The Effects of a Value Based Approach on Public Participation Scenarios: Acceptability of a Sustainable Project and Decision Making Process

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VALUE BASED APPROACH ON PUBLIC PARTICIPATION, ACCEPTABILITY OF A SUSTAINABLE PROJECT AND DECISION MAKING PROCESS

Abstract

Public participation is seen as a key component for policy makers to gain more support for sustainable energy projects. Research has shown that including the public into the process of policy making has a favorable effect on projects being accepted. In this study we investigate whether a value based approach where in an experiment we varied which consequences of a sustainable policy were to be discussed during public participation contributes to making public participation more effective. We investigated this through testing if participants are more accepting of the project and decision making process when they were placed in a joint value condition instead of a single value condition. Also it is tested whether the participants were more accepting if the preexisting values matched with the value condition. Based on this value based approach we expect that the joint value condition will show higher acceptability of the project and the decision making process and we also expect the higher peoples values are the more acceptable they will be in the condition where the preexisting values matched with the value represented in the condition. We conducted an experiment (N=108) where we manipulated the information people were getting across three conditions (joint, personal and environmental). The results displayed no differences between either of the three groups and no evidence is found that the stronger people´s values the more acceptable they will find the project and the decision making process when the respective values were to be discussed during public participation. We infer that we found no proof for a value based approach for making public participation more effective.

Keywords: Values, Public Participation, Project Acceptability, Decision Making Process, Sustainable Project

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The amount of carbon dioxide emissions have been continuously rising over the last two decades (Tiseo, 2020). The ICPP report of 2021 even states that the overall increase in greenhouse gasses since 1750 have been caused by human activity, indicating that the amounts of carbon dioxide have been rising continuously for hundreds of years. These rising amounts of carbon dioxide emissions have an impact on the environment, they cause the Earth's temperature to rise (Lindsey, 2020). The negative effects of earth's rising temperatures are overall well known (Macmillan & Turrentine, 2021). Trying to slow down this process is essential for the health of the earth and the longevity of the people who inhabit it. There are policies worldwide trying to solve this problem, but there are still aspects of this policy making that can be improved. A problem that policy makers often face is the resistance of the public. Public resistance can lead to problems in the startup of projects and can lead to shutting them down completely (Liu, Bouman, Perlaviciute & Steg, in Papazu; Shaw et al.; Boyd; Vallejos-Romero. 2021). People can, for example, feel their values and rights threatened and become more opposing towards sustainable energy projects (Perlaviciute & Steg, 2014). If people are more included into the process of policy making about environmental projects, these projects may face less resistance. The inclusion of public participation has been an important part of the development of policy making in environmental projects (Beierle & Konisky, 2000). Public participation is seen as a valuable part in decision making and in the overall acceptability of a project. Still it is not yet known how to make public participation more effective (liu et al., 2021)

Public participation has been defined by Dietz & Stern (2008) as organized processes adopted by responsible parties, such as: elected officials, government agencies, other public- or private-sector organizations, to engage the public in planning, developing, implementing,

managing and assessing of sustainable energy projects. Engaging the public is a crucial part of the definition, but yet known how to make this the most effective. For trying to make public participation more effective it is important to be aware of who takes part in public participation. Who takes part in public participation are namely people who are against environmental projects (Stephenson & Lawson, 2013; Perlaviciute, 2019). The participation rates of people who are more accepting of the projects are lower than of those who are against the environmental projects. Stephenson & Lawson (2013) state that people who participate more or show more opinions towards proposals have a tendency towards oppositions and reflect a strong opinion against the proposal. People who show less opinion tend to be more accepting towards proposals and reflect a more neutral stance. Perlaviciute (2019) states that people who show a strong opinion towards a proposal or project are to be expected having primary values that are threatened or touched by these proposals or projects. So people who feel that their values are more affected have a higher tendency to show their voice in public participations. If more people who feel that energy projects are a threat to their values participate, it will create something that Perlaviciute (2019) calls ´´value asymmetry´´. This means that people with certain values tend to participate more and those values are overly represented in participation meetings. This may create an imbalance in public participation meetings. If more people from the opposing side are represented in public participation meetings it may lead to a wrong impression of the public opinion and can result in less projects being accepted by the public. The overall acceptability of the project and the decision making process might be low if people feel that their values are underrepresented in the decision making process. To create a more balanced view of what the public opinion is about certain sustainable projects, different values may need to be better represented. This inclusion could possibly lead to more sustainable projects being accepted by the public (Perlaciviute, 2019). To include and attract more people with different values into public participation,

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Perlaciviute (2019) proposes an approach where values are used as a basis. This value based approach is needed to make public participation more effective. So attracting more people with different sets of values may be a factor to make public participation more effective and lead to more sustainable energy projects being accepted and have more overall acceptability of the decision making process.

Schwartz (1992) defines values as guiding principles in people´s lives that are approximately stable over time and across different situations. Values are reflections of goals that people attempt to follow in life (Perlaviciute et al., 2018 in Schwartz, 1992). Sustainable policies can have implications for people´s values, people may perceive these implications as either supporting or threatening their biospheric and agoistic values in particular (Perlaviciute & Steg, 2015). Both biospheric and egoistic values correspond with environmental decisions (de Groot & Steg, 2010). Biospheric values concern caring about the protection of nature and the environment and egoistic values concern about protecting personal resources like wealth and status (Perlaviciute et al. 2018). Both biospheric and egoistic values have a strong influence on a set of behaviors, including also environmental behaviors (Steg & de Groot, 2010). Steg & de Groot (2010) state that when biospheric values were the values they oriented around the most, they were more inclined to act in a pro-environmental way. When people were more egoistically oriented, they were less likely to act in a pro-environmental manner. People react different to information based on their values. If information provided from a sustainable energy project does not support their core values people may react strongly and have a higher chance of not accepting such energy projects. Nillson et al. (2016) state that people differ in the way they are receptive to different information that is used to justify environmental policies based on the way they differ in their personal values. Personal values have an influence on how information is perceived, processed and evaluated (Nillson et al., 2016 in Verplanken and Holland, 2002). So taken into account that people are more

susceptible to information that has implications to their personal values, people tend to support policies that support their important values and oppose policies that threaten that threaten their core values (Perlaviciute & Steg, 2015). A public participation approach where different values are taken into account could have a positive effect on the overall project acceptability and an approach where information is provided for people's important values and support their important values could lead to higher project acceptability and acceptability of the decision making process. So the higher people endorse a certain value, the higher the acceptability of the project and the decision making process will be if information is provided for that specific value.

It is clear that an approach where the values of different people are accentuated can lead to a more balanced way of public participation and could lead to more acceptability towards sustainable energy projects and more acceptability towards the decision making process. Perlaviciute (2019) states that more energy projects could be accepted by different groups if different values are used in public participation8, so that people feel more included or heard. Everyone has a different set of values that they find important and endorse them to different lengths, yet they can differ in how they prioritize these values for themselves (Perlaviciute, 2019; Perlaviciute et al., 2018). It's interesting to test whether this inclusion of multiple values can lead to more/less acceptability of the projects and can lead to higher/lower acceptability of the decision making process considering people have a set of values instead of one main value.

The goal of this research is to investigate whether using public participation where people think that different values, rather than one specific type of value will be discussed, leads to more acceptability of the sustainable energy projects and leads to more acceptability of the decision making process. Also we want to test whether people will be more accepting of the project and the decision making process if the information provided is in line with their

important values. Therefore I expect to find (hypothese1) that the group with the scenario where both biospheric and egoistic values are represented will show higher acceptance of the sustainable project than the groups where either egoistic or biospheric values are represented in the scenarios. I also expect to find that (hypothese 2) the group with the scenario where both biospheric and egoistic are represented will show more acceptability towards the decision making process than the groups where either egoistic or biospheric values are represented in the scenarios. Further I expect to find that (hypotheses 3 & 4) the stronger people´s biospheric values, the more acceptable people find the sustainable project and the decision making process in the environmental value condition. And lastly I expect to find that (hypotheses 5 & 6) the stronger people's egoistic values, the more acceptable people find the sustainable project and the decision making process in the personal value condition.

Method

Participants and Design

The sample was recruited within the researchers' social networks by means of sharing the survey via WhatsApp private messages and group chats, Instagram stories, and email. Utilizing the snowballing method, participants were invited to further distribute and share the questionnaire within their own social networks. Data collection took place from 17.11.2021 to 29.11.2021. The online questionnaire was accessible through a link to the digital survey platform Qualtrics.

Out of 202 recorded responses, we included 108 participants in our analysis. Participants who left more than three questions unanswered, or those who did not answer the second attention check correctly, were excluded. The sample consisted of 74 females and 34 males. The participants' average age ranged from 17 to 63 (M = 25.4, SD = 10.6). Most participants

were Dutch (71.3%) or German (14.8%). The most common educational level in our sample was Bachelor's Degree (60.2%), followed by Master's degree (22.2%) and High School (14.8%).

In our between-subjects experimental design, participants were randomly assigned to three different public participation conditions. Depending on the experimental condition, participants were informed they would discuss environmental, personal, or both environmental and personal (combined) consequences. Participants were randomly assigned to one of the three conditions using the "evenly present elements" in Qualtrics, making sure that there are approximately the same number of participants in each condition. The "Environmental" condition had 38 participants, the "Personal" condition 36 participants, and the "Combined" condition 34 participants. In each condition, examples of two positive and two negative consequences were given.

Manipulation of Public Participation Conditions

The participants were instructed to imagine a scenario that their government is considering the implementation of a carbon tax on food due to the increasing urgency of reducing carbon emissions to meet the requirements of the Paris agreement (see appendix A for the exact text of the scenarios). Further, participants read that their government intends to engage the public in the decision-making process about the policy and hence invites people to a meeting to discuss the implementation of the carbon tax. This text is implemented to simulate a situation where the government wants to involve the public in the decision making policy, to possibly improve the project acceptability. Depending on the experimental condition, participants learned that in such public meetings different consequences of the food tax policy will be discussed. Specifically, in the environmental public participation condition, environmental consequences (e.g. less deforestation) of the carbon tax on food were proposed to be discussed in the public meeting. In the personal public participation condition, personal

consequences (e.g. ensuring personal safety) of the carbon tax on food were proposed to be discussed. In the combined public participation condition, both environmental and personal consequences of the carbon tax on food were proposed to be discussed. In each condition, examples of two positive and two negative consequences were given.

Also, it was mentioned that the government will consider the public's opinion in their definitive decision about the carbon tax. Moreover, to strengthen our experimental manipulation the participants were asked to list some consequences, either environmental, personal or both (according to their condition) of the carbon tax that they could discuss in the meeting.

Procedure and Materials

The participants could fill in the survey on their own, using their laptop, desktop, smartphone or tablet. Participants were able to contact one of the researchers, when there were questions before, during or after finishing the survey. Participation was voluntary, with no rewards granted, and participants were asked for their informed consent. The survey exclusively consisted of self-reports. Filling out the questionnaire took about 15 minutes. At the end of the questionnaire , respondents were presented with the debriefing and a link for further sharing the questionnaire. Our research was ethically approved by the Ethics Committee Psychology of the University of Groningen.

The survey was constructed in the following manner and order. As this paper is part of a group project, additional measures were included in the survey; here, only the measures relevant to the present paper will be described.

Demographics

Participants were asked to indicate their age, gender, nationality and educational level.

Values

People's biospheric and egoistic values were measured using 16 items on a 9 point scale used from Schwartz (1992), for example, "Protecting the environment: preserving nature" (from -1 = *opposed to my values* to 7 = *of supreme importance*) or "Wealth: material possessions, money'"(from -1 = *opposed to my values* to 7 = of *supreme importance*). The sixteen items were used to measure the score on four different values, namely biospheric, egoistic, hedonic and altruistic values. The biospheric values were assessed using 4 items, while the egoistic values were assessed using 5 items. The mean responses on each value item were combined to form the score of the respective value type. Biospheric values displayed good reliability with a Cronbach's alpha of α =.89 (*M* = 5.0, *SD* = 1.4). Similarly, egoistic values displayed acceptable reliability with Cronbach's alpha of α = .71 (*M* = 2.6, *SD* = 1.3).

Project Acceptability

To measure the acceptability of the carbon tax policy, we used 4 items on a 7-point Likert scale from Liu et al. (2020). This included the following items: the extent to which participants found the proposed policy necessary (from 1 = *very unnecessary* to 7 = *very necessary*), found the proposed policy acceptable (from 1 = *not at all acceptable* to 7 = *very acceptable*), found the proposed policy good or bad (from 1 = *very bad* to 7 = *very good*) and found the proposed policy negative or positive (from 1 = *very negative* to 7 = *very positive*). The mean responses of the 4 items were combined to form the acceptability scale. Higher scores indicate a higher acceptability of the carbon tax policy (α = 0.895; *M*=4.93; *SD*=1.31).

Acceptability of the decision-making process

To measure the acceptability of the decision-making process we used one item from a 7-point Likert scale from Liu et al. (2021). The scale is adapted from the original three item scale due to the lengthiness of the survey. The item used is, the extent to which participants think that the decision-making process during the public participation (from 1= *very unacceptable* to 7 *very acceptable*). The mean score of this item reflects the degree to which

people found the decision-making process acceptable. Higher scores indicate more process acceptability. (*M=5.03,SD=1.22).*

Attention checks

To check whether participants read the public participation scenarios carefully, they were asked "According to the text you just read, what type of consequences of the carbon tax on food will be discussed in the public meetings?". Answer possibilities were "Environmental consequences" (the right answer in the environmental public participation condition), "Personal consequences" (the right answer in the personal public participation condition) or "Environmental and personal consequences" (the right answer in the combined public participation condition). Results showed that in the final sample, 25 participants in the environmental condition, 27 people in the egoistic value condition, and 4 people in the combined condition answered this question incorrectly. It could be that many participants who were not sure about the answer chose the "both environmental and personal consequences" option. Because of the high number of wrong answers, we did not exclude all participants who failed to provide the right answer. A closer look at the data showed that those participants can still be assumed to have answered the remaining questions attentively and seriously. Still, this might indicate a limitation to the strength of our manipulation. (In the final analysis, we excluded participants who failed to provide the right answer for the experimental condition they were assigned to.)

As the second attention check, halfway through the survey the participants were asked if they were still paying attention and to mark the answer option 'somewhat disagree'. Participants who chose another answer option were excluded from the final analysis.

Results

For the first hypothesis a 2-way analysis of variance (ANOVA) is conducted to test whether there is a difference between the three value groups in project acceptability. There is

found no proof that there is a significant difference between the three groups; environmental value condition, personal value condition and joint value condition in explaining project acceptability, $F(2, 104)= .28$, $p= .759$.

For the second hypothesis a two-way analysis of variance (ANOVA) is conducted to test whether there is a difference between the three value conditions in acceptability of the decision making process. There is no proof found that there is a significant difference between the three groups; environmental value condition, personal value condition and joint value condition in explaining acceptability of the decision making process, $F(2, 104)=1.83$, $p=.166$.

A multiple regression analysis is used to test to see whether the higher people's biospheric values the more acceptable they will find the sustainable project in the environmental value condition. The overall model was not significant, no proof was found that the higher people's biospheric values the more acceptable they find the sustainable project in the environmental value condition $F(3.104)=2.49$, $p=.064$, $R^2=6.7\%$. A significant main effect was found, where biospheric values predict the acceptability of the sustainable project, $b= 0.05$, $t=2.63$, $p=.01$. No significant interaction effects were found between biospheric values and the environmental value condition, $F= .42$, $p=.52$, the personal value condition, $F=.4$, $p=.53$ and the joint value condition, $F=1.35$, $p=.25$ in predicting the acceptability of the sustainable project.

For the fourth hypothesis a multiple regression analysis is used to test to see whether the higher people´s biospheric values the more acceptable they will find the decision making process in the environmental value condition. The overall model was not significant, providing no proof that the higher people´s biospheric values, the more acceptable people will find the decision making process in the environmental value condition, $F(3,103)= 1.32$, $p=.27$, $R^{2=}$ 3.7%. No significant main effect was found, biospheric values did not predict the acceptability of the

decision making process, *b*=.05, *t*=.58, *p*=.57. further no significant interaction effects were found between biospheric values and the environmental value condition, *F*=.13, *p*=.72, the personal value condition, *F*=1.05, *p*=.31, and the joint value condition, *F*=1.18, *p*=.28 in predicting the acceptability of the decision making process.

A multiple regression analysis is conducted for the fifth hypothesis, testing whether the higher people's egoistic values, the higher people find the sustainable project in the personal value condition. The overall model was not significant, providing no proof that the higher people's egoistic values, the more acceptable people find the sustainable project, *F*(3, 104)= .45, *p*=.721, R^2 =1.2%. No significant main effect was found, egoistic values did not predict acceptability of the sustainable project, *b*= -.09, *t*=-.89, *p*=.38. further no significant interaction effects were found between egoistic values and the environmental value condition, *F*=.61, *p*=.44, the personal value condition, *F*=.06, *p*=.81, and the joint value condition, *F*=1.22, *p*=.27 in predicting the acceptability of the sustainable project.

For the sixth hypothesis a multiple regression analysis is conducted, testing whether the more egoistic people's values are, the more acceptable people will find the decision making process in the personal value condition. The overall model was not significant providing no proof that the higher people's egoistic values, the more acceptable people will find the decision making process in the personal value condition, *F*(3,103)= 2.15, *p*=.098, R^2=5.9%. No significant main effect was found, egoistic values did not predict the acceptability of the decision making process, *b*=0.16, *t*=1,66, *p*=0,1. Further there were no significant interaction effects found between people's egoistic values and the biospheric value condition, *F*=.21, *p*=.65, the personal value condition, *F*=.55, *p*=.46 and the joint value condition, *F*=.05, *p*=.83, in predicting the acceptability of the decision making process.

Discussion

In this research we investigated whether people find the sustainable project and the decision making process more acceptable when different types were expected to be used during public participation. We also investigated whether the higher people´s biospheric or egoistic values the more acceptable people will be of the decision making process and the sustainable project in the environmental or personal value condition. This is in line with the arguments derived from the literature on the effects of using values in public participation and its effect on project acceptability (Bidwell, 2013; Perlaviciute, 2019). We hypothesized that the condition where both environmental and personal values are represented leads to more acceptability of the project and the decision making process. Next, we hypothesized that the stronger peoples values, the more acceptable people will be of the project and the decision making process when the preexisting values are in line with the values presented in the experimental conditions. The results from this study did not reveal evidence for the hypotheses that there is a difference between the joint value group and either of the personal value or environmental value group in the acceptability of the project and the decision making process. These findings are not in line with the arguments derived from the proposition in Perlaviciute (2019), stating that if different values are represented, the project might be more acceptable to different groups and people who endorse different kinds of values. furthermore the results did not reveal evidence for the hypotheses that the stronger peoples values are the more acceptable people will be of the sustainable energy project and the decision making process when the preexisting values are in line with the values presented in the experimental conditions. These findings are not in line with the research of Bidwell (2013), stating that when people endorse certain values more strongly, and the more they have a feeling that the projects supports their values, the more acceptable they will be of the project.

Theoretical and practical implications

In this study it was found that a value based approach where both values were represented in an experimental condition did not differ from either an experimental condition where personal values are represented or an experimental condition where environmental conditions are represented in terms of project acceptability and acceptability of the decision making process. These findings are not in line with arguments derived from the proposal of Perlaviciute (2019). It is stated that everyone contains a set of values they endorse instead of endorsing one primary value. A setting where arguments are provided for two instead of one value when aiming for tailoring information to match the values, should be favorable if stated that everyone has a set of values instead of one primary values. But no results are found in favor of this argument, meaning that there are no differences found between an experimental group where two values are represented and two single value conditions where either personal values or environmental values are represented in terms of how acceptable they found the project and the decision making process. The results found may challenge the proposition that overall more people will be more accepting of the sustainable project when more values are represented in public participation. These results might indicate that an approach where multiple values are discussed isn't needed for people to be accepting of the project, just the fact that values are represented in public participation might lead to a more favorable view on the project and the decision making process. It would be interesting to test whether the outcomes would still be the same if an experiment is conducted with value conditions where three or four values are represented. If no notable differences would be found between, for example a group where three values are represented and a group where just one value is represented, this would indicate that more values is not necessarily better than just representing values into public participation.

Secondly there is no proof found that the higher people's biopsheric values, the more acceptable they will find the sustainable energy project and the decision making process in the

environmental value condition. There is also no proof found that the higher people's egoistic values, the more acceptable they will find the project and the decision making process in the personal value condition. These findings are not in line with the arguments derived from the research from Bidwell (2013). It is stated that people find a sustainable energy project more acceptable when they think that the project is in line with their important values if the more strongly people endorse those certain values. Following this statement, the results were expected to be in line with this argument and showing that the stronger peoples values the more acceptable of the project and the decision making process people would be, but such results were not found. These results challenge the view that the stronger people's values are the more accepting they will be of the project and the decision making process if the project was supporting of their important values. Considering that no significant results were found it might indicate that overall a value based approach might not be the most effective way for making public participation more effective. It would be interesting to test whether a value based approach might produce different results compared to for example a more information based approach in public participation.

These results may have practical implications for policy makers trying to make public participation more effective. This research may be insightful for policy makers that struggle to make public participation more effective in the sense that a value based approach may not be the most effective strategy method based on this research. If practitioners would use a value based approach, they might struggle to improve the overall acceptability of sustainable projects and still have troubles with too much public resistance. Results drawn from this study might indicate that including values into public participation might not make public participation more effective. Further research is needed to investigate more whether values can play a significant role in improving the overall effectiveness of public participation, but practitioners could try and use values in combination with other types of participation, for

example a more information based way or ways where different types of public participation are combined, But no results indicate that solely a value based approach is an effective way of improving public participation.

Limitations and future directions

One limitation of our study is that many of the participants did not pass the first attention check indicating that quite a lot of people did not read the text carefully or did not fully understand the text in the experimental conditions. The first manipulation check required people to answer a question according to their experimental condition. Many people failed the first manipulation check indicating that the scenarios displayed in the three different conditions was unclear to many. For practical reasons we included the people who failed the first manipulation check. Due to the possible difficulty or the vagueness of the text that was provided in the different conditions many people misunderstood the manipulation check and failed the manipulation check. Because of the large number of participants who would have to be excluded from the study if they failed the first manipulation check, there would not be enough participants left due to the low power of the study. Furthermore there were quite a lot of people who left out multiple answers or did not answer any questions at all, due to the low quality of the data from those participants they were removed from the study. Another limitation of this study is that the participants were quite homogenous. Most of the participants were female, highly educated (82%) and were around the same age (*M=25*). This may have impacted the results in the sense that the possibility is quite high that their values are more clustered together and that they have similar views on certain policies. If the values are more clustered together the probability is high that the participants were more inclined towards either accepting the project if the values were more biospheric or either not accepting the project if the values were more egoistic, this could create a disbalance. The mean of the biospheric values is *M= 7.04* and the mean for egoistic values is *M*=4,56, considering that

people endorsed biospheric values more strongly, they overall could be more accepting of the project and the decision making process. The fact that the group is quite homogenous makes it hard to generalize this research to different people that are for example no students or older, it would be interesting to test whether the same results could be found with a more diverse group of participants. Another limitation of this research is that the measurement of the decision making process only contained one item. The original measurement of the decision making process contained four items. Due to the length of the questionnaire we had to limit the amount of items for this measurement. This could have led to an incomplete view of the acceptability of the decision making process. The last limitation is that the questionnaire was long and sometimes hard to understand for people outside of psychology, this information is received after feedback from the participants. Because of the length and difficulty of the questionnaire people might have filled in the questionnaire less serious or could have misunderstood questions leading to lower quality answers. Furthermore, another limitation might be that the participants did not have the feeling that the sustainable project might be implemented in real life situations. The participants were presented with a scenario instead of letting them participate into real-discussions where they could discuss with other people, policy makers and so on, making the project more realistic. Due to the fact that people might not find the project realistic enough they could have reacted in a more favorable manner taking into account that most participants where acquired through snowball-sampling. The fact that most participants were people the researchers knew in some sense might have influenced the results as well. Participants may have answered in a more favorable way towards the project, because this might aid the researchers, making the results less reliable. considering the relatively high overall acceptability, M=4,9, this might well be the case.

Conclusion

Altogether, there is no support found for the effectiveness of a value based approach of public participation where values are included into public participation to increase acceptability of the sustainable energy project and the decision making process. A value based approach might not be the most effective way for making public participation more effective, but no hard decision can be drawn from the results of this study. Further research is needed to investigate more whether these results were found due to the limitations of this study or due the lack of effectiveness of this type of public participation. Further research might focus on including more types of different values into public participation and more realistic ways of public participation to see whether a value based approach of public participation might have a contribution to making public participation more effective.

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Appendix A

Full text conditions

Biospheric condition

Due to the increasing urgency of reducing carbon emissions to meet the requirements of the Paris agreement, your local government is considering implementing a carbon tax on products like meat, cheese, avocados, bananas etc. A carbon tax on food is a policy that influences the price of food, based on how much carbon dioxide (CO2) is emitted through the production of these foods. To address any possible public concerns, the government will invite the public to a meeting to discuss the implementation of the carbon tax, aiming to find a well-adjusted consensus on the topic. The discussion will focus on the environmental consequences, of which a few are mentioned below.

The government will consider the public's opinion about the environmental consequences of the carbon tax on food in their definitive decision in January 2022 about whether the carbon tax is an appropriate measure to meet the Paris agreement.

Examples of environmental consequences of the carbon tax on food to be discussed in public meetings:

Positive consequences:

- Reduced global warming

- Less deforestation

Negative consequences:

- People may feel that they are entitled to consume high-carbon-emitting products if they can pay for them, which could lead to more purchases of such products

- Neglecting the effect of other greenhouse gasses like methane and water vapor that harm the environment even more

Personal condition

Due to the increasing urgency of reducing carbon emissions to meet the requirements of the Paris agreement, your local government is considering implementing a carbon tax on products like meat, cheese, avocados, bananas etc. A carbon tax on food is a policy that influences the price of food, based on how much carbon dioxide (CO2) is emitted through the production of these foods. To address any possible public concerns, the government will invite the public to a meeting to discuss the implementation of the carbon tax, aiming to find a well-adjusted consensus on the topic. The discussion will focus on the personal consequences, of which a few are mentioned below.

The government will consider the public's opinion about the personal consequences of the carbon tax on food in their definitive decision in January 2022 about whether the carbon tax is an appropriate measure to meet the Paris agreement.

Examples of personal consequences of the carbon tax on food to be discussed in public meetings:

Positive consequences:

- Ensuring personal safety by preventing increasingly intense natural disaster

- Increased individual well-being due to reduced pollution of water and air

Negative consequences:

- Increased costs of daily groceries

- Decreased choice of products because of insufficient alternatives to high-emission products

Personal and egoistic condition

Due to the increasing urgency of reducing carbon emissions to meet the requirements of the Paris agreement, your local government is considering implementing a carbon tax on products like meat, cheese, avocados, bananas etc. A carbon tax on food is a policy that influences the price of food, based on how much carbon dioxide (CO2) is emitted through the production of these foods. To address any possible public concerns, the government will invite the public to a meeting to discuss the implementation of the carbon tax, aiming to find a well-adjusted consensus on the topic. The discussion will focus on environmental consequences and personal consequences, of which a few are mentioned below.

The government will consider the public's opinion about the environmental and personal consequences of the carbon tax on food in their definitive decision in January 2022 about whether a carbon tax is an appropriate measure to meet the Paris agreement.

Examples of environmental and personal consequences of the carbon tax on food to be discussed in public meetings:

Positive consequences:

- Reduced global warming

- Ensure personal safety by preventing increasingly intense natural disasters

Negative consequences:

- Neglecting the effect of other greenhouse gasses like methane and water vapor that harm the environment even more

- Increased costs of daily groceries

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