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Hopes over fears: Can democratic deliberation increase positive emotions concerning the future?

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ABSTRACT

Deliberative mini-publics have often been considered to be a potential way to promote future-oriented thinking. Still, thinking about the future can be hard as it can evoke negative emotions such as stress and anxiety. This article establishes why a more positive outlook towards the future can benefit long-term decision-making. Then, it explores whether and to what extent deliberative mini-publics can facilitate thinking about the future by moderating negative emotions and encouraging positive emotions. We analyzed an online mini-public held in the region of Satakunta, Finland, organized to involve the public in the drafting process of a regional plan extending until the year 2050. In addition to the standard practices related to mini-publics, the Citizens' Assembly included an imaginary time travel exercise, Future Design, carried out with half of the participants. Our analysis makes use of both survey and qualitative data. We found that democratic deliberation can promote positive emotions, like hopefulness and compassion, and lessen negative emotions, such as fear and confusion, related to the future. There were, however, differences in how emotions developed in the various small groups. Interviews with participants shed further light onto how participants felt during the event and how their sentiments concerning the future changed.

1. Introduction

Uncertainty about the future can affect people emotionally. Many pressing and cumulative problems related to, for example, climate change and rising inequality, or long-term trends like advancing globalization and growing economic competition can cause stress for people (see for example Clayton, 2020; Colantone et al., 2019). On the other hand, optimism—though sometimes unfounded—does exist regarding the potential for technology or global markets to solve many of the world's current problems (see for example Arvesen et al., 2011, Dryzek, 2022). Emotional reactions to these problems can affect the preparedness of people to accept political decisions as well as their readiness to act to address long-term problems. Therefore, one way of helping people better think about and prepare for the future is to help them imagine the future in a way that connects, not with negative emotions like fear and helplessness, but with positive ones like hope and enthusiasm.

Emotions play an important role in intertemporal choices that individuals make (Sanna & Chang, 2006). Although “hot” emotional thinking is often associated with impulsive and short-sighted behavior—compared to “cool” rational thinking favoring long-term benefits—some socially oriented emotions, like gratitude and pride, may actually enhance longtermism (DeSteno, 2009). Some studies also show that the tendency to think about the future more often is related to optimism and a positive outlook (Fortunato &

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Furey, 2011; Tonn & Conrad, 2007). This suggests that evoking more positive emotions concerning the future could help people become more aware of the future and anticipate it.

The focus of this article is on deliberative mini-publics (see [Setälä & Smith, 2018](#)) and their potential in expanding and enhancing positive future thinking of citizens to help them better imagine possible futures. Deliberative mini-publics have been considered to be a potential way to strengthen long-term decision making (see for example [Kulha et al., 2021](#); [MacKenzie, 2016](#); [MacKenzie & Caluwaerts, 2021](#)). Yet, many of the connections between small-group deliberation and emotions remain unexplored. Some evidence indicates that participating in mini-publics can promote positive feelings, like happiness, among participants ([Johnson et al., 2017, 2019](#); [Morrell et al., 2022](#)). Therefore, the aim of this paper is to theorize and analyze how and to what extent group-deliberation about the future can promote positive emotions and lessen the burden of negative emotions related to anticipation of the future.

The analysis makes use of both survey and qualitative data, which originate from a Regional Citizens' Assembly held in the region of Satakunta, Finland during the fall of 2020. This mini-public aimed to contribute to a long-term regional planning process that looked ahead to the year 2050. In addition to the standard procedures of small group discussion rules and facilitation applied in most deliberative mini-publics (see for example [Setälä & Smith, 2018](#)), the Citizens' Assembly contained an experimental treatment where half of the deliberators were actively encouraged to imagine and to consider the perspectives of people living in the future.

Our results suggest that democratic deliberation can promote positive emotions and lessen negative emotions related to the future, at least for some people. Most notably, as a result of deliberation people reported more feelings of hopefulness about the future. At the same time, experiences of negative emotions, like fear and confusion, became less pronounced.

2. Theoretical background

In this chapter we address three important questions. First, how is thinking about the future connected to long-term decision making? Secondly, we consider why a more positive outlook towards the future is beneficial to long-term decision making. Lastly, we turn to deliberative mini-publics and address why it is plausible to expect that deliberation could enhance positive emotions concerning the future.

2.1. Emotions and long-term thinking

Many of the hopes and fears about the future are related to the fact that the future does not exist in the present, only the anticipation of it. Anticipation can be described as “[t]he form[s] the future takes in the present” ([Miller, 2018a](#), pp. 2). In order to anticipate the future, people must think about what is to come, in other words, imagine the future ([Nussbaum et al., 2006](#)). These images and the emotional responses they provoke help a person identify, firstly, what they desire, and secondly, the suitable means to reach the desired outcome ([Baumeister et al., 2016](#); [Baumgartner et al., 2008](#)). This ability of prospection is considered vital for various psychological processes ([Allen, 2019](#)). The way people think and feel about the future can be seen as an integral part of planning and enacting long-term public policies, as feelings also affect individuals' political choices ([Marcus et al., 2007](#)).

In general, people tend to anticipate the future through different, deterministic and often opposite, frames ([Miller, 2018b](#)). In some cases, it is even possible that these images take the form of a simple and inevitable dystopia, as in the case of the looming tragedy that is climate change (see for example [Arvesen et al., 2011](#); [Clayton, 2020](#); [Dryzek, 2022](#); [Miller, 2018b](#)). In truth, however, all of these anticipated scenarios of the future are false; that is, they do not manifest in full, and they oversimplify what is both possible and probable in the future. This is because the simple frames that act as templates for anticipation reduce the vast complexity and uncertainty of tomorrow and the great potential of the present moment to simple, restricted images. What will actually happen in the future may include some aspects of the anticipated futures, but it certainly will not be exactly the same as what is imagined.

The further the anticipated point of time goes into the future, the less we know about it and the more vague our images of that future become. This means that the general tendency to simplify increases the further in time one considers. However, people actually feel more confident about the images concerning the distant future than those of the near-term future, precisely because information about the distant future is more abstract ([Nussbaum et al., 2006](#)). In addition, decisions concerning near-term activities are more strongly influenced by the feasibility of those activities, whereas for activities in the distant future, the desirability of the result is more determining ([Lieberman & Trope, 1998](#)). At the same time, according to [Tonn and Conrad \(2007\)](#), people worry about the mid- to long-term future more than they do the near-term future, even though they think about the near future much more. These findings seem to suggest that abstract and vague information about the long term makes people envision the distant future as inevitable, which can cause worry, stress and feels of helplessness. Because thinking about the distant future can, in many cases, be a negative experience—or at least less pleasant than thinking about the present ([Baumeister et al., 2020](#))—people fulfil their pessimism by abstaining from doing it. Still, thoughts related to the distant future are experienced as more meaningful than thoughts related to the present (*ibid.*).

2.2. Positive emotions' benefits for long-term decision making

There are at least four reasons why a more positive outlook on the future could benefit long-term decision making. First, when thinking about the future becomes more pleasant, it also becomes more frequent ([Tonn & Conrad, 2007](#)). This is reasonable, as one would expect that the frequency of doing something is higher if it feels enjoyable rather than stressful or distressing.

Second, emotions affect individual decision making. While some emotions, like apathy and bitterness, can diminish agency, other emotions, such as hopefulness, can promote it ([Moore & Milkoreit, 2020](#); see also [Capelos & Demertzis, 2022](#)). Moreover, there is some

evidence that positive emotions may help in processing broad sets of information in the context of decision making (Aspinwall, 1998). Regarding the nature of decisions that individuals make, it has been proposed that negative emotions and stress can promote short-sighted behavior (Gray, 1999), whereas a positive mood curbs temporal discounting (Klapproth, 2011).

Third, emotions influence the way individuals work as a group. Markowitz and Shariff (2012) propose that active public engagement to tackle societal problems can be enhanced if policy challenges are presented in ways that connect with positive emotions, like hope, care, compassion and pride. This suggests that positive emotions regarding the future could make people more willing to support long-term policies and strengthen the will of individuals to cooperate in resolving problems that endanger future wellbeing.

Finally, positive emotions should lessen the lure of populist parties, who are often expected to support short-term-oriented protective policies (Guiso et al., 2017) presumed to pose a challenge to long-standing norms and institutions of liberal democracy, and who are seen as actors that erode political trust, social tolerance and cooperation both internationally and nationally (Norris & Inglehart, 2019). As Norris and Inglehart (2019, pp. 8) state, “[a]uthoritarian leaders and followers seek collective strength and security because of the triumph of fear over hope, of anxiety over confidence, of darkness over light”. Therefore, “[populist] leaders feed upon and foster the politics of fear, anger and resentment” (Norris & Inglehart, 2019, pp. 14). Populists’ bid for power and popular support are heavily connected to dystopian images regarding the future, fueling feelings such as insecurity and resentment (Salmela & von Scheve, 2017). These dystopias are related to the supposed failings of liberal democracy and economic globalization, and therefore such perceived threats as “waves” of illegal immigration, heightened vulnerability to crime and increase in violence, financial insecurity and “loss” of direction and order in society.

2.3. Deliberative mini-publics influencing emotions concerning the future

Based on the above, positive emotions regarding the future can be expected to improve anticipation and consideration of the long term, while also strengthening democratic means and processes to deal with the unknown and potential problems. Currently, research concerning the role of emotions in mini-publics is scarce, and the few studies dedicated to the subject (see Andrews, 2022; Johnson et al., 2017, 2019; Morrell et al., 2022) mainly do not deal with future-regarding emotions.¹ Therefore, there is still very little knowledge on how emotions towards democratic decision making are influenced by deliberative processes. In this chapter, we provide a short overview of deliberative mini-publics, and attempt to determine why it is plausible to expect that they could increase positive feelings about the future.

Deliberative mini-publics come in a wide variety of forms, sizes and assignments (see for example Setälä & Smith, 2018). However, their most important defining characteristics are summed up by Ryan and Smith (2014, pp. 20), who categorize mini-publics as an “institution in which a broadly inclusive and representative sub-group of an affected population engages in structured deliberation enabled by independent facilitation”. Therefore, the standard features of mini-publics usually include a selection of participants chosen with a combination of random sampling and stratification, providing information about a topic in the form of information sheets, plenaries and expert and advocate Q&As, as well as facilitation by specifically trained personnel to ensure the upholding of deliberative norms. With these characteristics, a mini-public “is organized with the aim of aligning political decision making with the considered views of citizens” (Ryan & Smith, 2014, pp. 20).

In many ways, emotions and the cool and collected reasoning that take place in group-deliberation, can be seen as adversaries to each other. For example, it is believed that strong emotions can create and maintain exclusionary attitudes, foster in-group identities and enhance group thinking, and even increase out-group hostility and neglect of compromise (see for example Fossett, 2006; Richards, 2013). This does not align well with the middle-ground seeking emphasis of deliberative democracy. Further, differing capacities in emotion work and emotional capital could exacerbate inequalities in discussions instead of alleviating them, which is contrary to the often-stated notion that there should be more room for emotional expression in deliberation (Saam, 2018). On the other hand, both emotions and reasoning can be seen as an inseparable part of deliberation, and work together in a complex relationship in decision making (Fischer, 2009). In some of the rare analyses carried out concerning emotions and deliberative mini-publics, Johnson et al., (2017, 2019) found that design features of deliberative mini-publics can help mediate the effect that emotions have on public decision making. When properly mediated, emotional appeals that support one policy or another can aid participants in a deliberative mini-public to reach decisions by helping citizens consider and prioritize the competing factual claims they encounter during the discussions.

There are several reasons why deliberative processes could foster a more positive outlook towards the future. First, deliberation itself can be a pleasant experience and a way to participate in societal matters in a safe venue, where—unlike in many other forms of political participation—lobbying, obstruction and exclusionary language are not tolerated. According to Johnson et al., (2019, pp. 2169) “participants [in a mini-public] experienced a range of emotions, with enthusiasm, happiness, and anxiety the most common”. Even though there were feelings of anger and frustration felt during the process, feelings of happiness increased towards the end (Johnson et al., 2019; see also Morrell et al., 2022). Feelings of happiness were tied to satisfaction with the deliberative process itself (Morrell et al., 2022). Therefore, we can assume that completing a satisfactory deliberative process can, at least to some extent, enhance positive emotions towards democratic decision making, regardless of the timespan of the decision in question. Logically, a deliberation concerning the future could then influence sentiments towards long-term decision making in a positive way.

Deliberation is highly associated with learning. A number of studies show that participating in a mini-public raises individuals’

¹ An exception is Andrews’ (2022) study, which examines mini-public participants’ emotions concerning climate change and mitigation actions, so the study’s context is clearly future-oriented.

levels of factual knowledge and can correct existing misconceptions among them (Már & Gastil, 2020; Suiter & Reidy, 2019). These patterns indicate that mini-publics could enhance knowledge about the long-term consequences of policies carried out today as well as about the capabilities to influence future wellbeing. In principle, being exposed to more information about the future should make it more vivid and precise. As uncertainty and vagueness of the future has been established as a potential source of stress and anxiety (see Section 2.1), these developments could help dispel tendencies to view the future as inevitable and menacing, and promote it as something that people can confront and potentially control. While this can encourage hopefulness (Ross et al., 2021; Andrews, 2022), learning and information gains would also likely counter tendencies that would encourage unrealistic optimism about the future (Jefferson et al., 2017).

Lastly, there are reasons to believe that deliberative mini-publics can alter the images people have about the future, making them more varied and complex. “Deliberately engaging in transformation processes inevitably requires imagination” (Moore & Milkoreit, 2020, pp. 1), and in principle, mini-publics can help people encounter the futures other people imagine. Mini-publics provide a voice to different societal groups, and this inclusive process allows participants to hear a wide variety of experiences, perspectives and policy suggestions. At the same time, norms of deliberation stress the importance of listening, perspective-taking and compromise, which allows connections built across differences in opinion and, most importantly in relation to our case, in anticipated futures. In principle, this pooling of images and visions about possible futures could help participants move beyond simple, deterministic frames and scenarios and towards more complex and rich images of the future.

Multiple predictions about the future could lead to the realization that the future holds innumerable possibilities, and the present holds the potential to change it. This view, in turn, could foster increased hopefulness and even changes in political attitudes (Cohen-Chen et al., 2015). According to Ahvenharju et al. (2018), openness to alternatives and belief in one’s capacity to change the course of events are important components of futures consciousness. Thus, it is important to stress that images of possible futures, near or distant, do not need to be reduced to simple utopias or dystopias; rather, as many possible futures as possible can be envisioned and deliberated.

2.4. Summary

Presuming that deliberative mini-publics promote future-oriented decision making (Kulha et al., 2021; MacKenzie, 2016; MacKenzie & Caluwaerts, 2021), they are likely to do this through various causal mechanisms, including changes in emotions concerning the future. We maintain that, for reasons outlined in Section 2.2 positive emotions concerning the future can support anticipation and long-term-oriented decision making. Second, it is plausible to expect that deliberative mini-publics can increase positive emotions concerning the future. This suggests that a causal relationship can exist in which deliberations lead to a weakening of democratic myopia when a more positive outlook regarding the future is evoked. The main argument of our theoretical reflection is summarized in Fig. 1.

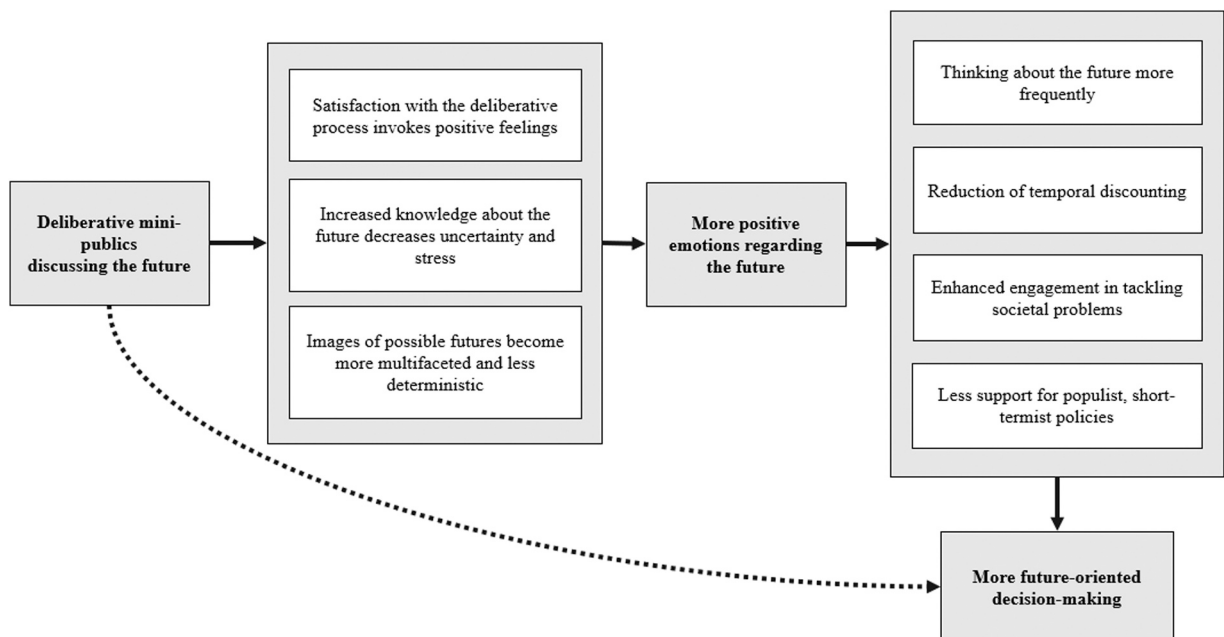


Fig. 1. Mini-publics’ potential impact on future-oriented decision making through positive emotions.

3. Case and data

To explore empirically the theoretical ideas laid out in the previous section, we set out to analyze an online Citizens' Assembly organized in Finland in 2020. In this section we present the case, data and methods utilized in this study.

3.1. The regional citizens' assembly of Satakunta

The Regional Citizens' Assembly took place online over Zoom in the fall of 2020. It was organized by researchers from University of Turku, the University of Helsinki and Åbo Akademi University in collaboration with the regional authorities of Satakunta. Originally planned to be held in spring 2020 as a face-to-face deliberative mini-public, the Assembly was moved online and rescheduled for September 2020 after the outbreak of the COVID-19 pandemic.

The Citizens' Assembly's main task was linked to the regional plan for 2050, which at the time was being drafted by the Regional Council of Satakunta. Its main objective was to allow regular citizens of the region to take part in the drafting process. The main purpose of the regional plan was to direct regional land use and regional development up until the year 2050. To support the drafting process, the participants in the Assembly were tasked with prioritizing different goals related to the development of the region. They also had the opportunity to comment on specific images of future drafted beforehand by the Regional Council. After the Assembly, the views of the participants were passed on to the Regional Council to be considered in the regional plan development process.

The recruitment process of the Citizens' Assembly began with a recruitment survey in March 2020. The survey was mailed to a random sample ($n = 6\,000$) of residents of the Satakunta region, who were between 15 and 80 years old. In addition to enquiries about socio-economic attributes, the survey included questions related to the preferred future of the region, measures of the respondents' temporal preferences of policy making and their tendency to think about future generations' interests. Around 17 % ($n = 1\,049$) of the sample responded to the survey, and 281 of the respondents volunteered to take part in the deliberative event. As the Citizens' Assembly was forced to be rescheduled and moved online, all the people who were initially willing to participate were informed about this change and given the opportunity to take part in the online Assembly in September 2020.

Of the initial volunteers, 70 people informed that they would be willing to take part in the online Citizens' Assembly. Further attrition happened at the very end of the recruitment process: eventually 55 people attended the online mini-public. Basic information about the composition of the Citizens' Assembly can be found in [Appendix A](#). The Assembly reflected the population of Satakunta quite well in terms of gender, age, native language and place of living. However, it seems that the Assembly attracted people with higher education levels much more than it did those with lower levels of education. Still, the Citizens' Assembly managed to bring together a diverse group of participants.

In terms of research, the main task of the Citizens' Assembly was to enable an analysis of whether deliberative mini-publics can help people in long-term thinking and make them more future-oriented (see for example [MacKenzie, 2016](#)). In addition, the researchers were interested in whether these qualities could be further enhanced by a special imaginary time travel exercise, what Hara et al. called Future Design (2019). Before the event, all participants were divided into two treatment conditions: in the Future Design treatment groups, participants carried out the time travel exercise before deliberation, while in the regular deliberation groups, participants began deliberating right away without doing the exercise. In the first group, participants were also told to think about the viewpoints of people living in the future during their small-group discussions.

In order to ensure that the Future Design treatment would be similar in all groups, the time travel exercise was prepared in advance by the researchers, recorded, and played for the participants by each group's moderator. The exercise loosely followed the examples of Cuhls (2016) and especially [Hara et al. \(2019\)](#). It aimed to help participants assume the perspective of future generations during the discussion (see [Kulha et al., 2021](#) for details of the exercise).

The deliberation itself was carried out in 10 small groups, consisting of four to seven people. Out of 55 participants, 28 took part in the Future Design treatment whereas 27 participated in the regular deliberation. The deliberation was carried out in Finnish. The event lasted for four hours and was divided into two sessions with a 50-minute break in the middle. Each group went through the procedure without having contact with the other groups. Apart from Future Design, which was applied to half of the groups, all small groups followed similar deliberation procedures. A couple of days before the Assembly all participants were also provided with a document containing background information about the current state of the region, including information on demographic, economic, environmental and other matters.

3.2. Data

The collection of survey data concerning the effects of deliberation and Future Design started with a pre-test survey, which was delivered to the participants one week before the event. In this survey, the participants were asked to prioritize goals related to the future of the region. It also included questions measuring participants' attitudes towards long-term decision making and future generations, as well as questions on the extent to which they felt certain emotions, like worry or compassion, when thinking about the future of the region. Note that the background information document was provided to the participants only after the pre-test survey was closed. The post-test survey included the same questions as the pre-test survey plus questions about the respondents' evaluation of the quality of the discussions. The first part of the post-test survey was carried out during the break between the two deliberation sessions, and the second right after the event ended. All participants completed the pre-test survey ($n = 55$), while one did not to complete the first part of the post-test survey ($n = 54$) and two did not to complete the second part ($n = 53$).

In addition to survey data, qualitative data was gathered. All the discussions in small groups were recorded and transcribed. After

the event, 17 randomly selected participants were interviewed about their experiences and sentiments regarding the Assembly and the future of the region. The interviewees represented all of the 10 discussion groups, and eight were from the Future Design treatment groups. The semi-structured interviews were carried out by a research team member between 12 November 2020 and 4 December 2020 and varied from 10 to 38 min in length. Most of the interviews were conducted online via Zoom; two were conducted over the phone.

4. Analysis

Our specific interest in the impacts of *deliberation* on people's future thinking warrants an inspection of the deliberative quality of the Citizens' Assembly. Regarding the inclusion of different experiences and viewpoints, the recruitment process managed to bring together a socio-demographically diverse group of participants from the different sub-regions of Satakunta, as previously noted. The deliberative quality was inspected by surveying participants at the end of the discussion. Participants' answers are reported in [Appendix B](#). In general, the mini-public adhered to the basic principles demanded of deliberative discourse: reciprocal discussion, considered judgement and mutual respect.

4.1. Changes in emotions concerning the future

Now let us turn to exploring the possible impacts of deliberating the future on the emotions of the participants. Specifically, following the classification by [Morrell et al. \(2022\)](#), our study focuses on 1) discrete emotions (as opposed to general emotional states) in a 2) concentrated, 3) structured deliberation. Concentrated deliberation implies that deliberation occurred over a limited period of time and covered a limited set of issues. Structured deliberation entails that discussions followed a pre-defined procedure. Emotions are understood as "evaluations of an event, person, or object" ([Saam, 2018, 761](#)) and in this case, the "target" of emotions is the future.

In both the pre-test and post-test surveys, participants were asked about emotions they experience when thinking about the future of the region. More precisely, they were asked to evaluate to what extent they felt worried, compassionate, scared, sympathetic, confused, anxious and hopeful on a five-point scale, ranging from "not at all" to "very strongly" (cf. [McClain, 2009](#)). Even though the set of emotions included in the questionnaire was limited, we posit that it was enough to reveal changes in participants' positive and negative affective states regarding the future. Worry, fear, confusion and anxiety can be regarded as rather negative or unpleasant emotions, whereas hope is related to imagining the future, setting (positive) goals and exploring pathways to reach these goals ([Snyder et al., 2006](#); [Bar-Tal, 2001](#)). Finally, feelings of compassion and sympathy can imply how much a person seeks to see things from the perspective of future generations.

Because the original survey was conducted in Finnish, some semantic clarifications should be made. Firstly, the Finnish word for anxiety, *ahdistus*, has a strong negative connotation, implying anguish rather than mere restlessness. Affective intelligence theory asserts that feelings of anxiety motivate information seeking and considered judgement, and decrease reliance on heuristics and ideological cues in decision making ([MacCuen et al., 2007](#); [Marcus et al., 2011](#)), which could be seen as beneficial for long-termist decision making. In our case, however, anxiety is clearly a negatively charged emotion. Secondly, in English, the words compassion and sympathy are practically synonymous. Here, though, sympathetic is a translation of the Finnish word *osaottava*, which is associated with condolences. As such, it has a slightly sadder tone than compassion (fi: *myötätunto*).

To inspect possible changes in the aforementioned emotions, the pre- and post-test answers were compared using two-sided paired samples T-tests. In addition to the group as a whole, Future Design and plain deliberation groups were examined separately. As shown in [Table 1](#), deliberation seems to have had some effect on the reported emotional states. Among all participants, statistically significant increases can be witnessed in compassion and hope, and decreases in fear and confusion. On closer inspection, however, we see that these changes are not symmetrical across the two treatment groups. Only the increase in hope is statistically significant among participants in both the Future Design and plain deliberation groups. An increase in compassion and decreases in fear and worry, in turn, are significant only in the Future Design group. Further, in the plain deliberation group there is a clear drop in confusion, but no big change like this happened in the Future Design group. Comparing the changes between the two groups, only the difference in change in compassion is statistically significant ($p < 0.05$).

Considering the small sample size, even with statistically significant changes it would hardly be reasonable to claim that the results are generalizable. Looking at the whole set of self-reported experiences of emotions, though, at least in this specific case, there seems to be a pattern: negatively associated feelings—fear, confusion and worry—decreased, whereas positive feelings of hope increased. Especially the change in hopefulness should be noted, as it happened in both groups. It is possible that discussing the possible and desirable futures and the development of one's home region led to more varied and concrete images of the future, and therefore increased feelings of hope for change for the better.

To confirm our observation of the general pattern of changes, we compiled an index of the negatively and positively charged emotions: worry, fear, confusion, anxiety and hope. The scales for negative emotions were reversed and the answers then summed so that a higher score of the index corresponded to lessened negative emotions and more hope. Finally, the index was rescaled to vary between 1 and 5. A comparison between the indices before and after deliberation showed that there was a significant positive change in the index in both the Future Design and the plain deliberation treatment (0.267 and 0.200, respectively, $p < 0,05$). However, inspecting the changes on the individual level revealed that there were 9 participants out of 53 for whom the index value actually decreased. Deliberation's impact on participants' emotions was thus not uniform, despite the majority (31 out of 53) receiving higher scores on the index after deliberation.

Regarding compassion, the difference in change between treatment groups seems to hint that the time travel exercise also had a role

Table 1
Participants' emotions regarding the future.

	All (N = 53)			Deliberation (N = 26)			Future Design (N = 27)		
	Pre-test	Post-test	Change	Pre-test	Post-test	Change	Pre-test	Post-test	Change
Worried	3.00 (0.137)	2.81 (0.108)	-0.189 (0.132)	2.81 (0.157)	2.81 (0.157)	0 (0.157)	3.19 (0.220)	2.81 (0.151)	-0.370† (0.208)
Compassionate	3.08 (0.128)	3.32 (0.117)	0.245† (0.140)	3.35 (0.146)	3.27 (0.142)	-0.077 (0.183)	2.81 (0.185)	3.37 (0.186)	0.556** (0.195)
Scared	2.23 (0.152)	1.96 (0.114)	-0.264* (0.124)	2.00 (0.229)	1.92 (0.156)	-0.077 (0.175)	2.44 (0.195)	2.00 (0.169)	-0.444* (0.172)
Sympathetic	2.55 (0.158)	2.51 (0.154)	-0.038 (0.183)	2.62 (0.242)	2.69 (0.227)	0.077 (0.260)	2.48 (0.209)	2.33 (0.207)	-0.148 (0.260)
Confused	2.23 (0.128)	2.02 (0.141)	-0.208† (0.112)	2.23 (0.178)	1.99 (0.195)	-0.346* (0.156)	2.22 (0.187)	2.15 (0.205)	-0.074 (0.159)
Anxious	1.79 (0.151)	1.68 (0.123)	-0.113 (0.084)	1.69 (0.220)	1.54 (0.169)	-0.154 (0.107)	1.89 (0.209)	1.81 (0.177)	-0.074 (0.130)
Hopeful	3.45 (0.128)	3.85 (0.099)	0.396** (0.109)	3.35 (0.200)	3.77 (0.160)	0.423** (0.149)	3.56 (0.163)	3.93 (0.118)	0.370* (0.161)

When you think about the future of Satakunta in the year 2050, what kind of emotions do you experience? How strongly are you...? Scale 1–5, 1 = Not at all, 5 = Very strongly

Mean values pre-deliberation, post-deliberation and change pre-post (standard error in parentheses)

† p < 0.1; * p < 0.05; ** p < 0.01

to play. Future design exercises specifically stress the importance of “incorporating the perspectives of imaginary future-generation groups” (Hara et al., 2019). This may explain why the participants in the Future Design groups reported increased compassion regarding the future. Lastly, it is interesting that confusion was abated in the regular deliberation groups, while remaining basically the same in Future Design groups. A possible explanation for this finding is that imagining the future can be hard even if specifically instructed to do so. In addition, as a product of time the travel exercise, the future might have actually seemed more complicated than before, precisely because the participants were tasked to care about future generations' perspectives. However, taking into account the small sample size, we cannot rule out that these differences were caused by chance rather than the treatment.

4.2. Participants' perceptions of the future and the discussions

To gain more insights into the participants' thinking and emotional states regarding the future of the region, we analyzed the interviews conducted with 17 Assembly members. The interviewees were asked about their experiences of the discussion and their thoughts about citizen participation and deliberation in general. Further, they were asked what kind of feelings and thoughts they experienced when thinking about the region in 2050, and how future generations should be taken into account in the present. Those in the Future Design groups were asked about the mental time travel exercise and whether they saw it as having an impact on the discussion. For the full list of questions, see Appendix C.

Based on our assumptions summed in Fig. 1, we were interested in three questions. Firstly, did participating in the Assembly invoke positive feelings in general? Secondly, did the discussion provide participants with new information and lessen the feelings of anxiety and worry? And, thirdly, did the participants develop alternative and more vivid images of the region's future? The analysis was carried out in two stages. First, sentiments related to the participatory experience or the future of the region were picked up from each interview and summarized. In the second stage, these summaries were inspected from the perspective of the three theory-based questions. Below, we outline results from this inquiry.

Most of the interviewees described taking part in the Assembly as a pleasant and positive experience, even as surprisingly positive. Many stated that the discussion worked well and left a positive feeling overall. A couple of interviewees mentioned the experience being “okay” or “nothing revolutionary”, or as one participant described: “A discussion was a discussion”² (interview 14). Still, none of the interviewees felt negatively about the event, and for most interviewees the discussion resulted in a good feeling. This was true regardless of the fact that many were sceptical about the discussion's impact on the regional plan: “I hope it [the Citizens' Assembly] would impact, but [-] I don't think it will have any big influence” (i12), one interviewee stated. These observations are encouraging, if we presume that the positive feelings invoked by the experience cultivate long-term thinking.

Now, did the positive feelings invoked by the discussion extend to the images participants held of the region's future? The interviews give a mixed answer to this. One of the interviewees stated explicitly that the Assembly process had given them a more positive outlook on the region's development, and another mentioned that receiving more information about the region made them feel safer. A couple of participants also referred to the information document (sent to them before the discussion) as a source of new information, but in most cases the information received did not seem to have had a big influence on how they felt one way or the other. Many noted, however, that the discussion gave them fresh perspectives and made them more aware of the region's matters. “Like, with my spouse when we have discussed what we would like the region to be like. So I'd say it [the Assembly] has inspired more active

² Translations from Finnish by KK

thinking in a way.” (i2).

At the same time, a few interviewees held deeply pessimistic views of the future of Satakunta, referring to the aging population and lack of employment possibilities and dynamism: “What will the employment situation be like in, say, 20 years. My thoughts on the future are not very hopeful, if this is how we carry on. I’m nervous.” (i6) One interviewee even expressed that they try to avoid thinking of the future and that they feel like they could not do much to change things for the better even if they wanted to. This notion is illustrative of how negative feelings about the future discourage long-term thinking and goal setting. So, even if the Assembly provided people with more information and potentially generated brighter images of the future, it did not have a lasting impact on all participants’ thinking.

The pessimistic approach of some participants does not mean that they felt that negative developments were completely inevitable. Most of those who were pessimistic about the region’s future had ideas and suggestions on what should be done to change the course of events. For example: “We should have wise decisions in these things, because the signs are so obvious, like for example in sustainable development and industries linked to it [-] they are developing fast there in the world and there is a chance to jump on the bandwagon, if we want [-].” (i3) Often the suggestions were linked to developing education possibilities, creating more job opportunities and taking care of healthcare and services. Many also brought up that the COVID-19 pandemic had increased remote work, which might increase urban-to-rural migration and thus benefit the region. A few stated that it is not possible to anticipate all the changes that will happen over 30 years, that there will be innovations that cannot be imagined yet.

Of course, interviewees’ takes cannot be directly attributed to their participation in the Assembly. In the case of some participants, however, the discussion contributed to broadened perspectives and learning, and none of the interviewees indicated that the Assembly had made them think more *negatively* about the future. What is more, several interviewees reported heightened feelings of efficacy as a result of taking part in the discussion. One participant described their motivation to participate: “I thought it was quite a nice thing, [for the Regional Council] to get like free tips from the grassroots level. I felt like I could impact something. And then I also would’ve been useful to the community, be it the Regional Council or something else.” (i11) Even though not linked to thinking of the future per se, increased feelings of impact and meaningfulness are in line with the upsurge in hopefulness witnessed in the survey results. Being hopeful implies having agency and a sense of ability to reach desired goals (Moore & Milkoreit, 2020; Snyder et al., 2006).

In sum, we can answer the questions presented about the interview data as follows. Did the discussion invoke positive feelings in participants? Definitely yes. Did it provide them with more information and lessen anxiety? For some, yes, but not for all. Did it result in more vivid images of the future? Again, for some definitely yes, but not necessarily for all.

The interviewees’ experiences of the Future Design exercise varied. Some stated that the exercise was very stimulating, whereas others described it as hard or not having much impact. More than half brought up that the exercise helped them direct their thoughts further into the future. One interviewee described: “It sure guides your thoughts, when the discussion is going on, so that we are not speaking of this moment but instead of what will happen in 30 years, and where everyone thinks we should be aiming at.” (i12) Despite being short, Future Design affected some participants’ thinking, but the impact seems to have been largely dependent on the individual. In some discussion groups, the exercise was referred to during the conversations, but not in all. Assessing participants’ emotional responses to the exercise and its effect on the discussion as a whole would require more investigation.

5. Conclusions

As mini-publics have often been proposed as a possible remedy for the short-sightedness of democratic decision making (see for example MacKenzie, 2016; MacKenzie & Caluwaerts, 2021), more careful analysis on the causal mechanisms between deliberation and expanded political time orientation is needed. In this article, we set out to investigate one possible mechanism by theorizing the potential of deliberative mini-publics to cultivate positive emotions regarding the future. Our line of thought suggests that satisfaction with the participatory process, receiving information and developing more multi-faceted images of the future may promote positive emotions, which in turn could contribute to thinking of the future more often, reduced temporal discounting, enhanced civic engagement and lessened support for short-term, populist policies. We should stress that this is not a fully developed theoretical account but rather an invitation for further inquiries on the matter.

Empirical findings from the Satakunta Citizens’ Assembly lend some support to our assumptions, however. After discussing the Satakunta region’s future in the year 2050, participants reported heightened feelings of hopefulness and compassion, whereas negatively charged feelings were reduced. Based on the interviews, plausible factors linked to these emotional changes are heightened efficacy amongst participants, diversified perspectives of the regional matters and that the mini-public itself was a positive experience. Our findings corroborate the conclusions of Andrews (2022, pp.16), who links the increase in optimism observed during Scotland’s Climate Assembly to a heightened sense of agency.

Despite increased feelings of hope, however, many still shared concerns about the region’s future and were also sceptical about the Assembly’s impact. The latter notion points to one important limitation of the current study: we have only focused on the mini-public’s impact on participants’ own thinking (see also Kulha et al., 2021). How mini-publics could steer policy processes towards long-termism is a different, yet fundamental, question. Further still, Andrews’ study suggests that the quality of policy impact after a mini-public may also relate to future-regarding emotions. In the case of Scotland’s Climate Assembly, participants signalled disappointment in policy-makers’ response to the Assembly’s recommendations and reported significant decreases in hopefulness and optimism after having discussed the response (Andrews, 2022).

While it is important to distinguish between emotions generated by the deliberative process itself and emotions participants hold and express regarding a specific object (see Saam, 2018), this might not be straightforward. Even though interviewees were asked about feelings concerning the year 2050, identifying the “targets” of particular feelings can be complicated. Some of the answers

certainly described feelings concerning the future, whereas others were directed at the deliberative process itself and in some cases, presumably both. This observation is not that surprising, as we expected contentment with the process to interact with feelings concerning the topic of deliberations, that is, the future (see Section 2.3). This interaction illustrates an example of how participants can reflect their own “emotional experience in a larger democratic framework” (Johnson et al., 2019, pp. 2185).

Our aim has not been to argue that some emotions are intrinsically better or worse when it comes to long-term decision making. In addition, approaching emotions one-dimensionally as “positive” or “negative” is necessarily a simplification. As DeSteno (2009) notes, emotions can support both searching for immediate gratification and myopic behavior as well as investing in the future and tackling long-term problems. Anxiety and fear, for example, might prompt information seeking, (MacKuen et al., 2007; Belt et al., 2007) but also might abate it (Gillman et al., 2022). Similarly, hopefulness can be seen as something that promotes agency (Moore & Milkoreit, 2020), but if it turns into unwarranted optimism, people could believe that harmful events and dangerous developments are not their concerns (Jefferson et al., 2017; Andrews, 2022). However, we maintain that, for reasons presented in the theory section, it is plausible to expect that positive emotions regarding the future can foster anticipation and help in addressing long-term policy problems.

Further, even though not directly related to timespan of political decision making, moderating negative emotions, especially fear and frustration, could lead to the strengthening of support for democracy in general. Constant dread of impending doom, whether related to climate catastrophes, global pandemics, war or famine, can make people more willing to surrender their democratic freedoms for safety and protection, and even turn to authoritarian, technocratic or other undemocratic solutions to address these problems (see for example Huysmans, 2014). Ahead of looming problems, mini-publics could make people more aware of potential solutions, promote action and cultivate hope. In addition to the Satakunta Citizens’ Assembly, such outcomes have been witnessed in the context of climate change mitigation (Ross et al., 2021; Andrews, 2022).

Our analysis leaves much interpretation on the role of Future Design in relation to mini-publics. It seems that just as time traveling exercises might not be necessary for mini-publics to enhance consideration of future generations’ perspectives (Kulha et al., 2021), deliberation concerning the future seems to be linked to positive feelings of the future even without a specifically designed foresight exercise. However, the nature of our analysis as a case study with a relatively small number of observations causes problems regarding generalization. Also, given that there were some noteworthy differences in how emotions developed in different treatment groups and reasons behind these differences fall outside the scope of our analysis, more research on the intricacies of mental time travel used in conjunction with processes of democratic deliberation is needed.

In addition, in this study we have not compared the outputs generated by the participants. Possible differences between the outputs of plain deliberation and deliberation with a Future Design or corresponding exercise could be a matter of future investigation. Another shortcoming of the study is related to fact that surveys and interviews were carried out in short succession to the mini-public. Therefore, we do not know whether deliberation produced lasting or fleeting effects on the participants’ emotions concerning the future. This is something that future research on the topic should take into account.

Declaration of Competing Interest

None.

Data availability

Data will be made available on request.

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Appendix A

Table 2
Demographics.

		SATAKUNTA 2018*	PARTICIPANTS
Gender (%)	Male	49.7	56.4
	Female	50.3	43.6
Age (Mean)		45.7	49.2
Native language (%)	Finnish	96.1	98.2

(continued on next page)

Table 2 (continued)

	SATAKUNTA 2018*	PARTICIPANTS
Other	3.9	1.8
Sub-region (%)		
Northern Satakunta	8.5	9.1
Pori sub-region	60.6	60.0
Rauma sub-region	30.9	30.9
Education level (Mean, 1–5)	2.1	3.3

Education level coded as follows: 1 = Elementary school or middle school, 2 = Matriculation exam or vocational degree, 3 = College level vocational degree, 4 = Polytechnic degree or lower university degree, 5 = Upper university degree.

* Demographics represent the situation in December 2018, from where we have complete data regarding regional demographics (see Statistics Finland, 2020a; 2020b).

Appendix B

Table 3

Deliberative quality of the Citizen's Assembly.

	Completely agree	Somewhat agree	Somewhat disagree	Completely disagree	I don't know
It was hard for me to bring up my opinions in the discussion if other people disagreed with me.	0,0 %	5,7 %	11,3 %	81,1 %	1,9 %
I had enough opportunities to express my views during the discussion.	92,5 %	7,5 %	0,0 %	0,0 %	0,0 %
Some participants dominated the discussion.	0,0 %	17,0 %	15,1 %	66,0 %	1,9 %
I read the information package that I received before the discussion.	90,6 %	7,5 %	1,9 %	0,0 %	0,0 %
I contemplated many viewpoints when I made the choice on the most important objectives to develop the region.	35,8 %	54,7 %	7,5 %	1,9 %	0,0 %
I gained enough information to make a well-considered choice on the most important objectives to develop the region.	17,0 %	60,4 %	9,4 %	0,0 %	13,2 %
The discussion's moderator was unbiased.	94,3 %	3,8 %	1,9 %	0,0 %	0,0 %
Other participants respected my views regardless of their own opinion.	90,6 %	7,5 %	0,0 %	0,0 %	1,9 %

Appendix C

Interview questions after Satakunta Citizens' Assembly

- In September, you participated in the Satakunta Citizen's Assembly. What kind of experience was this for you?
 - What do you remember? What could have been done differently?
 - How do you think the discussion succeeded as a whole?
- At the very beginning of the discussion, you did a mental time travel exercise where you time traveled in your mind to Satakunta in the year 2050. How did the mental time travel exercise feel? (Question only for Future Design group members)
- Did you notice that the mental time travel exercise came up in the conversation in some way? (Question only for Future Design group members)
- Have you discussed the future of Satakunta with those close to you or your acquaintances?
- If you imagine Satakunta and your own living environment 30 years from now, what kind of things or feelings come to mind?
- How do you think the actions of the current residents of Satakunta, including yourself, will affect future generations living in Satakunta?
 - How do you think future generations *should* be considered in today's activities?
- Was this the first time you participated in a Citizens' Assembly or a comparable event?
- Why did you choose to participate?
- How was it to participate in the Assembly purely online?
- Would you take part in a similar event again? Why/why not?
- Do you think that the Citizens' Assembly had/will have an impact on the final Regional Plan and Regional Strategy?
 - If yes, how do you think the Assembly has affected/will affect the Plan?
- Do you think that Citizens' Assemblies can drive change in decision making or have an impact on decisions?
- Did participating in the Citizens' Assembly change your conceptions on civic participation?
- Finally, a question about participation in general. Do you think that methods such as Citizens' Assemblies could be used to increase citizens' participation in decision making concerning them?

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