.

Distribution of respondents' characteristics across attributes

Table SF2. ANOVA tests of differences in mean scores across attributes

Variable	Attribute Level	Inclusion		Popular control		Considered judgement		Transparency		Efficiency		Transferability		Policy issue	
		Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Age (2-7)	1	4.903	0.026	4.908	0.021	4.895	0.026	4.908	0.021	4.910	0.026	4.908	0.021	4.898	0.030
	2	4.905	0.026	4.908	0.021	4.908	0.026	4.908	0.021	4.911	0.026	4.908	0.021	4.925	0.030
	3	4.915	0.026			4.919	0.026			4.902	0.026			4.890	0.030
	4													4.918	0.030
ANOVA (Prob > F)		0.943		1.000		0.808		1.000		0.962		1.000		0.816	
Gender (0 Female /1 Male)	1	1.499	0.008	1.500	0.007	1.500	0.008	1.500	0.007	1.502	0.008	1.500	0.007	1.500	0.010
	2	1.503	0.008	1.500	0.007	1.497	0.008	1.500	0.007	1.502	0.008	1.500	0.007	1.502	0.010
	3	1.498	0.008			1.503	0.008			1.496	0.008			1.502	0.010
	4													1.496	0.010
ANOVA (Prob > F)		0.925		1.000		0.887		1.000		0.875		1.000		0.955	
Education (1-9)	1	4.669	0.031	4.676	0.025	4.677	0.030	4.676	0.025	4.668	0.030	4.676	0.025	4.668	0.035
	2	4.678	0.030	4.676	0.025	4.673	0.030	4.676	0.025	4.679	0.031	4.676	0.025	4.690	0.035
	3	4.682	0.030			4.678	0.031			4.681	0.031			4.682	0.035
	4													4.665	0.035
ANOVA (Prob > F)		0.948		1.000		0.994		1.000		0.943		1.000		0.956	
Political interest (1-4)	1	2.733	0.015	2.728	0.012	2.723	0.015	2.728	0.012	2.723	0.015	2.728	0.012	2.734	0.017
	2	2.722	0.015	2.728	0.012	2.729	0.015	2.728	0.012	2.728	0.015	2.728	0.012	2.725	0.017
	3	2.728	0.015			2.731	0.015			2.732	0.015			2.730	0.017
	4													2.721	0.017
ANOVA (Prob > F)		0.877		1.000		0.936		1.000		0.920		1.000		0.949	
Left/right (0-10)	1	5.192	0.037	5.183	0.031	5.188	0.037	5.183	0.031	5.195	0.037	5.183	0.031	5.177	0.043
	2	5.173	0.037	5.183	0.031	5.190	0.037	5.183	0.031	5.167	0.038	5.183	0.031	5.202	0.043
	3	5.183	0.037			5.171	0.038			5.186	0.037			5.157	0.043
	4													5.195	0.043
ANOVA (Prob > F)		0.941		1.000		0.922		1.000		0.866		1.000		0.884	
Satsf. Democracy (0-10)	1	5.273	0.039	5.273	0.032	5.287	0.039	5.273	0.032	5.275	0.039	5.273	0.032	5.290	0.045
	2	5.274	0.039	5.273	0.032	5.272	0.039	5.273	0.032	5.268	0.039	5.273	0.032	5.285	0.045
	3	5.273	0.039			5.261	0.039			5.276	0.039			5.276	0.045
	4													5.241	0.045
ANOVA (Prob > F)		0.999		1.000		0.894		1.000		0.988		1.000		0.870	
Internal political efficacy (0-8)	1	4.067	0.031	4.064	0.0253	4.051	0.031	4.064	0.025	4.063	0.031	4.064	0.025	4.061	0.035
	2	4.054	0.031	4.064	0.0253	4.068	0.031	4.064	0.025	4.062	0.031	4.064	0.025	4.073	0.036
	3	4.070	0.031			4.072	0.031			4.066	0.031			4.061	0.036
	4													4.060	0.036
ANOVA (Prob > F)		0.924		1.000		0.878		1.000		0.995		1.000		0.993	

Correlation matrix

Table SF3. Correlation Matrix

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
[1] Inclusiveness: Representative sample	1.00												
[2] Inclusiveness: Key stakeholders	0.49	1.00											
[3] Popular control: Advisory role	-0.01	0.02	1.00										
[4] Considered judgement: Expert advice	0.03	0.02	0.04	1.00									
[5] Considered judgement: Moderated discussions	0.00	0.04	0.02	0.51	1.00								
[6] Transparency: Open to public	-0.02	-0.07	-0.01	0.00	-0.01	1.00							
[7] Efficiency: 2-5 instances	-0.03	-0.03	-0.02	0.04	0.01	0.06	1.00						
[8] Efficiency: 5-10 instances	-0.01	-0.02	-0.01	0.03	-0.01	0.01	0.51	1.00					
[9] Transferability: Offline	-0.04	-0.06	0.01	0.02	0.01	0.03	-0.02	-0.02	1.00				
[10] Policy issue: Wolf protection	-0.04	-0.01	0.02	0.02	0.00	0.01	0.01	-0.03	-0.03	1.00			
[11] Policy issue: Regional reform	-0.04	0.01	-0.05	-0.03	-0.06	-0.01	-0.03	0.03	0.00	0.48	1.00		
[12] Policy issue: Economic growth	-0.06	0.00	0.04	-0.02	-0.03	-0.04	-0.03	0.00	-0.01	0.47	0.61	1.00	
[13] Constant	-0.28	-0.32	-0.32	-0.38	-0.34	-0.28	-0.36	-0.35	-0.26	-0.41	-0.41	-0.42	1.00

Regression results

Table SF4. Regression of all attributes

	β	SE	P	95% CI	
Inclusiveness (ref. all interested)					
Representative sample	0.007	0.012	0.553	-0.016	0.031
Key stakeholders	-0.014	0.013	0.257	-0.039	0.010
Popular control (ref. directly implemented)					
Advisory role	0.093	0.011	0.000	0.071	0.114
Considered judgement (ref. own judgement)					
Expert advice	0.049	0.012	0.000	0.025	0.073
Moderated discussions	0.115	0.012	0.000	0.091	0.139
Transparency (ref. Behind closed doors)					
Open to public	0.093	0.010	0.000	0.073	0.113
Efficiency (ref. 1 instance)					
2-5 instances	-0.004	0.013	0.756	-0.030	0.022
5-10 instances	-0.050	0.013	0.000	-0.075	-0.025
Transferability (Ref. Online)					
Offline	0.033	0.010	0.001	0.014	0.053
Policy issue (ref Vegan food)					
Wolf protection	0.001	0.015	0.970	-0.029	0.030
Regional gov. reform	0.140	0.016	0.000	0.109	0.172
Ec. growth	0.112	0.016	0.000	0.082	0.143
Constant	0.293	0.018	0.000	0.258	0.328
N			10500		

Note: Entries are regression coefficients (β) from a linear regression analysis with clustered standard errors (SE), P-values (P) and 95% confidence intervals (95% CI). The R^2 is not reported since model fit is irrelevant for the current purposes.

Table SF5. Including interaction with policy issue

	β	SE	P	95% CI	
Policy issue (ref Vegan food)					
Wolf protection	0.019	0.042	0.653	-0.064	0.101
Regional gov. reform	0.126	0.041	0.002	0.046	0.206
Ec. Growth	0.060	0.042	0.157	-0.023	0.143
Inclusiveness (ref. all interested)					
Representative sample	0.026	0.023	0.269	-0.020	0.071
Key stakeholders	-0.038	0.023	0.092	-0.083	0.006
Representative sample # Wolf protection	-0.062	0.033	0.064	-0.127	0.004
Representative sample # Regional gov. reform	-0.004	0.032	0.893	-0.067	0.059
Representative sample # Ec. Growth	-0.007	0.032	0.835	-0.069	0.056
Key stakeholders # Wolf protection	0.027	0.032	0.403	-0.036	0.089
Key stakeholders # Regional gov. reform	0.032	0.032	0.314	-0.031	0.096
Key stakeholders # Ec. Growth	0.038	0.031	0.224	-0.023	0.098
Popular control (ref. directly implemented)					
Advisory role	0.064	0.019	0.001	0.027	0.102
Advisory role # Wolf protection	0.040	0.026	0.119	-0.010	0.091
Advisory role # Regional gov. reform	0.008	0.025	0.755	-0.041	0.057
Advisory role # Ec. Growth	0.064	0.025	0.012	0.014	0.113
Considered judgement (ref. own judgement)					
Expert advice	0.067	0.023	0.003	0.023	0.111
Moderated discussions	0.075	0.024	0.002	0.028	0.122
Expert advice # Wolf protection	-0.028	0.032	0.380	-0.090	0.034
Expert advice # Regional gov. reform	-0.033	0.031	0.295	-0.093	0.028
Expert advice # Ec. Growth	-0.014	0.032	0.673	-0.077	0.050
Moderated discussions # Wolf protection	0.049	0.034	0.145	-0.017	0.115
Moderated discussions # Regional gov. reform	0.058	0.031	0.067	-0.004	0.119
Moderated discussions # Ec. Growth	0.052	0.033	0.117	-0.013	0.117
Transparency (ref. Behind closed doors)					
Open to public	0.117	0.019	0.000	0.079	0.154
Open to public # Wolf protection	-0.037	0.026	0.162	-0.089	0.015
Open to public # Regional gov. reform	-0.037	0.026	0.157	-0.088	0.014
Open to public # Ec. Growth	-0.019	0.026	0.455	-0.070	0.032
Efficiency (ref. 1 instance)					
2-5 instances	-0.015	0.024	0.537	-0.061	0.032
5-10 instances	-0.027	0.025	0.271	-0.075	0.021
2-5 instances # Wolf protection	-0.015	0.032	0.643	-0.077	0.047
2-5 instances # Regional gov. reform	0.031	0.031	0.331	-0.031	0.092
2-5 instances # Ec. Growth	0.025	0.032	0.425	-0.037	0.088
5-10 instances # Wolf protection	-0.002	0.033	0.944	-0.067	0.062
5-10 instances # Regional gov. reform	-0.055	0.033	0.097	-0.119	0.010
5-10 instances # Ec. Growth	-0.038	0.033	0.254	-0.103	0.027
Transferability (Ref. Online)					
Offline	0.022	0.019	0.237	-0.014	0.058
Offline # Wolf protection	-0.018	0.026	0.478	-0.069	0.032
Offline # Regional gov. reform	0.039	0.026	0.143	-0.013	0.091
Offline # Ec. Growth	0.024	0.026	0.362	-0.028	0.076
Constant	0.306	0.029	0.000	0.248	0.364
N			10500		

Note: Entries are regression coefficients (β) from a linear regression analysis with clustered standard errors (SE), P-values (P) and 95% confidence intervals (95% CI). The R^2 is not reported since model fit is irrelevant for the current purposes.

Table SF6. Including interactions with process preferences

	β	SE	P	95% CI	
Process preference (ref citizens)					
Intermediate	-0.024	0.053	0.652	-0.127	0.079
Elected representatives	-0.072	0.049	0.138	-0.168	0.023
Inclusiveness (ref. all interested)					
Representative sample	0.019	0.028	0.510	-0.037	0.074
Key stakeholders	-0.044	0.032	0.178	-0.108	0.020
***Representative sample*#Intermediate**	-0.022	0.035	0.522	-0.091	0.046
***Representative sample*#Elected representatives**	-0.006	0.033	0.850	-0.071	0.059
Key stakeholders#Intermediate	0.004	0.039	0.925	-0.073	0.080
Key stakeholders #Elected representatives	0.059	0.037	0.114	-0.014	0.131
Popular control (ref. directly implemented)					
Advisory role	0.053	0.029	0.066	-0.004	0.110
***Advisory role*#Intermediate**	0.025	0.034	0.464	-0.042	0.092
***Advisory role*#Elected representatives**	0.064	0.033	0.050	0.000	0.128
Considered judgement (ref. own judgement)					
Expert advice	0.036	0.029	0.212	-0.021	0.092
Moderated discussions	0.103	0.030	0.001	0.045	0.162
***Expert advice* #Intermediate**	0.013	0.035	0.714	-0.056	0.082
***Expert advice* #Elected representatives**	0.016	0.034	0.629	-0.050	0.083
***Moderated discussions* #Intermediate**	0.004	0.037	0.917	-0.068	0.075
***Moderated discussions* #Elected representatives**	0.021	0.035	0.548	-0.047	0.089
Transparency (ref. Behind closed doors)					
Open to public	0.071	0.025	0.005	0.021	0.121
***Open to public*#Intermediate**	0.025	0.031	0.431	-0.037	0.086
***Open to public*#Elected representatives**	0.028	0.029	0.336	-0.029	0.085
Efficiency (ref. 1 instance)					
2-5 instances	-0.002	0.032	0.939	-0.064	0.059
5-10 instances	-0.062	0.034	0.068	-0.129	0.005
***2-5 instances*#Intermediate**	-0.004	0.040	0.928	-0.081	0.074
***2-5 instances*#Elected representatives**	0.001	0.037	0.986	-0.071	0.072
***5-10 instances*#Intermediate**	-0.001	0.040	0.975	-0.079	0.077
***5-10 instances*#Elected representatives**	0.025	0.038	0.510	-0.050	0.101
Transferability (Ref. Online)					
Offline	-0.002	0.024	0.936	-0.049	0.046
***Offline*#Intermediate**	0.061	0.030	0.039	0.003	0.119
***Offline*#Elected representatives**	0.026	0.028	0.357	-0.029	0.081
Policy issue (ref Vegan food)					
Wolf protection	0.044	0.038	0.246	-0.031	0.119
Regional gov. reform	0.175	0.039	0.000	0.098	0.251
Ec. Growth	0.124	0.038	0.001	0.050	0.198
***Wolf protection*#Intermediate**	-0.056	0.046	0.223	-0.147	0.034
***Wolf protection*#Elected representatives**	-0.049	0.044	0.258	-0.135	0.036
***Regional gov. reform*#Intermediate**	-0.033	0.048	0.491	-0.128	0.061
***Regional gov. reform*#Elected representatives**	-0.046	0.045	0.311	-0.134	0.043
***Ec. Growth*#Intermediate**	-0.030	0.046	0.519	-0.119	0.060
***Ec. Growth*#Elected representatives**	-0.002	0.044	0.955	-0.089	0.084
Constant	0.337	0.042	0.000	0.255	0.419
N			10500		

Note: Entries are regression coefficients (β) from a linear regression analysis with clustered standard errors (SE), P-values (P) and 95% confidence intervals (95% CI). The R^2 is not reported since model fit is irrelevant for the current purposes.

Marginal means

Figure SF1. Marginal means for all attributes

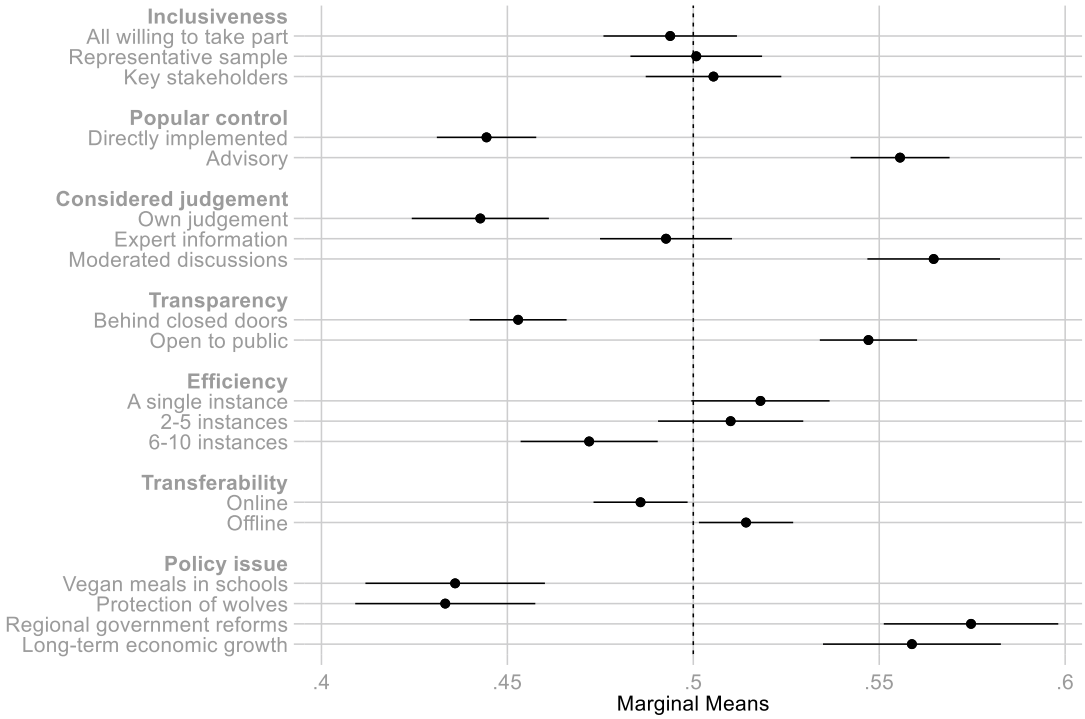

Figure SF2. Marginal means across policy issue

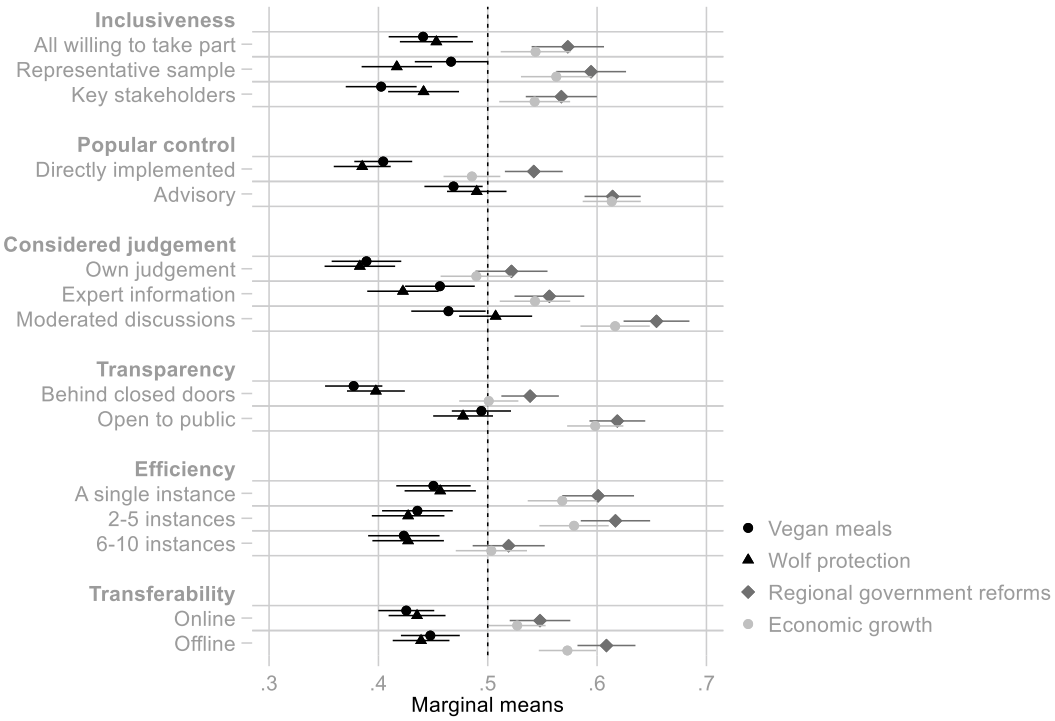

Figure SF3. Marginal means across process preferences