

Does Crowdsourcing Legislation Increase Political Legitimacy? The Case of *Avoin Ministeriö* in Finland

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Crowdsourcing legislation gives ordinary citizens, rather than political and bureaucratic elites, the chance to cooperate to come up with innovative new policies. By increasing popular involvement, representative democracies hope to restock dwindling reserves of political legitimacy. However, it is still not clear how involvement in legislative decision making affects the attitudes of the participants. It is therefore of central concern to establish whether crowdsourcing can actually help restore political legitimacy by creating more positive attitudes toward the political system. This article contributes to this research agenda by examining the developments in attitudes among the users on the Finnish website Avoin Ministeriö ("Open Ministry") which orchestrates crowdsourcing of legislation by providing online tools for deliberating ideas for citizens' initiatives. The developments in attitudes are investigated with a two-stage survey of 421 respondents who answered 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, it has the potential to do so.

KEY WORDS: crowdsourcing, political legitimacy, political attitudes, citizen initiatives, democratic innovation, legislation, collective action

Introduction

Crowdsourcing legislation is one of the emerging ways to engage citizens in legislative decision making in representative democracies (Aitamurto, 2012; Brabham, 2013; Howe, 2008). 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 with citizens' initiatives, which are democratic innovations found in several European countries and at the European level (Setälä & 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 unclear how involvement in 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 toward the political system.

This article contributes to this research agenda by examining the developments in attitudes among the users on the Finnish website *Avoin Ministeriö* ("Open Ministry"), which orchestrates crowdsourcing of legislation by providing online tools for deliberating ideas for citizens' initiatives. Finland introduced the Citizens' Initiative in 2012, but so far, there has only been a final decision on a single citizens' initiative, where the Finnish Parliament in June 2013 rejected an initiative to ban fur farming. We here examine the developments in attitudes among the participants on *Avoin Ministeriö* 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. The results suggest that crowdsourcing legislation has yet to affect political legitimacy in a positive manner, but it has the potential to do so.

How to Crowdsource Legitimacy?

Most representative democracies have struggled with their political legitimacy in recent decades, where sceptical attitudes toward the political authorities have increased, while participation in traditional political activities such as elections and political parties has declined (Dalton, 2004; Mair, 2006; Hay, 2007). Scholars argue that the Internet can boost democratic legitimacy by allowing greater citizen input into political decision making (Coleman & Blumler, 2009; Loader & Mercea, 2012). Crowdsourcing is one such possibility (scholars have previously used similar notions such as co-creation and coproduction; Voorberg, Bekkers, & Tummers, 2014). However, the idea of crowdsourcing differs in central aspects, even if no universal agreement exists on what exactly crowdsourcing entails. According to some accounts, crowdsourcing is a broad concept that may also include traditional forms of collective action, such as elections (Howe, 2008). Brabham (2013, p. xix) has a more restrictive view of what is meant by crowdsourcing, 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 (2013) sees crowdsourcing as a relatively new phenomenon that is inherently connected to the possibilities provided by the Internet. It is particularly worth noting that he contends that simply voting is not crowdsourcing since this situates the locus of control primarily within the organization (Brabham, 2013, p. xxii). As we argue below, this conceptual disagreement has important consequences for whether the Finnish Citizens' Initiative constitutes an example of crowdsourcing.

Crowdsourcing can be used for democratic policymaking by establishing official channels that give citizens a say in decision making (cf. Aitamurto, 2012, p. 18). By tapping the combined intellectual resources of citizens, crowdsourcing surfaces innovative new proposals for policies that solve the problems they are meant to resolve. Although trained professionals are more likely to engage in crowdsourcing than amateurs (Brabham, 2012), this source of legislation transfers decision-making powers from politicians and bureaucrats to ordinary citizens. In this sense, crowdsourcing shares affinities with theories of deliberative and participatory democracy, which also emphasise the value of participation for the functioning of democracy (Pateman, 1970; Smith, 2012, p. 90).

The focus here is on whether and how taking part in crowdsourcing legislation can recreate democratic legitimacy, which scholars argue is the case for other participatory innovations (Fung & Wright, 2001; Geissel & 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). However, the belief that rules and regulations are entitled to be obeyed by virtue of who made the decision or how it was made is a central component of political legitimacy (Tyler, 2006). According to Beetham (1991, pp. 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 importance of citizens' attitudes toward the political system when discussing political legitimacy (cf. Tyler, 2006, p. 377).

Different aspects of political decision making can affect attitudes toward the political system. When discussing the legitimacy of the European Union, Schmidt (2013) distinguishes between input, output, and throughput legitimacy, and this distinction is helpful for establishing how crowdsourcing legislation can help restore participants' 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, p. 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, and the transparency of the information (Schmidt, 2013, pp. 5–7). This distinction highlights that citizens grant legitimacy to a particular political system for different reasons. In particular, both satisfaction with the policy outcome of the decision making (associated with output legitimacy), and the quality of the decision-making process (associated with throughput legitimacy), can affect how the attitudes of participants may develop as a result of their involvement. This article therefore examines how outcome and process satisfaction shape developments in political attitudes among participants in crowdsourcing.1

Outcome satisfaction hinges on crowdsourcing ensuring a policy outcome that more adequately reflects the preferences of the participants. Citizens get involved in achieving a specific outcome, and their evaluation of the experience

hinges on whether or not they achieve this outcome. Several scholars find a link between the policy performance of government and political dissatisfaction (McAllister, 1999; Hay, 2007; Norris, 2011, pp. 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. Outcome satisfaction is therefore likely to affect developments in political legitimacy.

Contrary to this, crowdsourcing can improve process satisfaction by improving the perceived quality of decision making, and ensuring that it is seen as fair and balanced. In this case, direct involvement may enhance legitimacy even when participants fail to achieve their desired outcome. Previous studies suggesting that individuals are willing to accept not getting their preferred outcome when the decision making is a fair process support this proposition (Carman, 2010, p. 736). Furthermore, both normative theories and experimental research suggest that procedural fairness is important for legitimacy beliefs, and that users must consider the decision-making process to be fair and balanced in order to accept the outcome willingly (Esaiasson, Gilljam, & Persson, 2012, pp. 788–90). The experiences gained through involvement can benefit the users and develop political legitimacy in a positive direction (cf. Grönlund, Setälä, & Herne, 2010).

It is important to determine whether outcome or process satisfaction explains developments in political attitudes to establish whether and how crowdsourcing legislation can increase democratic legitimacy in the long run. Previous studies find a connection between the use of initiatives and civic competencies (Smith, 2002), but few "before and after" studies scrutinize the accounts of how and why democratic innovations such as crowdsourcing matter (Geissel, 2012, p. 214). This article examines this question in the case of crowdsourcing legislation via *Avoin Ministeriö* in Finland.

The Citizens' Initiative in Finland and Avoin Ministeriö

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 & Setälä, 2012, p. 1). Depending on the type of citizens' initiative, the proposal is either followed by a referendum (full-scale initiatives) or a decision by Parliament (agenda initiatives). Citizens' Initiatives hereby give citizens a more direct say in political decision making. Even if citizens do not necessarily gain the final say over policy outcomes, they acquire agenda-setting powers otherwise held by elected politicians in representative democracies.

Finland introduced the Citizens' Initiative on March 1, 2012 to supplement the traditional representative structures. The introduction was also influenced by the concurrent plans for a European Citizens' Initiative in the European Union. According to the provisions, 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 50,000

Finnish citizens, the organizer can submit the initiative to the Finnish Parliament for consideration within six months. The 50,000 signatures must be collected within six months on paper or via an online system. After receiving an initiative, Parliament has to consider the proposal, but it can approve it in an amended form or reject it altogether, meaning it is an agenda initiative, where citizens gain agenda-setting powers but are not directly involved in the decision making.

At the time of writing, six citizens' initiatives have gathered the necessary 50,000 signatures, four of which have been handed over to Parliament, while one is still actively collecting signatures. Only one initiative went through the whole decision-making process. This concerns a citizens' initiative to ban fur farming, which Parliament decided to reject. While it was clear from the outset that there was little chance of Parliament approving the initiative, the issue was contentious and was debated in the media during the proceedings. On one hand, the fur-farming industry is a major industry in some Finnish regions, and Finland is the largest producer of fox pelts in Europe and a major supplier of mink hides, meaning considerable economic interests were at stake. On the other hand, animal rights groups documented several instances of animal cruelty on fur farms and generally argued that the abolishment of fur farming was necessary to ensure animal welfare. The industry counter-argued that a ban would only serve to increase fur farming in China, where animal cruelty is (even more) widespread, and a ban would therefore lead to worse conditions for fur animals.

The initiative to ban fur farming in Finland collected almost 70,000 statements of support. After the organizers submitted the proposal to Parliament in March 2013, committees and plenaries debated the proposal over the following months. Eventually, the responsible Agriculture and Forestry Committee decided against backing the ban. The plenary vote on the issue on June 19, 2013 replicated this outcome, since 146 of 200 MPs voted against the proposal in a plenary vote. The Green League was the only political party uniformly supportive of the initiative, while the other political parties in Parliament were largely opposed to the idea.

The Ministry of Justice launched an official online service (www.kansalaisaloite.fi) to support launching initiatives and collecting signatures. However, since this service does not include possibilities for debating the content of the initiatives, it is doubtful whether it can be considered to be a genuine instance of crowdsourcing according to the restrictive definition of Brabham (2013) introduced above. Nevertheless, it is possible to crowdsource citizens' initiatives since a grassroots website www.avoinministerio.fi complements the official channel. Finnish e-democracy activists³ maintain the site, which aims to allow individual citizens and nongovernmental organizations (NGOs) to crowdsource citizens' initiatives. The site launched immediately following the introduction of the Citizens' Initiative in Finland, but not all features were in place before autumn 2012. An important addition to the official web service for citizens' initiatives is that *Avoin Ministeriö* enables discussion of proposals for citizens' initiatives, thereby constituting an example of crowdsourcing proposals for legislation. The site has played a key role in gathering support for several of the citizens'

initiatives that have so far managed to collect the necessary 50,000 signatures. Studying the users on this site therefore provides a unique perspective on the effects of crowdsourcing legislation.

Data and Methods

This article examines the developments in attitudes among the participants on *Avoin Ministeriö* following the decision to reject the citizens' initiative to ban fur farming, in order to establish how outcome and process satisfaction shape developments in central political attitudes. We examine the following two hypotheses:

H1 Those with low outcome satisfaction experience significantly more negative developments in political attitudes compared with those with high outcome satisfaction.

H2 Those with low process satisfaction experience significantly more negative developments in political attitudes compared with those with high process satisfaction.

To examine these hypotheses, we use data collected through a survey administered twice:

T₀: September 2012: Initial survey to collect pretest attitudes.

 T_1 : July 2013: Posttest survey following Parliament's decision to reject the initiative to ban fur farming.

This research design gives the study a quasi-experimental character, which can help determine systematic differences in the development of attitudes between treatment groups, even if it cannot determine unequivocally whether the treatments cause the observed effects. Quasi-experimental studies are characterized by lacking random assignments to treatment groups, which are often done by self-selection (Shadish, Cook, & Campbell, 2002, pp. 13–14). In our study, we use a design with both control groups and pretests (Shadish et al., 2002, p. 136). The pretest is carried out at T₀, while the treatment groups consist of participants who indicate that they have high or low outcome and process satisfaction. The considerable time span between the two surveys means we cannot explain the overall developments in attitudes, but any differences between the treatment groups in these developments can be attributed to differences in outcome and process satisfaction.

Since these types of "before and after" studies are relatively rare (Geissel, 2012, p. 214), this study provides a unique examination of 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 more deeply 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) that offers ideal circumstances for studying the relationships of interest by making it

possible to detect effects of the decision-making process on political attitudes. While crowdsourcing legislation has yet to affect legislative outcomes, the involvement may still affect the attitudes of the users on *Avoin Ministeriö*. The study hereby gives an early indication of the impact of crowdsourcing on political legitimacy.

Self-selection was the only possibility for recruiting participants at T₀ since sending invitations to a representative sample was impossible due to the rapidly growing number of users at this point. We therefore placed an invitation to take part in the study on the *Avoin Ministeriö* website when the site started to collect signatures in late September 2012. This invitation was visible on the site whenever the user was present until he or she either took the survey or declined to do so. A total of 872 respondents filled in the initial survey.⁴ Of these, 57 had missing data on several variables, most likely due to technical problems, and were subsequently dropped from the data set, leaving us with 815 respondents who filled in the first round.

Following the decision of Parliament on the initiative to ban fur farming, an email was sent to all members on Avoin Ministeriö, inviting them to fill in the second round of the survey. A major challenge with this kind of study is attrition, that is, the loss of response from participants from one round to another (Hooghe Stolle, Mahéo, & Vissers, 2010 Shadish et al., 2002). After terminating the collection of surveys in the second round and cleaning out incomplete surveys, a total of 421 had completed both rounds, equating to an attrition rate of 48.3 percent.⁵ While less than ideal, such rates are not uncommon in experimental research (Shadish et al., 2002, p. 324), and similar response rates are common in Internet surveys (Manfreda & Vehovar, 2002). Furthermore, attrition is only a problem if it is nonrandom (Hooghe et al., 2010, p. 92). Appendix 1 shows a comparison of the sociodemographic characteristics of the participants who filled in the survey at T_0 , at both T_0 and T_1 , and only T_0 (cf. Shadish et al., 2002, pp. 334–36). The results reveal that the nonresponses caused few noticeable changes in the characteristics of the participants. The chisquare tests indicate that the changes are only significant for age and education, which are important predictors of nonresponse and attrition (Karjalainen & Rapeli, 2015). Nevertheless, even though the changes are significant, the Eta scores suggest that the relationships are weak (cf. Cohen, 1998), meaning the variables do poorly in explaining who filled out both rounds. Hence, the changes are less decisive than the chi-square values indicate, and since the attrition is random, it did not fundamentally alter the characteristics of the participants.6

To further ensure that the differences that did occur did not affect the results, the hypotheses were tested using a 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 hypotheses.

To test H1, we used a question asking the respondents whether they signed the initiative to ban fur farming ("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 the supporters who expressed manifest support for the proposal by signing the initiative. The idea is that the supporters have low outcome satisfaction and vice versa for those who did not support the initiative, in accordance with Figure 1.⁷ The analyses exclude 44 respondents who did not remember whether they had signed or not, leaving 377 respondents for this test.

To test H2, we used 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 5-point Likert scale from "strongly agree" to "strongly disagree." Here, those who were dissatisfied with the handling of Parliament have low process satisfaction, and vice versa for those who were satisfied, as shown in Figure 2. For this question, 78 respondents neither agreed nor disagreed and were subsequently excluded from the analyses, leaving 343 respondents for testing this hypothesis.⁸

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 are prominent indicators of political support (Dalton, 2004; Norris, 1999), the last indicator is central for the vitality of representative democracies since citizens should feel they can affect political matters, should the need arise (Almond & Verba, 1963; Stoker, 2006).

Scholars often consider political trust as a one-dimensional construct measured with a single index (Marien, 2011). However, Easton (1965, p. 165) distinguishes between different objects of support within the political system: the authorities, the regime, and the political community (Easton, 1965, p. 157), a distinction that later work elaborates on (Dalton, 2004; Norris, 1999). Since it can be expected that the experience affects trust in political actors directly involved in the decision making 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 of 0–10, with 10 indicating the highest level of trust at both T₀ and T₁. The

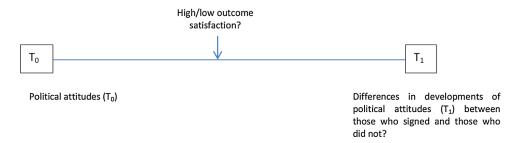


Figure 1. Examining the Impact of Outcome Satisfaction on Political Attitudes.

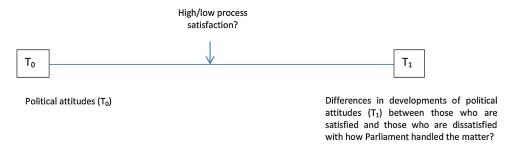


Figure 2. Examining the Impact of Process Satisfaction on Political Attitudes.

analyses also examine developments in a combined index of "political trust" that includes all five types (Cronbach's alpha $T_0 = 0.71$; $T_1 = 0.92$).

We measured "satisfaction with democracy" with a straightforward question, where respondents at both T_0 and T_1 indicated their satisfaction with democracy on a scale of 0–10, with 10 being the highest level of satisfaction. For "internal political efficacy," we used two questions concerning how confident the respondent feels about his or her 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 up your mind about political issues?"). Both items were scored on 5-point Likert scales, but due to a mistake in the ordering of the answer alternatives presented to the respondents for the latter question, we had to collapse the "always" and "often" alternatives. For this reason, the combined index was recoded to range from 0 to 7. Information on all variables is given in Appendix 2.

Empirical Analysis

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

Table 1. Developments in Political	Trust, Satisfaction	With Democracy an	d 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

Notes: 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 deteriorated from T_0 to T_1 , while there were minor improvements in the scores for satisfaction with democracy and internal political efficacy. It is unlikely that the crowdsourcing experience caused these overall developments since many factors affect the level of political legitimacy, not least a general deterioration in economic conditions in Finland during this time. The relevant question is instead how differences in satisfaction with outcomes and processes affect these developments. Table 2 shows the results for H1 and the impact of outcome satisfaction.

The supporters of the initiative to ban fur farming, who have low outcome satisfaction, as expected experienced a significantly stronger drop in political trust of -6.3 points on the 0–50 scale compared with a more modest average drop of -3.4 for those with high outcome satisfaction. While the 2.9 points difference on a scale from 0 to 50 may not seem dramatic, it shows that low outcome satisfaction for the citizens' initiative to ban fur farming had an adverse effect on political trust among the participants.

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 outcome satisfaction 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 outcome satisfaction experienced a negative development in the level of trust of -0.8, while those with high satisfaction with the outcome experienced a positive development of 0.5. This may at least partly be a spillover 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 outspoken on the matter. Nevertheless, those with low satisfaction lost trust in all government institutions and actors regardless of whether these actors were involved in the decision making. No significant differences exist for satisfaction with democracy or internal political efficacy, where both groups experienced miniscule gains from T₀ to T₁. 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 satisfaction with the process. The results are in line with expectations for political trust since those with low process satisfaction experienced a drop in political trust of -7.4 compared with a slight drop in the level of trust of -1.5 for those with high process satisfaction.⁹ A similar result was found for the five kinds of political trust, where those with low process satisfaction experienced stronger drops for all five kinds of political trust. Once again, this also goes for the president, where those with high satisfaction experienced a positive development in trust of 0.9, while those with low satisfaction experienced a drop of -1.2 points.

 Table 2. Results for the Impact of Outcome Satisfaction on Political Attitudes

Variable (Range)	Outcome Satisfaction	u	$\begin{array}{c} \text{Mean} \\ \text{T}_0 \end{array}$	$\begin{array}{c} \text{Mean} \\ \text{T}_1 \end{array}$	Change: Mean (SD)	t-Test (t, DF): p	ANCOVA (F, DF): p
Political trust index (0–50)	Low	133	27.9	21.6	(9.8) (9.9)	(-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)		

Notes: The table reports developments in mean scores of political attitudes for those who signed compared with 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.

Table 3. Results for the Impact of Process Satisfaction on Political Attitudes

Variable (Range)	Process Satisfaction	u	$Mean\;T_0$	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):	(30.63, 1, 322):
	High	153	31.3	29.8	-1.5 (8.8)	0.000	0.000
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	9.9	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)		

Notes: The table reports developments in mean scores of political attitudes for those who are satisfied compared with 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.

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?	Mear	ns (0–10)
All	7.68	7.23
High output satisfaction	7.71	7.20
Low output satisfaction	7.65	7.17
High process satisfaction	7.86	7.59
Low process satisfaction	7.70	7.13
		npletely or vhat agree
To support representative democracy, public debates on policy issues should be organized for ordinary people	89.3	86.9
I myself would like to attend public debates organized for ordinary people	68.2	60.5
	O	nly 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
Did you take part in the possibilities for discussion to help formulate a citizen initiative?	7.0	6.2
In your opinion, were the discussions helpful in creating new ideas for the initiatives?	19.4	77.9
In your opinion, did the discussions increase the quality of the final initiatives?	13.3	82.8

The differences are also significant for satisfaction with democracy, where those with low process satisfaction also lost faith in democracy more generally. While the average change of -0.2 on the 0-10 scale does not indicate a particularly strong effect, it contrasts sharply with the positive development of 0.2 for those with high process satisfaction. Hence, dissatisfaction with the process in this case led to 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 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' initiative, it does mean that the

process did not have adverse effects in this regard. ;1; is then confirmed for political trust and satisfaction with democracy.

These results suggest that outcome and process satisfaction both shape developments in political attitudes among the participants. Furthermore, crowd-sourcing legislation via citizens' initiatives has so far not had unequivocal positive effects on political legitimacy. However, this does not necessarily mean that the participants have lost belief in crowdsourcing as a way to improve 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 crowd-sourcing following the decision of Parliament. The results are shown in Table 4.

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 outcome or process satisfaction. Furthermore, even if there was a slight decline in the belief that crowdsourcing legislation improves democracy, the overall rating of 7.23 at T₁ 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 policymaking, which is also necessary for crowdsourcing legislation. 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 favor of using (86.9 percent) and taking part in (60.5 percent) public debates for policymaking.

The remaining questions are from 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 is important from a democratic perspective. The participants uniformly agreed that the initiative helped raise important issues in public and private debates, which indicates that crowdsourcing legislation has important secondary effects of raising awareness in the general public.

The final three questions concern the possibilities for citizen deliberation on *Avoin Ministeriö*. The first shows that only seven percent 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 were 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 were directly negative in their views, while about 19 percent thought that the possibilities on *Avoin Ministeriö* were helpful for coming up with new ideas, and about 13 percent thought that they increased the quality of the initiatives. While these results are not an overwhelming vote of confidence in favor of crowdsourcing, they are hardly a uniform dismissal either.

Conclusions

These results have important implications for the prospects of restoring political legitimacy through crowdsourcing legislation. While the results are not necessarily generalizable since the data are not representative for the Finnish population, the results show how taking part in crowdsourcing affects the political attitudes of the participants, which are central for the political legitimacy of the political system.

While the results in no way indicate that crowdsourcing legislation cannot improve political legitimacy among the participants, they do show that this vision faces some challenges. First of all, the results for the first hypothesis show that outcome satisfaction matters for how legitimacy develops among the participants. The supporters of the initiative to ban fur farming experienced a drop in political trust as a result of not achieving this outcome, which shows that political legitimacy may well decline when participants do not get the intended result (cf. Budge, 2012). Hence, if crowdsourcing legislation is to have a positive impact on political legitimacy, it is not enough to produce innovative solutions to perceived problems supported by a relatively small minority of 50,000 supporters; they also need the backing of a majority in Parliament. The legislative suggestion that emerges from crowdsourcing should therefore aim to obtain popular appeal rather than express fringe opinions of minorities with strong preferences.

Furthermore, the result for the second hypothesis clearly showed that the outcome is not necessarily the most important aspect for determining the developments in political attitudes among the participants. Process satisfaction, or the extent to which the participants thought Parliament handled the matter in an appropriate fashion, affected both political trust and satisfaction with democracy. 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 help increase throughput legitimacy by creating a more trustworthy decision-making process. The participants may well be willing to accept not achieving 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 the public, whereas forming an accurate opinion of the processes requires much more effort. Hence, decision makers need to give serious consideration to the transparency and publicity of decision-making processes if they want public attitudes to reflect the realities of political decision making. The findings thereby also support the ideas of Blaug (2002) who argues that democratic innovations perceived as mere window dressing could be harmful for democratic legitimacy. For crowdsourcing to improve democratic legitimacy among the participants, 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 toward the authorities.

While satisfaction with democracy was also affected by process satisfaction, the political attitude most clearly affected was political trust, which is more likely to fluctuate in the short term (Norris, 2011, p. 21). The negative developments were modest when it came to trust in core representative institutions, such as the Parliament. Since this suggests that the experience has not led to a declining confidence in the representative democracy as such, this could be considered positive for political legitimacy. 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), the critical attitudes could develop into a harmful political disenchantment that undermines democratic legitimacy in the long run (Hay, 2007; Mair, 2006; Stoker, 2006, pp. 44–46). Any negative effects from crowdsourcing legislation on the political trust of participants should therefore not be taken lightly.

On a more positive note, the participants generally still believed that crowdsourcing legislation can help improve democracy in Finland. Even if the belief in the Citizens' Initiative as a tool for empowering citizens drops somewhat among all participants, no systematic differences exist in this development. Furthermore, the participants generally still retained faith in central ideas associated with crowdsourcing. Hence, crowdsourcing legislation has an unful-filled potential for improving political legitimacy.

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Notes

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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, p. 70–71). However, the focus will be on throughput and output legitimacy since the current research design is unable to settle the impact on input legitimacy. These two forms of legitimacy are also of greater importance for crowdsourcing, which emphasizes processes and outcomes rather than the representativeness of those who make the contributions, which is the central concern when it comes to input legitimacy.
- 2. This description builds on www.kansalaisaloite.fi/fi/ohjeet/briefly-in-english.
- 3. They also founded an NGO under the same name, which takes action in campaigning for selected initiatives. The focus here is exclusively on the online services. A short description in English can be found at http://openministry.info/.
- 4. The number of registered users when terminating data collection for the first round was about 10,400, meaning about 8.1 percent filled in the questionnaire.

- 5. Two reminders about the survey were sent to the users who had not yet filled in the survey, the last of which was specifically directed at those who had completed the survey at T₀.
- 6. The differences in political attitudes between all respondents at T₀ and those who signed at T₀ and T₁ are also minor, which further indicates that the attrition does not influence the results (results not shown).
- 7. Although not signing does not necessarily imply opposition to the initiative to ban fur farming, their inactivity makes a preference for the status quo more likely. Furthermore, those who did not sign can also be conceived of as a control group for the intervention of supporting the initiative, as is customary in experimental research, meaning it is still meaningful to examine the differences in the developments.
- 8. While a strong connection between outcome and process satisfaction is theoretically likely 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 the two.
- 9. It may be argued that a tautological relationship exists between low levels of political support and process satisfaction, since those with low levels of political trust are per definition dissatisfied with the process. This interpretation is supported by the lower levels of trust reported at T₀ by those with low satisfaction. However, those who are initially dissatisfied are unlikely to experience marked drops because of 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.

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Appendix 1

	All Respondents $(T_0, n = 815)$		Final Population $(T_0 \text{ and } T_1, n = 421)$	Eta
	#	#	#	χ^2
Age				0.048 0.12
0–20	92	55	37	
21–30	311	159	152	
31–40	214	105	109	
41–50	90	37	53	
51–60	48	18	30	
61-	43	17	26	
(n)	798	391	407	
Gender				0.325 0.04
Male	525	249	276	
Female	270	138	132	
(n)	795	387	408	
Education				0.009 0.12
Basic education or less	74	48	26	
(ISCED 2 or less) Upper secondary/post-secondary non tertiary (ISCED 3/4)	318	164	154	
University degree or similar (ISCED 5)	379	169	210	
Second stage of tertiary education (ISCED 6)	30	13	17	
(n)	801	394	407	
Language				0.122 0.07
Finnish	756	366	390	
Swedish	38	24	14	
Other	4	3	1	
(n)	798	393	405	
Municipality				0.653 0.10
Helsinki	179	89	90	
Tampere	80	34	46	
Espoo	62	31	31	
Turku	52	27	25	
Other	354	174	180	
(n)	815	394	421	

Notes: 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

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	o .	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 organized for ordinary people	4 categories: Strongly agree– Strongly disagree
Public debate 2	I myself would like to attend public debates organized for ordinary people	
Only T ₀		
Socio-demographic characteristics Age	Year of birth	Written in numbers; recoded to age in years by subtracting
Gender	Gender	answer from 2013 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

Appendix 2 (Continued)

Variable	Question	Coding of Variable
Language	What is your mother tongue?	3 categories: Finnish, Swedish, Other
Only T ₁		
Treatments		
Outcome satisfaction	Did you sign the initiative to ban fur farming?	3 Categories: Yes, No, Don't know/Can't remember
Process satisfaction	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

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