What does crowdsourcing legislation entail for the participants? The Finnish case of *Avoin Ministeriö*

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Introduction

Crowdsourcing legislation is one of the emerging ways to engage citizens in the legislative decision-making in representative democracies (Howe, 2008; Aitamurto, 2012; Brabham, 2013). This form of democratic innovation involves giving ordinary citizens, rather than political and bureaucratic elites, the chance to cooperate to come up with innovative new policies. Crowdsourcing legislation frequently happens in connection to Citizens' initiatives, which have been introduced in several European countries and at the European level (Setälä and Schiller, 2012). Using the Internet for crowdsourcing such initiatives makes it possible to engage a greater range of voices in drafting the proposal than what is practically possible to achieve offline and should ideally make it possible to draft proposals of higher quality and with greater public appeal.

By increasing popular involvement, the representative democracies hope to restock dwindling reserves of political legitimacy. However, it is still not clear how involvement in the legislative decision-making affects the attitudes of the participants, since it cannot be taken for granted that this impact is positive (cf. Blaug, 2002). It is therefore of central concern to establish whether crowdsourcing can actually help restore political legitimacy by creating more positive attitudes towards the political system.

This study paper contributes to this research agenda by examining the developments in attitudes among the users on the Finnish website *Avoin Ministeriö* (English translation Open Ministry) which orchestrates crowdsourcing of legislation by providing online tools for deliberating ideas for Citizens' initiatives. The Citizens' initiative was introduced in Finland in 2012, but so far, there has only been a final decision on a single Citizens´ initiative, where an initiative to ban fur-farming in Finland was rejected by the Finnish Parliament in July 2013. The developments in attitudes among the participants on *Avoin Ministeriö* are examined following this decision with the help of a two-stage survey. The data include 421 respondents who filled in the questions concerning political and social attitudes as well as political activities performed. The results suggest that while crowdsourcing legislation has so far not affected political legitimacy in a positive manner, there is still potential for doing so.

Crowdsourcing for democratic legitimacy?

Most representative democracies have struggled with their political legitimacy in recent decades. Participation in traditional political activities such as elections and political parties has been declining while sceptical attitudes towards the political attitudes have been on the rise (Dalton, 2004; Mair, 2006; Hay, 2007).

It has been argued that the Internet can boost democratic legitimacy by allowing greater citizen input into the political decision making (Loader and Mercea, 2012; Coleman and Blumler, 2009). *Crowdsourcing* is one such possibility. Similar ideas such as co-creation and co-production have been used for a longer time (Voorberg et al., 2014). However, the idea of crowdsourcing differs in central aspects, even if there is no universal agreement on what crowdsourcing entails. According to some accounts, crowdsourcing is a broad concept that may also include traditional forms of collective actions such as elections (Howe, 2008). Brabham (2013: xix) has a more restrictive view of what crowdsourcing entails, since he defines it as 'an online, distributed, problem-solving and production model that leverages the collective intelligence of online communities to serve specific organizational

goals'. Brabham sees crowdsourcing as a relatively new phenomenon inherently connected to the possibilities provided by the Internet. It is particularly worth noting that he contends that simply voting does not count as crowdsourcing since this situates the locus of control primarily within the organization (Brabham 2013: xxii). As argued below, this conceptual disagreement has important consequences for whether the Citizens' initiative in Finland constitutes an example of crowdsourcing.

Crowdsourcing can be used for democratic policy making by establishing official channels that give citizens a say in the decision-making (cf. Aitamurto, 2012: 18). By tapping the combined intellectual resources of citizens, crowdsourcing make it possible to come up with innovative new proposals for policies that may be better solutions for the problems they are meant to resolve. Although crowdsourcing is not necessarily done by amateurs (Brabham, 2012), it transfers decision-making powers from politicians and bureaucrats to ordinary citizens. In this sense, crowdsourcing shares affinities with theories of deliberative and participatory democracy, where there has also been an emphasis on the value of participation for enhancing the functioning of democracy (Pateman, 1970; Smith, 2012: 90).

The focus here is on whether and how taking part in crowdsourcing legislation can recreate democratic legitimacy, which has been argued to be the case for other participatory innovations (Geissel and Newton, 2012). Different aspects can be seen as constitutive for the legitimacy of a political system, and the multidimensionality of this concept means that it is contested what aspects are of primary importance (Beetham, 1991; Schmidt, 2013). According to Beetham (1991: 15-25), legitimacy characterizes democratic authorities when these have a legal right to exercise power, are justified in terms of shared norms and beliefs, and a form of social consent is present (Beetham 1991, pp.15–25). This calls attention to the centrality of citizens' attitudes towards the political system for political legitimacy.

When discussing the legitimacy of the EU, Schmidt (2013) distinguishes between input, output and throughput legitimacy, and this distinction is helpful for establishing how crowdsourcing can help restore citizens' belief in the representative system. Input legitimacy concerns the participatory quality of the processes leading to laws and rules, and output legitimacy refers to the problem-solving quality of the laws and rules (Schmidt, 2013: 4). Throughput legitimacy involves the quality of governance processes and encompasses the ways in which the policy-making processes work to ensure the efficacy of governance, the accountability of those engaged in making the decisions, the transparency of the information and the inclusiveness and openness to 'civil society' (Schmidt, 2013: 5-7) . Hence, there are different reasons why citizens grant legitimacy to a particular political system. This study examines how the participants' satisfaction with output and throughout legitimacy can shape developments in their political attitudes as a result of the involvement.[1]

Satisfaction with output legitimacy hinges on crowdsourcing ensuring a policy outcome that more adequately reflects the preferences of the participants. Citizens get involved to achieve a specific outcome and their evaluation of the experience hinges on whether or not they achieve this outcome. Several scholars argue that there is a link between the policy performance of government and

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[1] Input legitimacy is also of importance when it comes to democratic innovations, since it is a key challenge to mobilize citizens when introducing democratic innovations (Fung 2004: 70-71). However, the focus will be on throughput and output legitimacy since the current research design does not make it possible to settle the impact on input legitimacy. These two forms of legitimacy are also of greater importance for crowdsourcing, where the emphasis lie on processes and outcomes rather than who makes the contributions, which is the central concern when it comes to input legitimacy.

political dissatisfaction (McAllister, 1999; Hay, 2007; Norris, 2011: 202-209). Budge (2012) sees it as one of the strengths of direct democracy that it can bring policy outcomes closer to the preference of the median citizen, thereby creating greater satisfaction and democratic legitimacy. There are therefore good reasons to expect satisfaction with output legitimacy to affect the developments in political legitimacy.

Contrary to this, crowdsourcing can improve satisfaction with throughput legitimacy by improving the quality of decision-making and ensuring it is seen as fair and balanced. In this case direct involvement may enhance legitimacy even when participants do not get their desired outcome. This proposition is supported by studies suggesting that individuals may be willing to accept outcomes they do not prefer if these were derived through a fair process (Carman, 2010: 6). Furthermore, both normative theories and experimental research suggests that procedural fairness is important for legitimacy beliefs and that users must consider the process as a fair and balanced decision-making process to be willing to accept the outcome (Esaiasson et al., 2012: 788-790). The experience of being involved can benefit the users so that legitimacy develops in a positive direction (cf. Grönlund et al., 2010).

It is important to determine whether output or throughput legitimacy explains developments in political attitudes to establish whether and how crowdsourcing legislation can increase democratic legitimacy in the long run. While previous studies have found a connection between the use of initiatives and civic competences (Smith, 2002), there is a lack of 'before and after' studies scrutinizing these accounts of how and why democratic innovations such as crowdsourcing matter (Geissel, 2012: 214). This study examines this question in the case of crowdsourcing legislation via *Avoin Ministeriö* in Finland.

The Citizens' Initiative in Finland and *Avoin Ministeriö*

Direct channels of participation have been rare in Finland, which has traditionally been a strong representative democracy. The Citizens' initiative was introduced in Finland on 1 March 2012 as a way of complementing the traditional representative structures by giving citizens new possibilities to influence public policy.

Citizens' initiatives are direct democratic institutions that allow citizens to bring new issues to the political agenda through collective action by collecting a certain number of signatures in support of a policy proposal (Schiller and Setälä, 2012: 1). The proposal can either be followed by a referendum (full-scale initiatives) or a decision by Parliament (agenda initiatives). Citizens' initiatives hereby allow citizens a more direct say in the political decision-making. Even if citizens do not gain the final say over policy outcomes, they acquire agenda-setting powers otherwise held by elected politicians in representative democracies.

According to the provisions for the Citizens' initiative, all Finnish citizens entitled to vote may organize a Citizens' initiative concerning a proposal for legislation or amending or repealing an existing act.[2] If the initiative is able to gather support from at least 50000 Finnish citizens within 6 months, the organizer can submit the initiative to the Finnish Parliament. The 50000 signatures can

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[2] This description builds on the version found on www.kansalaisaloite.fi/fi/ohjeet/briefly-in-english.

be on paper or via an online system. After receiving an initiative, Parliament is obliged to consider the content, but it can decide to amend the proposal or even reject it altogether.

At the time of writing, six Citizens' initiatives have gathered the necessary 50000 signatures. Four of these have been handed over to Parliament while one is still actively collecting signatures. So far, Parliament has only made a decision on a single Citizens' initiative concerning a proposal to ban fur farming, which was a contentious suggestion. On one hand, the fur farming industry is a major industry in some Finnish regions; Finland being the largest producer of fox pelts in Europe and a major supplier of mink hides. On the other hand, animal rights groups documented several instances of animal cruelty on fur farms and argued that the abolishment of fur farming was necessary to ensure animal welfare. The industry counter-argued that a ban would only serve to move the production to China, where animal cruelty is (even more) widespread, and a ban could therefore lead to worse conditions for fur animals. In the end, the initiative to ban fur farming in Finland collected almost 70000 statements of support and was submitted to Parliament in March 2013. It was debated in committees and plenaries in the following months. The Parliament's Agriculture and Forestry Committee decided not to back the Citizen's initiative to ban fur farming, and on 19 June 2013, Parliament followed this line in a plenary vote where 146 of 200 MPs voted against implementing the proposal and the Green League was the only political party uniformly supporting the initiative.

The Citizens' initiative in Finland is supported by various online structures. An official online service (www.kansalaisaloite.fi) offers citizens facilities for launching initiatives and collecting signatures. However, this service has limited possibilities for adding input into the proposals, since it does not offer possibilities for debating the content of the initiatives. This makes it doubtful whether the Citizens' initiatives ought to be considered a genuine instance of crowdsourcing according to the restrictive definition by Brabham (2013) introduced above, since there are no possibilities for interaction beyond casting votes for one or more initiatives already in place.

However, the official channel has been complemented by a bottom-up initiative on the website www.avoinministerio.fi, which is managed by Finnish e-democracy activists.[3] This website aims to help citizens, NGOs and citizen movements to use Citizens' initiatives to develop proposal for Citizens' initiatives. An important addition to the official Citizens' Initiative web service is that *Avoin Ministeriö* provides the possibility for discussing proposals for citizens' initiatives, which entails that the website provides a perfect example of crowdsourcing proposals for legislation via the Citizens' initiative.

Data and methods

This study examines the developments in attitudes among the participants on *Avoin Ministeriö* following the decision to reject the Citizens' initiative to ban fur farming to establish how satisfaction with output and throughput legitimacy shaped developments in central political attitudes. The following two hypotheses are examined:

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[3] The founders also founded an NGO under the same name, which takes action in campaigning for selected initiatives. The focus is here exclusively on the possibilities provided by the online service. A short description in English can be found at http://openministry.info.

H1:   Those with low satisfaction with output legitimacy experience significantly more negative developments in political attitudes compared to those with high satisfaction with output legitimacy.

H2:   Those with low satisfaction with throughput legitimacy experience significantly more negative developments in political attitudes compared to those with high satisfaction with throughput legitimacy.

The hypotheses are examined with the help of data collected through a survey administered two times:

T_0:   The time of signing up (when survey launched for older members, from September 2012).

T_1:   When Parliament made decision to reject initiative to ban fur farming (July 2013).

This research design gives the study a quasi-experimental character, which can help determine systematic differences in the developments in attitudes between treatment groups, even if it cannot determine unequivocally whether the treatments cause the observed effects. This kind of 'before and after' studies are relatively rare (Geissel, 2012: 214), and this study therefore provide a unique possibility for studying how involvement in crowdsourcing legislation affects the attitudes of the participants. Although the users on *Avoin Ministeriö* are unlikely to reflect the general population in Finland, these individuals are likely to be deeper engaged in the issues at hand than the general public, since they made an extra effort by being involved. The study thereby resembles a crucial 'most-likely case' (Eckstein, 1975), which offers the ideal circumstances for studying the relationships of interest, since is more likely to be possible to detect any effects of the decision-making process. While crowdsourcing legislation has yet to affect legislative outcomes, the processes may well already have affected the attitudes of participants on *Avoin Ministeriö*. The study hereby gives an early indication of the impact of crowdsourcing on political legitimacy.

A major challenge with this kind of study is attrition, i.e. the loss of response from participants from one round to another (Hooghe et al., 2010; Shadish et al., 2002: 323). After terminating collection of surveys in the second round and cleaning out incomplete surveys, a total of 421 had completed both rounds, which equates an attrition rate of 48.3.[4] While less than ideal, such rates are not uncommon in experimental research (Shadish et al., 2002: 324) and similar response rates are common in internet surveys (Manfreda & Vehovar, 2002). Furthermore, attrition is only a problem if it is non-random (Hooghe et al., 2010: 92). Appendix 1 shows a comparison of the socio-demographic characteristics of the participants who filled in the survey at T_0, both T_0 and T_1, and only T_0 (cf. Shadish et al., 2002: 334-336). The results reveal that the non-response caused few noticeable developments in the characteristics of the participants. The χ^2 tests indicate that the changes are only significant for age and education, which have previously been found to be important predictors or nonresponse and attrition (Karjalainen and Rapeli, 2014). However, even though the changes are significant, the eta scores suggest that the relationships are not particularly strong (cf. Cohen 1998), meaning the variables do poorly in explaining who filled out both rounds. This suggests that the
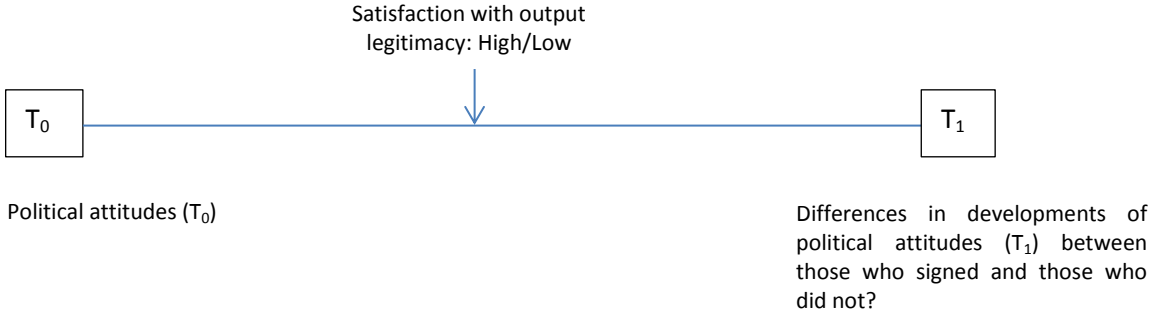
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[4] Two reminders about the survey were send to the users who had not yet fill in the survey, the last of which was specifically directed at those who completed the survey at T_0.

changes are less decisive than the χ^2 values indicate. Hence, the attrition has not systematically altered the characteristics of the participants, since it is predominantly random in character.[5]

To further ensure that the differences that do occur do not affect the ensuing results, the hypotheses are tested using One-Way Analysis of Covariance (ANCOVA) in addition to traditional t-tests. ANCOVA is an extension of ANOVA that makes it possible to control for possible confounding factors. In addition to age and education, the analyses also control for gender, since all three factors may explain initial levels of political attitudes (Dalton, 2004; Norris, 2011). This therefore constitutes a more stringent test of the impact of satisfaction with output and throughput legitimacy.

To test H1 a question asking the respondents whether they signed the initiative to ban fur farming is used (*Did you sign the initiative to ban fur farming?*). Although this does not make it possible to discern differences in the intensity of the preferences, it does make it possible to identify those who expressed manifest support for the proposal by signing the initiative. The idea is that those who supported the initiative have low satisfaction with output legitimacy and vice versa for those who did not support the initiative in accordance with the illustration in figure 1.[6]

FIGURE 1   EXAMINING THE IMPACT OF OUTPUT LEGITIMACY ON POLITICAL ATTITUDES

Satisfaction with output legitimacy: High/Low

T_0 T_1

Political attitudes (T_0)

Differences in developments of political attitudes (T_1) between those who signed and those who did not?
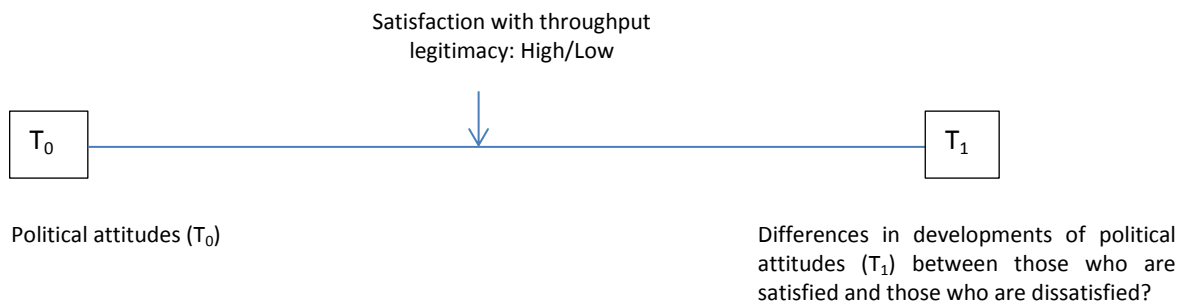
The analyses exclude 44 respondents who did not remember whether they signed or not, leaving 377 respondents for this test.

To test H2 a question asking the respondents for the extent to which they agree with a statement that Parliament handled the initiative in a suitable manner on a five-point Likert scale 'Strongly agree'-'Strongly disagree'. Those who are dissatisfied with the handling of Parliament have low satisfaction with throughput legitimacy and vice versa for those who are satisfied, as shown in figure 2.

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[5] The differences in political attitudes between all respondents at T_0 and those who signed at T_0 and T_1 are also minor, which further indicates that the attrition does not influence the results (results not shown).
[6] Those who did not sign may also be conceived as a control group for the intervention of supporting the initiative as is customary in experimental research. However, in this case there are theoretical reasons for believing that both supporting and not supporting can affect developments in attitudes.

FIGURE 2   EXAMINING THE IMPACT OF THROUGHPUT LEGITIMACY ON POLITICAL ATTITUDES

T_0

T_1

Satisfaction with throughput legitimacy: High/Low

Political attitudes (T_0)

Differences in developments of political attitudes (T_1) between those who are satisfied and those who are dissatisfied?

For this question, 78 respondents neither agreed nor disagreed and are subsequently excluded from the analyses, leaving 343 respondents for testing this hypothesis.[7]

The political attitudes that form the dependent variables of the study are political trust, satisfaction with democracy, and internal political efficacy. While the former two have been considered prominent indicators of political support (Norris, 1999; Dalton, 2004), the last indicator has also been considered central for the vitality of representative democracies since citizens should feel they can affect political matters should the need arise (Almond and Verba, 1963; Stoker, 2006).

Political trust is often considered a one-dimensional construct measured with a single index (Marien 2011). However, Easton (1965: 165) distinguishes between different objects of support within the political system: the authorities, the regime, and the political community (Easton, 1965: 157), a distinction that has been elaborated in later work (Norris, 1999; Dalton, 2004). Since it can be expected that political actors directly involved in the decision making are affected disproportionality, the empirical analyses also examine developments in five democratic institutions and actors: Trust in parliament, Trust in politicians, Trust in political parties, Trust in president, and Trust in government. For each of these, the respondents indicated the level of trust on a scale 0-10 with 10 indicating the highest level of trust at both T_0 and T_1. In addition to this, the analyses examine developments in a combined index of political trust including all of these (Cronbach's alpha T_0 = 0.71; T_1=0.92).

Satisfaction with democracy is measured with a straightforward question where respondents at both T_0 and T_1 indicated their satisfaction with democracy on a scale 0-10 with 10 being the highest level of satisfaction. Internal political efficacy is measured with two questions concerning how confident the respondent feel about his or hers ability to influence political decisions ('How often does politics seem so complicated that you can't really understand what is going on?' and 'How difficult or easy do you find it to make your mind up about political issues?'). Both items were scored on five-point Likert scales, but due to a mistake in the ordering of the answer alternatives presented to the respondents

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[7] While it may be expected that there is a strong connection between satisfaction with output and throughput legitimacy – since those who do not get what they want tend also to be dissatisfied with the process – the relationship is empirically not particularly strong with a correlation coefficient of about 0.19 between the two indicators. Hence it is possible to identify separate effects from satisfaction with output and throughput legitimacy.

for the latter question, the 'Always' and 'Often' alternatives had to be collapsed. For this reason, the combined index is recoded to range from 0-7.

Information on all variables is in appendix 2.

Empirical analysis

Table 1 shows the overall developments in the political attitudes that occurred from T_0 to T_1.

TABLE 1   DEVELOPMENTS IN POLITICAL TRUST, SATISFACTION WITH DEMOCRACY AND INTERNAL POLITICAL EFFICACY, T_0-T_1

	T_0			T_1		
	Mean	*SD*	*N*	*Mean*	*SD*	*N*
Political trust index (0-50)	28.44	8.94	419	23.75	11.49	413
Trust parliament (0-10)	5.61	2.39	419	5.35	2.57	420
Trust politicians (0-10)	5.76	2.96	420	4.24	2.45	420
Trust political parties (0-10)	5.39	2.56	420	3.95	2.55	418
Trust president (0-10)	5.76	3.15	420	5.66	2.83	418
Trust government (0-10)	5.94	2.83	419	4.57	2.82	417
Satisfaction democracy (0-10)	5.19	2.44	410	5.21	2.53	421
Internal political efficacy (0-7)	3.66	1.41	421	3.99	1.39	419

Note: The entries show mean scores and standard deviations for political trust, satisfaction with democracy and Internal political efficacy. T_0: Time of signing up; T_1: After Parliament's decision to reject initiative to ban fur farming.

For political trust, the attitudes generally deteriorated from T_0 to T_1, while there were minor improvements in the scores for satisfaction with democracy and internal political efficacy. However, these developments cannot be attributed to the crowdsourcing experience, but are more likely to be caused by other factors such as the general deterioration in the economy in Finland during this time. The relevant question is instead how these developments are affected by differences in satisfaction with output and throughput legitimacy? Table 2 shows the results for H1 and the impact of satisfaction with output legitimacy.

Those who supported the initiative to ban fur farming, and therefore have low satisfaction with output legitimacy, as expected experienced a significantly stronger drop in political trust of -6.3 points on the 0-50 scale compared to a more modest average drop of -3.4 for those with high satisfaction with output legitimacy. While the 2.9 points difference on a scale from 0-50 may not seem dramatic, it does show that low satisfaction with output legitimacy for the Citizens' initiative to ban fur farming had an adverse effect on political trust.

TABLE 2   RESULTS FOR THE IMPACT OF OUTPUT LEGITIMACY ON POLITICAL ATTITUDES

Variable (range)	Output legitimacy	n	Mean T_0	Mean T_1	Change: Mean (SD)	T-test (t, DF): p	ANCOVA (F, DF): p
Political trust index (0-50)	Low	133	27.9	21.6	-6.3 (8.6)	(-2.91, 366): 0.004	(9.21, 1, 321): 0.003
	High	235	28.5	25.1	-3.4 (9.3)		
Trust parliament (0-10)	Low	135	5.5	5.0	-0.5 (1.8)	(-1.54, 372): 0.125	(1.82, 1, 357): 0.179
	High	239	5.7	5.6	-0.2 (2.3)		
Trust politicians (0-10)	Low	135	5.6	4.0	-1.7 (3.8)	(-0.87, 373): 0.383	(0.85, 1, 357): 0.356
	High	240	5.8	4.4	-1.4 (3.6)		
Trust political parties (0-10)	Low	134	5.4	4.0	-1.4 (2.5)	(-0.08, 371): 0.934	(0.09, 1, 355): 0.766
	High	239	5.4	4.0	-1.4 (2.5)		
Trust president (0-10)	Low	135	5.6	4.8	-0.8 (3.0)	(-3.22, 371): 0.001	(12.45, 1, 355): 0.000
	High	238	5.7	6.2	0.5 (4.1)		
Trust government (0-10)	Low	134	5.8	4.0	-1.8 (2.3)	(-2.38, 370): 0.018	(6.12, 1, 355): 0.014
	High	238	5.9	4.9	-1.1 (3.1)		
Satisfaction democracy (0-10)	Low	132	4.9	5.0	0.0 (1.8)	(-0.11, 366): 0.909	(0.25, 1, 357): 0.619
	High	236	5.3	5.4	0.1 (1.8)		
Internal political efficacy (0-7)	Low	135	3.7	4.0	0.3 (1.2)	(-0.35, 373): 0.724	(0.01, 1, 355): 0.906
	High	240	3.7	4.0	0.4 (1.2)		

Note: The table reports developments in mean scores of political attitudes for those who signed compared to those who did not sign the initiative. T-test reports the t-score, degrees of freedom (DF) and the significance with equal variance assumed. ANCOVA reports the F-score, degrees of freedom for outcome and error term (DF) and the significance after controlling for age, gender and education.

The developments for the different kinds of political trust show that the differences are only significant for two types of political trust. Unsurprisingly, those with low satisfaction with output legitimacy became less trusting of the government widely perceived to be in charge of the handling in Parliament. More surprisingly, the developments are even more striking when it comes to trust in the President, who is not formally involved in the decision-making for the Citizens' initiatives. Here those with low satisfaction with output legitimacy experienced a negative development in the level of trust of -0.8 while those with high satisfaction with output legitimacy experienced a positive development of 0.5. This may at least partly be a spill-over from the 2012 presidential elections, where the current President Sauli Niinistö won the second run against Pekka Haavisto from the Green League. Since the supporters of the initiative to ban fur farming are likely to have supported Haavisto, the outcome may have rekindled the animosities from the elections, even if Niinistö was not even particularly outspoken on the matter. Nevertheless, those with low satisfaction lost trust in all government institutions and actors regardless of whether these actors were actually involved in the decision-making.

There are no significant differences for satisfaction with democracy or internal political efficacy, where both groups experienced miniscule gains from T_0 to T_1. H1 can therefore only be confirmed for political trust, in particular trust in the government and trust in the president.

Table 3 shows the results for H2 and the impact of throughput legitimacy.

TABLE 3 RESULTS FOR THE IMPACT OF THROUGHPUT LEGITIMACY ON POLITICAL ATTITUDES

Variable (range)	Throughput legitimacy	n	Mean T_0	Mean T_1	Change: Mean (SD)	T-test (t, DF): p	ANCOVA (F, DF): p
Political trust index (0-50)	Low	185	26.9	19.5	-7.4 (8.7)	(-6.19, 336): 0.000	(30.63, 1, 322): 0.000
	High	153	31.3	29.8	-1.5 (8.8)		
Trust parliament (0-10)	Low	186	5.0	4.5	-0.5 (2.1)	(-2.72, 340): 0.007	(2.61, 1, 326): 0.107
	High	156	6.5	6.6	0.1 (1.8)		
Trust politicians (0-10)	Low	186	5.4	3.5	-1.9 (3.4)	(-2.64, 340): 0.009	(5.93, 1, 326): 0.015
	High	156	6.2	5.3	-0.9 (4.0)		
Trust political parties (0-10)	Low	186	4.9	3.1	-1.7 (2.5)	(-2.53, 339): 0.012	(5.67, 1, 325): 0.018
	High	155	6.1	5.0	-1.1 (2.4)		
Trust president (0-10)	Low	185	5.9	4.7	-1.2 (3.1)	(-5.38, 338): 0.000	(24.25, 1, 324): 0.000
	High	155	6.1	7.0	0.9 (3.9)		
Trust government (0-10)	Low	186	5.8	3.7	-2.1 (2.1)	(-4.63, 339): 0.000	21.30, 1, 325): 0.000
	High	155	6.4	5.7	-0.7 (3.3)		
Satisfaction democracy (0-10)	Low	182	4.6	4.5	-0.2 (1.8)	(-2.04, 332): 0.043	(18.11, 1, 326): 0.014
	High	152	6.1	6.4	0.2 (1.7)		
Internal political efficacy (0-7)	Low	185	3.5	3.8	0.3 (1.2)	(-0.27, 340): 0.786	(0.00, 1, 325): 0.970
	High	157	4.0	4.3	0.3 (1.1)		

Note: The table reports developments in mean scores of political attitudes for those who are satisfied compared to those who are not satisfied with the process. T-test reports the t-score, degrees of freedom (DF) and the significance with equal variance assumed. ANCOVA reports the F-score, degrees of freedom for outcome and error term (DF) and the significance after controlling for age, gender and education.

Throughput legitimacy has the expected impact on political trust, since those with low satisfaction with throughput legitimacy experienced a drop in political trust of -7.4 compared to a slight drop in the level of trust of -1.5 for those with high satisfaction with throughput legitimacy.[8] A similar result is found for the five kinds of political trust, where those with low satisfaction with throughput legitimacy experienced stronger drops for all five kinds of political trust. Once again, this also goes for the President, where those with high satisfaction with throughput legitimacy experienced a positive development in trust of 0.9, while does with low satisfaction experienced a drop of -1.2 points.

The differences are also significant for satisfaction with democracy, where those with low satisfaction with throughput legitimacy also lost faith in democracy more generally. While the average change of -0.2 on the 0-10 scale is not particularly pronounced, it contrasts sharply with the positive development of 0.2 for those with high satisfaction with throughput legitimacy. Hence, dissatisfaction with throughput legitimacy may spill over into a more general dissatisfaction with the functioning of democracy.

The differences for internal political efficacy are not significant. It is nonetheless worth noting that even those with low satisfaction with throughput legitimacy experienced a rise in the level of internal political efficacy from T_0 to T_1. While this positive development cannot be attributed to the citizens'

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[8] It may be argued that there is a tautological relationship since those with low levels of political trust are more likely to have low satisfaction with throughput legitimacy. This interpretation is supported by the lower levels of trust reported at T_0 by those with low satisfaction. However, those who are initially dissatisfied are unlikely to experience marked drops due to the ceiling effect of the index used as a measure. The observed changes in political trust are therefore unlikely to be caused by initially lower levels of trust leading to dissatisfaction with the decision-making for the Citizens' initiative.

initiative, it does entail that the process did not have any adverse effects in this regard. Hypothesis 2 is then confirmed for political trust and satisfaction with democracy.

These results suggest that satisfaction with output and throughput legitimacy shapes developments in political attitudes among the participants. Furthermore, crowdsourcing legislation via the Citizens' initiative has so far not had unequivocal positive effects on political legitimacy. However, this does not entail that the participants believe that crowdsourcing does little to improve the functioning of democracy. While it is not possible to give definitive answers to this question, the data make it possible to examine participants' attitudes towards the prospects of crowdsourcing following the decision of Parliament.

TABLE 4   ATTITUDES TOWARD CROWDSOURCING AMONG THE PARTICIPANTS

	T_0	T_1
Does the possibility to make a citizen initiative in your opinion help improve the Finnish democracy?	**Means (0-10)**	
All	7.68	7.23
High satisfaction with output legitimacy	7.71	7.20
Low satisfaction with output legitimacy	7.65	7.17
High satisfaction with throughput legitimacy	7.86	7.59
Low satisfaction with throughput legitimacy	7.70	7.13
	% completely or somewhat agree	
To support representative democracy, public debates on policy issues should be organised for ordinary people	89.3	86.9
I myself would like to attend public debates organised for ordinary people	68.2	60.5

	Only T_1	
	% completely or somewhat agree	**% completely or somewhat disagree**
The citizen initiatives helped raise important issues in the public debate in the media	82.3	8.1
The citizen initiatives helped raise important issues in private debates among friends, family and/or colleagues	72.2	12.1

	Yes	**Don't know**	**No**
Did you take part in the possibilities for discussion to help formulate a citizen initiative?	7.0	6.2	86.8
In your opinion, were the discussions helpful in creating new ideas for the initiatives?	19.4	77.9	2.7
In your opinion, did the discussions increase the quality of the final initiatives?	13.3	82.8	3.6

The results for the first question concerning attitudes towards the Citizens' initiative improving the functioning of democracy show a minor decline in the belief that the Citizens' initiative improves democracy. However, the developments are not statistically significant, nor are there significant differences depending on satisfaction with output or throughput legitimacy. Furthermore, even if there has been a limited decline in the belief that crowdsourcing legislation improves democracy, the overall rating of 7.23 at T_1 still indicates a positive attitude on the 0-10 scale.

The two following questions do not directly concern crowdsourcing, but concern the use of public debates in connection to policy making, which may be considered necessary for crowdsourcing legislation as well. Here there was a slight decline in the percentage of participants who believe public debates should be arranged and a more marked decline in those willing to participate. Nevertheless, the majority remains in favour of using (86.9 %) and taking part in (60.5 %) public debates for policy making.

The remaining questions were only asked at T_1 following the decision of Parliament. The first two questions concern whether the initiative helped nurture debate on issues concerning fur farming in public and in private. While these questions are not directly relevant for crowdsourcing, they indicate whether the participants thought that the process helped create attention for the issues involved, which may be considered important from a democratic perspective. The participants uniformly agree that important issues had been raised in public and in private, which indicate that crowdsourcing legislation can have important secondary effects by raising awareness in the general public.

The final three questions concern the possibilities for citizen deliberation on *Avoin Ministeriö*. The first show that only 7 per cent had taken advantage of the possibilities to help formulate an initiative. Although this may seem modest, similar figures are customary for other experiences with crowdsourcing (cf. Howe, 2008). The vast majority are uncertain as to whether these possibilities were helpful for coming up with new ideas and improving the quality of the initiatives. Nevertheless, only small percentages are directly negative in their views while about 19 % thought that the possibilities on *Avoin Ministeriö* were helpful for coming up with new ideas, and about 13 % thought that they helped increase the quality of the initiatives. While these results are not an overwhelming vote of confidence in favour of crowdsourcing, they are hardly a uniform dismissal either.

Conclusions

These results have important implications for the prospects of restoring political legitimacy by crowdsourcing legislation. Even if the current data are not representative for the Finnish population, the results do indicate how taking part in crowdsourcing affects the attitudes of the participants. While the results in no way indicate that crowdsourcing legislation cannot have positive effects on political legitimacy, they do show that this vision faces some challenges.

First of all, the results for the first hypothesis show that satisfaction with output legitimacy matters, since those who supported the initiative to ban fur farming experienced a drop in political trust as a result of not achieving this outcome. This shows that political legitimacy may well decline when participants do not get the intended result (cf. Budge, 2012). Hence, if crowdsourcing legislation in Finland is to have a positive impact on political legitimacy, it is important that it can help produce popular Citizens' initiatives that are subsequently adopted by Parliament.

Furthermore, the result for the second hypothesis clearly showed that output legitimacy is not necessarily the most important aspect. Political trust and satisfaction with democracy were affected by satisfaction with throughput legitimacy, or the extent to which the participants thought Parliament handled the matter in an appropriate fashion. Hence, it is of paramount importance that the whole process is conceived as legitimate (cf. Carman, 2010; Esaiasson et al., 2012).

The good news is that the findings clearly suggest that crowdsourcing can potentially increase the throughput legitimacy by creating a fairer and more trustworthy decision-making process. Furthermore, activists generally seem to be willing to accept not getting the desired outcome, as long as they perceive the process to be fair. In connection to this, it is worth noting that policy outcomes are relatively easy to establish for citizens, whereas forming an accurate opinion of the processes requires much more effort on behalf of citizens. Hence, decision makers need to give serious consideration to the transparency and publicity of the decision making processes if they want public attitudes to reflect the realities of the political decision making.

On the other hand, the findings support the ideas of Blaug (2002), who argues that democratic innovations perceived as mere windows dressing could be harmful for democratic legitimacy. For crowdsourcing to improve democratic legitimacy in Finland, it is important that each initiative is given due consideration. Were citizens to consider the decision-making processes to be rigged, it is likely that it would create even more negative attitudes towards the authorities.

The political attitude most clearly affected by output and throughput legitimacy was political trust, which is unsurprising since this has been argued to fluctuate in the short term (Norris, 2011: 21). It may be considered positive that the negative developments are modest when it comes to core representative institutions such as the parliament. On the other hand, the negative effects also affect actors not directly involved in the decision making, which could suggest that the implications could become more pervasive over time. Although untrusting or critical citizens are not necessarily bad for democracy (Norris, 1999), there is a risk that the critical attitudes develop into a harmful political disenchantment, which in the long run could undermine democratic legitimacy (Mair, 2006; Stoker, 2006: 44-46; Hay 2007). Any negative effects on political trust from crowdsourcing legislation should therefore not be taken lightly.

On a more positive note, the participants generally still believe that crowdsourcing legislation can help improve democracy in Finland. Even if the belief in the Citizens' initiative as a tool for empowering citizens does drop somewhat among all participants, there are no systematic differences in this development. Furthermore, the participants generally still retain faith in central ideas associated with crowdsourcing. Hence, crowdsourcing legislation has an unfulfilled potential for improving political legitimacy.

Appendix 1   Attrition and socio-demographic characteristics

	All respondents (T$_0$, n=815)		Dropouts (only T$_0$, n=394)		Final population (T$_0$ and T$_1$, n=421)		χ^2	Eta
	#	%	#	%	#	%		
Age							0.048	0.12
0-20	92	11.5	55	14.1	37	9.1		
21-30	311	39.0	159	40.7	152	37.3		
31-40	214	26.8	105	26.9	109	26.8		
41-50	90	11.3	37	9.5	53	13.0		
51-60	48	6.0	18	4.6	30	7.4		
61-	43	5.4	17	4.3	26	6.4		
(n)	798	100.0	391	100.0	407	100.0		
Gender							0.325	0.04
Male	525	66.0	249	64.3	276	67.6		
Female	270	34.0	138	35.7	132	32.4		
(n)	795	100.0	387	100.0	408	100.0		
Education							0.009	0.12
Basic education or less (ISCED 2 or less)	74	9.2	48	12.2	26	6.4		
Upper secondary /post-secondary non tertiary (ISCED 3/4)	318	39.7	164	41.6	154	37.8		
University degree or similar (ISCED 5)	379	47.3	169	42.9	210	51.6		
Second stage of tertiary education (ISCED 6)	30	3.7	13	3.3	17	4.2		
(n)	801	100	394	100	407	100		
Language							0.122	0.07
Finnish	756	94.7	366	93.1	390	96.3		
Swedish	38	4.8	24	6.1	14	3.5		
Other	4	0.5	3	0.8	1	0.2		
(n)	798	100	393	100	405	100		
Municipality							0.653	0.10
Helsinki	179	22.0	89	22.6	90	21.4		
Tampere	80	9.8	34	8.6	46	10.9		
Espoo	62	7.6	31	7.9	31	7.4		
Turku	52	6.4	27	6.9	25	5.9		
Other	354	54.2	174	44.2	180	42.8		
(n)	815	100	394	100	421	100		

Note: The entries are number of respondents and percentages belonging to each category who filled in the survey at T$_0$, those who dropped out, and those who filled in both rounds. χ^2 and eta scores indicate the strengths of the relationships between the categories for each characteristic and dropping out or not.

Appendix 2   Variables, T_0 and T_1

Variable	Question	Coding of variable
T_0 and T_1		
Internal efficacy 1	How often does politics seem so complicated that you can't really understand what is going on?	Likert scales with 5 categories (Always – Never*; Never – frequently); recoded into index 0-7.
Internal efficacy 2	How difficult or easy do you find it to make your mind up about political issues?	
Political trust: Parliament	How much you personally trust each of the institutions: National parliament	11 categories: Not at all- complete trust; coded 0-10
Political trust: Politicians	How much you personally trust each of the institutions: Politicians	11 categories: Not at all- complete trust; coded 0-10
Political trust: Political parties	How much you personally trust each of the institutions: Political parties	11 categories: Not at all- complete trust; coded 0-10
Political trust: President	How much you personally trust each of the institutions: President	11 categories: Not at all- complete trust; coded 0-10
Political trust: Government	How much you personally trust each of the institutions: Finnish government	11 categories: Not at all- complete trust; coded 0-10
Political trust index		Combined index measuring extent of political trust; coded 0-50
Satisfaction with democracy	How satisfied are you with the way democracy works in Finland?	11 categories: Extremely dissatisfied- Extremely satisfied; coded 0-10
Satisfaction with citizen initiative	Does the possibility to make a citizen initiative in your opinion help improve the Finnish democracy?	11 categories: No help at all- helps a lot; coded 0-10
Public debate 1	To support representative democracy, public debates on policy issues should be organised for ordinary people	4 categories: Strongly agree – Strongly disagree
Public debate 2	I myself would like to attend public debates organised for ordinary people	
Only T_0		
Socio-demographic characteristics		
Age	Year of birth	Written in numbers; recoded to age in years by subtracting answer from 2013
Gender	Gender	2 categories: Male/female; coded 0/1
Home municipality	Home municipality	Answer chosen from list; only municipalities with most participants shown
Education	What is the highest level of education you have achieved?	6 categories: Less than basic school – PhD or similar
Language	What is your mother tongue?	3 categories: Finnish, Swedish, Other
Only T_1		
Treatments		
Satisfaction with output legitimacy	Did you sign the initiative to ban fur farming?	3 Categories: Yes, No, Don't know/Can't remember
Satisfaction with throughput legitimacy	Parliament handled the citizen initiatives in a suitable manner	5 categories: Agree completely – Completely disagree
Crowdsourcing attitudes		
Issues in public	The citizen initiatives helped raise important issues in the public debate in the media	5 categories: Agree completely – Completely disagree
Issues in private	The citizen initiatives helped raise important issues in private debates among friends, family and/or colleagues	5 categories: Agree completely – Completely disagree
Avoin Ministeriö 1	Did you take part in the possibilities for discussion to help formulate a citizen initiative?	3 categories: Yes, No, Don't know/can't remember
Avoin Ministeriö 2	In your opinion, were the discussions helpful in creating new ideas for the initiatives?	3 categories: Yes, No, Don't know/can't remember
Avoin Ministeriö 3	In your opinion, did the discussions increase the quality of the final initiatives?	3 categories: Yes, No, Don't know/can't remember

Note: * Due to a mistake in the answer alternative presented to the respondents, the 'Always' and 'Often' alternatives have been collapsed in the analyses.

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