Participation in Online Platforms: Examining Variations in Intention to Participate across Citizens from Diverse Sociodemographic Groups

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Abstract

Theory about the participants in online citizen participation is scarce, limiting government’s ability to design online participation in such a way that many and diverse citizens are facilitated to participate. To fill this gap, this article theorizes about the factors that influence the intention of citizens from diverse sociodemographic backgrounds to participate in online platforms. The theory of planned behavior is used as theoretical lens, which posits that behavioral intentions depend on three main factors (attitude, perceived norm, and perceived behavioral control), which are in turn informed by behavioral, normative, and control beliefs. To identify relevant beliefs that impact online participation, an open-ended questionnaire was administered among 442 respondents. Fourteen behavioral and control beliefs are defined using thematic analysis. Building on these insights, the article formulates propositions about beliefs that are particularly influential for specific sociodemographic groups, in an effort to advance theory about online participation of citizens.

Introduction

Theory about direct citizen participation has largely been focused on the organization of participation, describing the phenomenon top-down instead of considering the bottom-up perspectives of participants (Roberts 2004). Since Arnstein’s seminal work about the ladder of citizen participation (1969), various scholars have developed frameworks and typologies to define modes of participation, for example, making distinctions based on methods of participant selection or the degree of citizen influence (e.g., Fung 2006; Vigoda 2002). Research has further focused on the outcomes of participation, stressing either the potential of participation (e.g., Robbins, Simonsen, and Feldman 2008) or asking whether participation is worth the effort (e.g., Irvin and Stansbury 2004). Also, the perspective of public officials has been extensively covered (e.g., Clark 2018; Migchelbrink and van de Walle 2020). Despite citizens being the key player in direct citizen participation, mapping the characteristics of participating citizens, and particularly the factors that impact their participation, is still a work in progress (Gustafson and Hertting 2017).

Direct citizen participation, also known as bureaucratic participation, stands for participation processes in which citizens directly share power with public officials in decision making (Roberts 2004). Governments open up decision making to the input of citizens to foster more inclusive democratic processes (Feldman and Khademian 2007). Participation is considered to be inclusive when all citizens have an equal opportunity to participate and no sociodemographic groups are excluded or marginalized from having influence (Barnes et al. 2003; Young 2000). It is, however, noted that participation processes often predominantly end...
up including “usual suspects,” namely citizens that are easier to reach and more vocal (Bryson et al. 2012). Groups that are more difficult to reach in direct participation are, for example, women, (religious) minorities, the youth, the elderly, the unemployed, and others (Thijssen and van Dooren 2016). The inclusion of citizens from a wide variety of backgrounds is a vital factor impacting whether participation alleviates democratic deficits in society, yet experience has shown that inclusivity in participation is difficult to achieve (van den Berg et al. 2020).

Learning more about citizens’ conceptions about participation and how this relates to sociodemographic characteristics is an important step toward advancing inclusivity in participation. This is a valuable addition to existing research on direct citizen participation, which has mostly been using sociodemographic characteristics as control variables (e.g., Kim and Lee 2012; Ma 2018). A notable exception is research by Kim and Lee (2019) which examined the link between gender and participation. Knowledge about factors that impact the intention to participate for specific sociodemographic groups can help government to design more inclusive participation processes. Depending on how a participation process is organized or designed it may affect the intention to participate for different groups in a different way. By being aware of the mechanisms that impact participation of certain groups, governments can make informed choices for the design of participation processes to reach an inclusive group of citizens. This is particularly relevant because governments increasingly innovate in direct citizen participation (Fung 2015).

This article focuses on online platforms as one example of an innovative means of organizing direct citizen participation. Online platforms are infrastructures on the web that are designed to facilitate a particular activity (Gillespie 2010) and in the context of citizen participation in government this activity involves communication, negotiation, and decision making. Examples include online forums, virtual discussion rooms, electronic juries, and electronic polls (Kim and Lee 2012). Sometimes, participation is organized via existing platforms, such as social media. Other times, government creates new online platforms specifically for the purpose of facilitating direct citizen participation. The latter are the types of platforms that this article refers to when speaking of online participation platforms.

Participation via online platforms has several distinct features and possibilities compared to direct citizen participation that takes place offline. For example, online participation platforms can be accessed 24 h a day, from different locations, and via multiple channels (Nabatchi and Mergel 2010; Robbins, Simonsen, and Feldman 2008). Furthermore, online participation is mediated through these platforms, which impacts the fabric of the interactions: participants communicate with a relatively unknown audience, receiving different communicative cues in varying time frames and pace (Walther 2017). Because of these distinctive features, not all theorizing around offline participation applies to online platforms. Moreover, online participation platforms touch many different disciplines. Relevant research is being published in domains, such as information systems, marketing, and media research. An integrative theoretical approach is needed to bring these different research strands together and paint a more complete picture of the factors that impact citizens intentions to participate in online platforms.

To advance knowledge about the bottom-up perspectives of participants in online participation platforms this article asks the question: Which factors influence the intention of citizens from diverse sociodemographic backgrounds to participate in online platforms? This article draws on the theory of planned behavior (TPB) for identifying the relevant factors. TPB originates in social psychology and is designed to explain most human behaviors with a limited set of constructs (Fishbein and Ajzen 2010). The theory, with attitude toward the behavior, subjective norms, and perceived behavioral control as its three main constructs, has been used in more than 2000 studies and effectively accounts for variance in behaviors (Hagger et al. 2019). TPB posits that each of the main constructs are informed by beliefs, which are the substantive considerations that affect attitudes, norms, and perceived behavioral control (Fishbein and Ajzen 2010). Beliefs provide the most concrete information unique for the behavior and can be subdivided into three categories: First, behavioral beliefs are linked to attitudes and capture citizens’ beliefs whether online participation leads to positively or negatively valued outcomes. Second, normative beliefs are linked to subjective norms and capture citizens’ beliefs whether online participation is applauded or condoned by individuals or groups who are important to them. Third, control beliefs are linked to perceived behavioral control and capture citizens’ estimation of the likelihood that personal or situational factors will arise that facilitate or inhibit online participation (Fishbein and Ajzen 2010).

By using TPB as integrative framework this article fills several research gaps. First, the three main theoretical constructs of TPB are able to capture a broader variety of factors that impact participation than have hitherto been synergized. For example, TPB connects previous work about motives for participation (which link to attitudes, e.g., Gustafson and Hertting 2017)
to research about how procedural factors affect participation (which link to perceived behavioral control, e.g., Yetano and Royo 2017). Second, Fishbein and Ajzen (2010) recommend conducting qualitative research to identify relevant beliefs. Previous work that used TPB in the context of citizen participation instead only relied on theory to look for additional explanatory factors (e.g., Choi and Song 2020; de Jong, Neulen, and Jansma 2019). By conducting a qualitative study to elicit beliefs, this work may identify other influential factors than the ones that have so far been discussed. Third, this article focuses on the relationship between sociodemographic characteristics and the factors that impact participation, contributing to the scarce literature that has so far been written on this topic (e.g., Gustafson and Hertting 2017; Kim and Lee 2019). This article formulates new propositions about this relationship and thereby furthers our understanding about how citizens from different sociodemographic groups form intentions to participate.

The remainder of this article is structured as follows. First, the theoretical framework of the TPB is explained more elaborately. Then follows a discussion about the sociodemographic characteristics that this research studies in relation to online participation. Following, the research setting and methodology are introduced. The discussion section first presents an overview of the behavioral and control beliefs that are identified and then examines how these beliefs vary between citizens from diverse sociodemographic groups. Building on these results, in combination with theory and empirical findings from existing literature, five propositions are presented about beliefs that are particularly influential for specific sociodemographic groups. The article concludes with discussing the implications of these findings and providing suggestions for future research and recommendations for practice.

Theoretical Framework

Theory of Planned Behavior

This article focuses on the factors that influence citizens’ intention to participate in online platforms. Prominent behavioral theorists assert that positive intentions to perform a behavior are necessary to produce any particular behavior (Fishbein and Ajzen 2010). Generally speaking, an appropriate measure of whether a person has the intention to perform a certain behavior can serve as an accurate prediction of whether this person will indeed carry out this behavior (Fishbein and Ajzen 2010). There are, however, external factors that may cause a gap between behavioral intentions and actual behavior. For example, environmental constraints might make it impossible for an individual to carry out the behavior or the person might discover not to have the necessary skills for performing the behavior (Fishbein and Ajzen 2010). In other words, a person may lack either external or internal control over performing the behavior, which influences behavior as well as behavioral intentions.

This article uses the TPB as theoretical lens to explain behavioral intentions. TPB posits that intentions are formed by three key determinants: attitude toward the behavior, perceived norm, and perceived behavioral control (figure 1; Ajzen 1991; Fishbein and Ajzen 2010). Attitude stands for people’s dispositions toward the behavior and are evaluative in nature, it captures whether people hold favorable or unfavorable opinions of the behavior (Fishbein and Ajzen 2010). Perceived norm is divided into two categories and stands for people’s impressions of the perceived norm to perform (or not to perform) the behavior (i.e., injunctive norms), as well as impressions about whether relevant others are performing the behavior (Fishbein and Ajzen 2010). Perceived norm is divided into two categories and stands for people’s impressions of the perceived norm to perform (or not to perform) the behavior (i.e., injunctive norms), as well as impressions about whether relevant others are performing the behavior (i.e., descriptive norms; Ajzen 2011). Lastly, perceived behavioral control captures people’s perception of the degree to which they have control (both external and

![Figure 1. Theory of Planned Behavior (Fishbein and Ajzen 2010)](Downloaded from https://academic.oup.com/ppmg/article/4/3/259/6325444 by guest on 07 September 2021)
internal) over performing the behavior (Fishbein and Ajzen 2010). Combined, the general rule of the theory is that “the more favorable the attitude and perceived norm and the greater the perceived behavioral control, the stronger should be the person’s intention to perform the behavior in question” (Ajzen 2011, 75).

Previous work has studied online participation using TPB, concluding that perceived norm and perceived behavioral control in particular work well as predictors for (intentions of) online participation (Choi and Song 2020; de Jong, Neulen, and Jansma 2019). This work, however, did not include that each of the three main determinants in the theory are informed by underlying belief constructs (Fishbein and Ajzen 2010). Beliefs are highly informative, because while a person’s attitude may partly explain whether somebody participates online, to understand the origin of this positive or negative attitude toward online participation it is necessary to know why somebody holds this attitude. Attitudes, norms, and perceived behavioral control are informed by behavioral, normative, and control beliefs, respectively.

Behavioral beliefs are based on the expectancy-value model, meaning they are a function of what an individual perceives to be likely outcomes of the behavior (i.e., outcome expectancy) and how this individual evaluates (i.e., values) these outcomes (Fishbein and Ajzen 2010). For online participation, behavioral beliefs thus capture subjective probabilities that online participation leads to certain positive or negative outcomes, which influence whether an individual has positive or negative attitudes toward online participation. Normative beliefs are the subjective probabilities that particular referents, with whom an individual is motivated to comply, think that they should perform the behavior and whether these referents are themselves performing this behavior (Fishbein and Ajzen 2010). Normative beliefs thus capture an individual’s beliefs about expectations and behaviors of relevant others, which influence whether an individual perceives social pressure to participate online. Finally, control beliefs are an individual’s estimation of whether certain factors will be present that facilitate or hinder performing the behavior (Fishbein and Ajzen 2010). Again, these can be external control factors, such as task demands and circumstances, or internal control factors, such as skills or willpower. Regarding online participation, control beliefs capture subjective probabilities that facilitating or impeding factors to online participation will be present, which influence whether an individual perceives themselves capable to participate online.

Sociodemographic Characteristics and Online Participation

The TPB posits that people with similar social backgrounds are more likely to hold the same beliefs, as they will to some extent have had similar information exposure and experiences (Fishbein and Ajzen 2010). This section illustrates this point by examining various relevant background factors and discussing mechanisms through which people with similar backgrounds may hold similar beliefs. What particular background factors are relevant to study depends on their association with the behavioral, normative, or control beliefs that impact online participation. In the context of inclusivity, it is particularly of interest to consider how the population is segmented along dimensions of sociodemographic characteristics, such as gender, age, socioeconomic status, ethnicity, and religion (Pitts and Wise 2010), because these account for dominant divisions in society. Participation in government and policymaking have long been biased toward social and economic elites (Gilens and Page 2014) and there are still barriers to inclusion for nonmainstream groups based on gender, ethnicity, disabilities, and sexual orientation (Naff 2018). There are thus many sociodemographic characteristics that are relevant for studying inclusivity in participation. This article zooms in on three of these characteristics, namely age, gender, and socioeconomic status. As the next few paragraphs explain, there are theoretical arguments that these characteristics are associated with beliefs that impact participation, but we do not yet know clearly in what way. Moreover, these characteristics are relatively less sensitive and therefore participants in large-scale qualitative research are likely to be comfortable disclosing this personal information.

Starting with age, prior research has shown a curvilinear relationship between age and online participation (Van den Berg et al. 2020). There are two interesting effects of aging which may impact beliefs. First, there are life-cycle effects. As people age, they pass through different roles (e.g., child, student, worker, parent, retiree). They adapt to these roles by learning new knowledge, accumulating social experiences, and undergoing biological and psychological change in the process (Riley 1973). Each stage in the life cycle has different challenges and opportunities that can affect whether a person participates online. For example, older people generally have a higher stake in society (e.g., by having a mortgage or raising children), which can mean that participation has more instrumental value (Thijssen and Van Dooren 2016). If older participants particularly participate out of self-interest (Gustafson and Hertting 2017), this group may hold self-interest as a behavioral belief whereas younger people do not. Second are cohort effects. This view considers how society is constantly changing by shifts in tastes and beliefs, developments in arts and sciences, periods of prosperity or depression and particular disruptive events (Riley 1973). Cohorts are groups in society that go through the stages in their
outside forces such as luck or chance), which can are seen as dependent on one’s own behavior or on specifications) and locus of control (i.e., whether outcomes (i.e., the perception of one’s own capabilities and qualities) and time and to focus on the intersection of multiple dimensions (Bearfield 2009; Meier 2019; Vinopal 2020). Intersectionality challenges the idea that sociodemographic characteristics form independent analytical categories, but stresses that categories operate together to form inequalities in society (Bearfield 2009; Vinopal 2020). In this article, the analysis will point toward the sociodemographic categories that are of most interest and in what configuration.

Methodology

The method of this research is qualitative and exploratory. Data were collected from open-ended questions, which were based on the guidelines for applying the theory of planned behavior as outlined by Fishbein and Ajzen (2010). The questions asked citizens to list their behavioral, normative, and control beliefs about online citizen participation. The collected responses were analyzed inductively, via thematic analysis, to categorize responses into themes.

Research Setting and Sampling

This research was conducted in the context of online participation platforms developed by the municipality of The Hague, The Netherlands. The Hague is the third largest city in The Netherlands and has roughly 550,000 inhabitants. Compared to the average in The Netherlands, inhabitants of The Hague are somewhat younger and less frequently have intermediate education (instead, inhabitants are either lower or higher educated than average in The Netherlands; GGD Den Haag 2021; Den Haag in Cijfers 2021). The Hague works together in a coalition with four other large municipalities in The Netherlands on a life cycle against roughly the same societal backdrop (Riley 1973). For example, digital natives are a cohort that grew up in the digital age and are therefore generally very engaged with technology and used to rapid innovations in information and communication technologies (Zavattaro and Brainard 2019). Belonging to this “internet generation” may impact online participation, for example, through impacting control beliefs (Thijssen and Van Dooren 2016).

A second relevant sociodemographic characteristic is gender. Some prior research shows that men are more likely to participate online than women (Ma and Zheng 2018), although other research finds no difference in gender and online participation (Van den Berg et al. 2020). Regardless, men and women might form intentions to participate online based on different beliefs. Kim and Lee (2019), for example, find that assigning instrumental value (e.g., ownership and influence) to online participation is a determinant of participation for men, whereas recognizing intrinsic value (e.g., information and education) of online participation is of more importance for women. Social role theory can serve to explain why beliefs might structurally vary between men and women. According to this theory, societies prescribe gender roles and “undertake extensive socialization to promote personality traits and skills that facilitate role performance” (Eagly and Wood 2012, 459). Summarizing these roles, part of the female gender role and stereotypical for women are communal, domestic, or subordinate behaviors, whereas part of the male gender role and stereotypical for men are agentic, resource acquisition and dominant behaviors (Eagly and Wood 2012). These gender roles can cause men and women to have varying life experiences, because behavior that is applauded for one gender may be reprimanded for another. Moreover, the selective attention from men and women to highly gender-stereotyped media also leads to variances in information exposure based on gender (Greenwood and Lippman 2010). Despite the highly normative character of this socialization, it is proposed these mechanisms may impact all three types of beliefs as defined in TPB.

The third sociodemographic characteristic that is considered is socioeconomic status. It is noted that people who are better educated and wealthier participate more (Fung 2006). Socioeconomic status is linked to the attainment of knowledge and skills and is therefore likely to particularly influence control beliefs. Cohen, Vigoda, and Samorly (2001), for instance, find a relation between socioeconomic status to self-esteem (i.e., the perception of one’s own capabilities and qualifications) and locus of control (i.e., whether outcomes are seen as dependent on one’s own behavior or on outside forces such as luck or chance), which can impact perceptions of controllability over the behavior. In the context of online participation, the usage gap and differential use thesis of Van Deursen and Van Dijk (2014) is of relevance. These scholars find that lower educated people make use of the internet for longer periods of time than higher educated people, but that people who are lower educated are more likely to use the internet for gaming and social interaction and less likely to use it for information and personal development. These trends cause variation in the type of skills that people develop and the information they are exposed to, which can impact beliefs.

Before continuing it is relevant to stress that sociodemographic categories can be combined in different configurations and some categories are strongly interlinked. For example, being a student or retired is captured in job status and is also part of the lifecycle process, thus related to age. There is growing interest in public administration research to look beyond one single sociodemographic category at the time and to focus on the intersection of multiple dimensions (Bearfield 2009; Meier 2019; Vinopal 2020). Intersectionality challenges the idea that sociodemographic characteristics form independent analytical categories, but stresses that categories operate together to form inequalities in society (Bearfield 2009; Vinopal 2020). In this article, the analysis will point toward the sociodemographic categories that are of most interest and in what configuration.
policy agenda to improve inclusive democracy. This policy agenda particularly focuses on the number and diversity of participating citizens in local democracy (Rijksoverheid 2019). Together with this coalition, The Hague is also one of the front-runners for online citizen participation in The Netherlands, releasing several high-quality online participation platforms per year at neighborhood level.

The Hague uses these online participation platforms to citizen-source locations in neighborhoods that can be improved with repairs or updates. Participating citizens help to identify and prioritize these locations, and this input is subsequently used to create a redevelopment plan for the neighborhood. Participation takes 10–15 min for an average participant and requires little or no preparation for most participants involved. All citizens above the age of 12 within the neighborhood receive a personal invitation to participate via postal mail and The Hague spreads awareness about the participation platforms in both local (print) and social media. This is a suitable research setting for studying intentions to participate for citizens from diverse sociodemographic groups, knowing that The Hague aims for these platforms to have a wide reach in an effort to capture a broad variety of perspectives.

For this study, research participants were recruited using non-probability sampling. An invitation was sent out via Email to citizens who recently participated in one of these online platforms and submitted their contact details to stay informed. This means that there are multiple moments when participants self-selected. First, citizens self-selected by participating in the online platform and submitting their Email address. Second, they self-selected when they were invited for this research. The research participants are thus not representative of all citizens in The Hague but are rather a subgroup of engaged and online citizens living in neighborhoods that were recently invited for online participation. This self-selection bias is not a problem for the purpose of eliciting different factors that impact intentions to participate. The focus is to capture variety in these different influential beliefs, rather than proving which beliefs are representative for all citizens. To support this focus, the analysis zooms in on diverse sociodemographic groups that are present in the sample and examines whether there is variety in the factors that influence their intention to participate. When finding differences between these groups that can be supported by literature, propositions are developed as a basis for future, empirical research.

Data Collection and Respondents
Data were collected through an online questionnaire using Qualtrics software, between May and June of 2020. The questionnaire was sent to 1,281 citizens and 442 complete responses were collected (34.5% response rate). Citizens had to be above 18 to participate in this research. The mean age of the respondents was 57 (SD = 15.7) and 54.3% of the respondents were male. Over half of the respondents were (self-) employed (53.4%) and many respondents were retired (35.1%). 50.7% of the respondents held a degree in higher education. See table 1 for all descriptive statistics. Compared to the adult population of The Hague, men are overrepresented in the sample by 4.6 percentage points, 65+ year-olds are overrepresented by 21.7 percentage points and higher educated are overrepresented by 16.7 percentage points. This matches with the literature that states that older, higher educated men are most represented in participation (Fung 2006; Michels and De Graaf 2010; Van den Berg et al. 2020).

Instrument
The online questionnaire included six open TPB questions about behavioral, normative, and control beliefs, see table 2, which were based on the questions as formulated in Ajzen (2019). To avoid attrition, respondents were randomly allocated to one of the TPB categories (i.e., behavioral, normative, or control beliefs) and were asked the two corresponding questions.1 Thus, two open questions were asked per respondent, one probing for positive beliefs (question A) and one for negative beliefs (question B). For each question respondents were prompted to give 1–5 answers to the question in a single text box.

The TPB questions were embedded in a larger questionnaire that asked citizens to evaluate the participation process that they had just participated in. The questionnaire opened with two demographic questions to establish the respondent’s eligibility. This was followed by 14 closed evaluation questions. Afterward, random assignment took place and citizens were asked the two allocated TPB questions. The TPB questions were introduced by the following statement: “The next two questions concern participating in an online platform of the municipality. The [online platform you recently participated in] is one example of such a platform. The municipality wants to use online platforms more often so that citizens can think about and help decide what happens in their neighborhood and in the city.” The questionnaire closed with demographic questions.

1 The demographic characteristics of respondents allocated to the different TPB categories were homogeneous. Male and female respondents were equally distributed over the three groups $\chi^2 (2, N = 388) = 2.30, p = .317$ and no significant difference was found in the mean age $t(2, 390) = 8.1, p = .543$. Groups were also comparable considering work status $\chi^2 (4, N = 379) = 2.67, p = .614$ and education level $\chi^2 (4, N = 372) = 5.10, p = .277$. 


Considering that the TPB questions were embedded within a larger questionnaire, there are two implications about the instrument that should be noted. First, because the overall questionnaire was linked to a prior participation process, some citizens listed beliefs that only applied to their earlier participation and were not general beliefs about participating in online platforms. This was, for instance, the case when citizens listed a specific complaint about the results, for example, naming a location in the neighborhood that should also be improved. When this happened, it was coded as a “comment on earlier participation” and not used in further analyses. Second, the evaluation questions that preceded the TPB questions may have made some beliefs about participation more available to respondents, regardless of whether they already held this belief. Respondents were asked to evaluate specific aspects of the participation process and during this valuation they may have formed new beliefs about these aspects. The data suggests that if this effect was present it was not strong. The answers of respondents showed a lot of variation and the wording used in these answers was not uniform.

**Coding Procedure and Analysis**

The responses to the open questions were analyzed using thematic analysis (Braun and Clarke 2006). First, the responses recorded during the first week of data collection were read to become familiar with the data and record ideas about initial codes. Once the data collection was finished, the data were collated into two lists (one for the positive beliefs, i.e., responses to question A, and one for negative beliefs, i.e., responses to

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**Table 1. Descriptive Statistics Respondents**

| Demographic Characteristic | N = 442 | % Respondents in The Hague |
|----------------------------|---------|---------------------------|
| Gender                     |         |                           |
| Male                       | 240     | 54.3                      | 49.7 |
| Female                     | 197     | 44.6                      | 50.3 |
| No response                | 5       | 1.1                       | —    |
| Age                        |         |                           |
| 18–40                      | 91      | 20.6                      | 40.5 |
| 40–65                      | 174     | 39.4                      | 41.2 |
| 65+                        | 177     | 40.0                      | 18.3 |
| Education                  |         |                           |
| Lower                      | 71      | 16.0                      | 31   |
| Intermediate               | 125     | 28.3                      | 35   |
| Tertiary                   | 224     | 50.7                      | 34   |
| No response                | 22      | 5.0                       | —    |
| Job status                 |         |                           |
| Working                    | 236     | 53.4                      | N/A  |
| Retired                    | 155     | 35.1                      | N/A  |
| Other                      | 37      | 8.4                       | N/A  |
| No response                | 14      | 3.1                       | —    |

*The percentages for age in The Hague were also calculated on the population >18.

*Education level is ranked according to the International Standard Classification of Education, based on the categorizations used by the Dutch Statistics Agency (CBS 2017). Lower education includes 0 less than primary, 1 primary and 2 lower secondary education. Intermediate education includes 3 upper secondary and 4 postsecondary non-tertiary education. Tertiary education includes 5 short cycle tertiary, 6 bachelor or equivalent, 7 master or equivalent, and 8 doctoral or equivalent.

*Job status other includes unfit for work (N = 14), student (N = 10), unemployed (N = 7), or other (N = 6).

**Table 2. TPB Questions**

| Random allocation | Behavioral beliefs (positive and negative outcomes of participation) | Normative beliefs (influential individuals/groups that applaud or condone participation) | Control beliefs (factors that facilitate or hinder participation) |
|-------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------|
|                    | 1a. What are the **advantages** of participating in an online platform of the municipality? |
|                    | 1b. What are the **disadvantages** of participating in an online platform of the municipality? |
|                    | 2a. Who or what are reasons for you to **favor** participating in an online platform of the municipality? |
|                    | 2b. Who or what are reasons for you to **oppose** participating in an online platform of the municipality? |
|                    | 3a. What makes it **easy** for you to participate in an online platform of the municipality? |
|                    | 3b. What makes it **hard** for you to participate in an online platform of the municipality? |
question B), and all responses were given initial codes. Afterward, the initial codes were sorted into preliminary themes. For example, the theme “interaction” included initial codes such as “no discussions,” “answer not biased,” and “quieter.” Because the TPB is used as a theoretical framework in this research, it was also evaluated whether the themes were exemplary of behavioral, normative, or control beliefs (e.g., “influence” was considered a behavioral belief and “moment” was considered a control belief). The theoretical definitions of behavioral, normative, and control beliefs were leading for making this decision. As the next step, all themes were reviewed and refined, paying special attention to the coherency among the codes that belonged to the same theme. At this stage, the lists of positive and negative beliefs were merged, while keeping score of the themes’ total, unique, positive, and negative mentions. Some themes were only listed as either positive (e.g., voice) or negative (e.g., cynicism), but most themes occurred on both lists. For example, influence was mentioned 68 times in total by 60 respondents, meaning that 8 respondents mentioned it twice. The theme occurred 26 times on the list of positive beliefs (e.g., online participation “gives me influence over decisions”) and 42 times on the list of negative beliefs (e.g., online participation “does not give me enough influence over decisions”). In the last phase of the coding procedure, the definitions and names for each theme were finalized. Codes that occurred very infrequently (less than three times) and did not link to an existing theme were left undefined.

Interestingly, there were no codes or themes that matched the definition of normative beliefs. A possible explanation for this observation lies in the formulation of the question about normative beliefs. The question asked: “who or what are reasons [...]”, rather than the more explicit “list individuals or groups who would approve of you participating in an online platform of the municipality,” as suggested by Fishbein and Ajzen (2010). With the current formulation, no respondents listed answers to the “who” part of the question. See the discussion section for further reflection on this finding.

To improve the reliability of the coding, the code-recode procedure was used. For this procedure, the author coded 25% of all responses for a second time after a 2-month break from coding. Over half of the responses received the exact same codes. Most differences were minor. For example, sometimes the new code was a synonym of the old code, or the new code was at the level of initial coding whereas the old code had already been sorted into a theme. The recoding indicated that three themes should be developed more thoroughly, which was subsequently done. All old codes were revisited to process these new insights.

For further analysis, two types of overviews were created to compare beliefs across different sociodemographic groups. For the first overview, beliefs were the starting point. For each belief, the subset of respondents who mentioned that belief was compared to the whole sample, examining whether there were differences in the distribution of sociodemographic characteristics between the subset and the sample. In this overview, the sociodemographic groups were defined in the same way as in table 1. This gives insights into whether a belief is more often mentioned by a particular sociodemographic group than by other groups. For example, 52% of the respondents in the whole sample have tertiary education, but this percentage is 69% in the subset of respondents who mention inclusion beliefs, from which it can be concluded that inclusion is more often mentioned by higher educated respondents.

For the second overview, sociodemographic characteristics were the starting point. The sample was subset based on sociodemographic characteristics to examine the beliefs that were mentioned within sociodemographic groups. These overviews give insights into which beliefs are more or less commonly held within a sociodemographic group and allows for comparisons between sociodemographic groups and their beliefs. For example, comparing the most held control belief for men and women, it shows that for women this is location and for men this is time. These overviews were also used for studying intersectionality. The starting point for this analysis was job status, because life-cycle effects naturally connect job status to age (people who are retired are—on average—older than people who are working or studying). The following overviews were systematically created and compared: job status × education × gender, job status × education, and job status × gender.

Results
One thousand fifteen codes were recorded in 23 themes, categorized as either behavioral or control beliefs. The results focus on the salient themes, which are the themes that were most often mentioned and together cover 80% of the total codes. The first part of this result section defines these themes and examines what sociodemographic groups mention each theme. Table 3 presents the themes that are categorized as behavioral beliefs and table 4 the
control beliefs, with two to four illustrative beliefs for each theme. Additionally, figure 2 summarizes the salient themes in a model. The second part of the result section presents five propositions about selected behavioral and control beliefs that are proposed to impact behavioral intentions differently for citizens with particular sociodemographic backgrounds.

Behavioral Beliefs

Voice
The most frequently occurring behavioral belief in the population concerned voice, which is the belief that through participation you can speak out or voice an opinion. This belief has to do with “how participants interact within a venue of public discussion or decision” and therefore links to the communication and decision dimension in the framework of participation of Fung (2006, 68). The belief falls at the lower end of this dimension as a less intense form of interaction. It does not include beliefs about more intense forms of interaction, such as negotiation or deliberation about how preferences are used in the end result (Fung 2006). The belief of being able to put forward one’s own views can positively affect attitudes toward online participation. Voice beliefs are widely held throughout the sample and important for citizens in all sociodemographic groups. It is a prominent belief for respondents with intermediate or lower education.

Influence
Another frequently mentioned behavioral belief was influence, which is the belief that citizens can affect government action through participation. It relates to the degree of citizen power, which is central in Arnstein’s ladder of citizen participation (1969). Influence beliefs can negatively impact attitudes when citizens perceive their power at levels of tokenism or placation, or positively impact attitudes when citizens perceive partnership, delegated power, or citizen control. Men and higher educated respondents mentioned this belief more often than women and lower educated respondents. Moreover, for employed men it is the most often mentioned behavioral belief, indicating that for men it is particularly important that they perceive their participation to influence the decisions that are being made.

Inclusion
Respondents also held beliefs about inclusion, meaning whether all citizens had equal opportunities to participate (Young 2000). Comments about inclusion were mostly made by higher educated respondents and women, although it varies for job status whether education or gender differences are more noticeable. For retired respondents, those with tertiary education more often hold inclusion beliefs than those with lower or intermediate education. These respondents applauded that online platforms can reach a wide range of people or express concerns for people who have difficulties using online platforms to participate. For employed respondents, women mention inclusion more often than men. These respondents not only mention that people may be excluded because participation takes place online, but also specifically express the worry that older people may have difficulties participating.

Democratic Values
Respondents indicated various beliefs about whether important democratic values are supported by online participation. Quintessential values such as transparency (Grimmelikhuijsen and Welch 2012) and trust (Welch, Hinnant, and Jae Moon 2005) mostly have a negative impact on attitudes when they are not sufficiently present. Beliefs about democratic values were not clearly mentioned by one particular sociodemographic group, although retired respondents mentioned it slightly less often than respondents in any of the other job status categories.

Involvement
Another belief that can positively affect attitude, is that participating in an online platform increases feelings of involvement. First, respondents spoke of involvement in general terms, related to taking part in the participation process. Second and more nuanced, respondents noted that online participation makes them feel more involved in the neighborhood, linking to the concept of sense of community (Foster-Fishman, Collins, and Pierce 2013). Involvement beliefs were more often held by respondents with lower or intermediate education than by respondents with tertiary education.

Crowdsourcing
This theme covers beliefs about crowdsourcing, meaning the collaborative effort of collecting input from the public into decision making (Nam 2012). Crowdsourcing beliefs emphasize that ideas are brought forward by the public and that the public should collectively decide on the best ideas. These beliefs can positively impact attitude toward online participation. Similar to involvement beliefs, crowdsourcing beliefs were more often mentioned by respondents with lower or intermediate education than by respondents with tertiary education.

Incentive
Finally, several respondents noted beliefs that emphasized the necessity of a specific incentive for
### Table 3. Behavioral Beliefs

| Themes                        | Quotes                                                                 | Demographic                                                                                           |
|-------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| **Voice**                     |                                                                         |                                                                                                        |
| [+] State my preferences      | “Hopefully this is a way to directly indicate your wishes”; “You can present your own ideas and opinions”; “A chance to raise your voice” | Widely held belief in the sample, for respondents of all sociodemographic groups. Prominent belief for respondents with intermediate or lower education. |
| [+] Participate in determining actions | “You can participate about issues”; “You at least have the opportunity to participate” |                                                                                                        |
| **Influence**                 |                                                                         |                                                                                                        |
| [-] Not enough influence over decisions | “If it is evident that my vote does not have influence”; “Participation has little or no influence” | More often mentioned by men and higher educated respondents. For employed men it is the most often mentioned behavioral belief. |
| [+] Influence over decisions  | “Possibly influence decisions”; “I hope that it will be of influence”   |                                                                                                        |
| [-] Extent of influence is vague | “You do not know about the extent of your influence”; “I can’t see whether my vote has influence” |                                                                                                        |
| [-] Influence is only in pretense | “Often it’s already decided and predetermined, it may appear otherwise, but in the end, everything is decided by others”; “I think it only appears to be your decision” |                                                                                                        |
| **Inclusion**                 |                                                                         |                                                                                                        |
| [-] Excludes people without internet | “You need to have a computer”; “people who aren’t active online can’t participate” |                                                                                                        |
| [+ Accessible to many people | “Accessibility for the largest possible group of citizens”; “Everyone with an internet connection can participate” |                                                                                                        |
| [-] Too difficult for some people | “Not everyone is skilled in digital environments”; “You need to be able to operate it” |                                                                                                        |
| **Democratic values**         |                                                                         |                                                                                                        |
| [-] Insufficient feedback     | “You don’t receive direct feedback”; “The feedback isn’t entirely clear”; “Not enough feedback and updates” | Equally mentioned by respondents from various sociodemographic groups. |
| [-] Not transparent           | “Little insight into what happens ‘behind the scenes’”; “Not enough transparency” |                                                                                                        |
| [-] Government does not listen | “I want to have the idea that they listen”; “I have the feeling that they don’t listen anyway” |                                                                                                        |
| [-] Negatively impacts trust | “If the result is negative, trust in the municipality may plummet”; “Doesn’t promote trust in the municipality” |                                                                                                        |
| **Involvement**               |                                                                         |                                                                                                        |
| [+] Feel more involved        | “I feel involved when I take up a cause”; “I want to stay involved in the plans of the municipality” | More often mentioned by respondents with lower or intermediate education. |
| [+] Feel more involved in the neighborhood | “Easy way to feel involved in the neighborhood”; “Involvement in the neighborhood where you live” |                                                                                                        |
| **Crowdsourcing**             |                                                                         |                                                                                                        |
| [+ Local] Locals can bring forward ideas | “Input from the target audience”; “That locals can bring forward their ideas”; “Can post your own topics” | More often mentioned by respondents with lower or intermediate education. |
| [+ Local] Locals can state their preferences | “Locals help decide”; “More participation for locals about what happens in the neighborhood” |                                                                                                        |
| [+ Local] Voice for those who know best what is needed in the area | “Locals know very well where the problems are”; “Locals see more than office people” |                                                                                                        |
| **Incentive**                 |                                                                         |                                                                                                        |
| [+ Local] The topic is interesting | “If it’s about something that I often have to deal with”; “The topic is important” | More often mentioned by retired respondents. |
| [- Local] The topic is of no interest to me | “If the topic of the platform isn’t interesting to me”; “If it is irrelevant to me”; “No alignment with my interests” |                                                                                                        |
| [+ Local] Participation is in my own interest | “It’s in my interest”; “Sort of for my own sake” |                                                                                                        |
| Theme                        | Quotes                                                                 | Demographic                                                                 |
|------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------|
| **Location**                 |                                                                        |                                                                            |
| [+] Accessible               | “Everyone has access to participate”; “Accessible medium”; “Low threshold to participate” | More often mentioned by respondents who are younger, female, or have tertiary education. |
| [+] Possible from any location | “You don’t need to go anywhere”; “It’s possible from home”; “You don’t have to go out the door” |                                                                            |
| [+] Possible via internet    | “The fact that it’s possible online”; “You can participate via your own computer, tablet or smartphone” |                                                                            |
| **Time**                     |                                                                        |                                                                            |
| [+] Fast                     | “It takes little time”; “You can do it quickly”                        | More often mentioned by respondents who are younger, employed, or have tertiary education. |
| [+] Possible at any moment I prefer | “I can choose for myself when I have the time”; “You choose when you have time to participate” |                                                                            |
| [+] Can take as much time as I need | “There’s plenty time to read all information”; “Calmly read all the plans, time to consider and compare” |                                                                            |
| **Effort**                   |                                                                        |                                                                            |
| [+] Easy                     | “It’s easy to use”; “Easy to fill out”; “I find it’s really easy”; “Easy to participate” | More often mentioned by respondents who are younger, working, or have tertiary education. |
| [−] Too much effort          | “Often it’s too much effort”; “If I need to do too much for it”; “If it takes too much effort” | Less often mentioned by respondents who are older and retired. |
| **Information availability** |                                                                        |                                                                            |
| [+] Plenty of information    | “A lot of information and options together”; “Plenty of information”; “Enough access to information” | More often mentioned by respondents who are employed or have tertiary education. |
| [−] Not enough information   | “Too little information”; “If you need to seek for explanations”; “Challenging to gather all information” |                                                                            |
| **Information presentation** |                                                                        |                                                                            |
| [+] Clear overview of information | “Very clear overview”; “Complete overview of what needs to happen”; “Better overview of the plans” | More often mentioned by employed respondents with tertiary education. |
| [+] Clear                    | Respondents often list the word “clear” without any further explanation |                                                                            |
| **Platform design**          |                                                                        |                                                                            |
| [−] Platform is low quality  | “If the website doesn’t work well or is unclear”; “First need to figure out how the website works” | More often mentioned by employed respondents with tertiary education. |
| [+] Platform has functionalities that I need | Respondents mention features that improve their experience on online platforms, such as better sorting options and the use of pictures and drawings |                                                                            |
| **Interaction**              |                                                                        |                                                                            |
| [−] Mediates my interaction with other people | “No interaction with others”; “No personal contact”; “I prefer to speak to a person than to my laptop” | Less often mentioned by retired respondents and more often mentioned by female respondents. Lower educated respondents more often mention interaction as affecting controllability positively. |
| [−] Negatively impacts interactions | “It isn’t easy to discuss with my neighbors”; “I miss interaction with others”; “No deliberation possible” |                                                                            |
| [−] No chance to elaborate on my opinions | “Sometimes it’s useful to elaborate in person”; “You can’t further explain about the ideas you care for” |                                                                            |
participation. Most often, respondents mentioned a personal interest in the topic as an important incentive for online participation, which links to findings from Yetano and Royo (2017) who found that personal interest was a determinant of online participation. Incentive appears to be a more important factor to retirees than to the other respondents, who list incentive less often.

Control Beliefs

Location
The most occurring control beliefs regard factors that link to the logistics of participation, meaning the actions that need to be undertaken to participate. Beliefs about logistics are divided into two main themes. This first theme consists of beliefs about the location of participation. Location beliefs include that online participation is accessible, possible from any location, and online. These three beliefs all positively affect perceived behavioral control. Location beliefs are more often mentioned by respondents who are younger, female or have tertiary education.

Time
The second theme that relates to beliefs about the logistics of participation consists of beliefs about time. If citizens hold beliefs that participation is fast and can be done at any preferred moment, this can positively affect controllability over online participation. Some respondents also appreciated that they could take as much time as needed to participate. For time beliefs there is less gender difference than for location beliefs, although women still mention time beliefs slightly more often than men. Time beliefs are also more often mentioned by respondents who are younger, employed, or have tertiary education.

Effort
This is the most general control belief that was brought forward by respondents. Respondents frequently mentioned the belief that online participation was easy, which can positively affect perceived behavioral control. Alternatively, many respondents also mentioned the opposite belief, namely that they would not participate if it would cost too much effort, in which case it would negatively affect perceived behavioral control. Similar to time beliefs, beliefs about effort are also more often mentioned by respondents who are younger, working, or have tertiary education. Older and retired respondents mention effort much less often than the other respondents.

Information Availability
Many respondents state that online platforms enhance the availability of information about participation. Jaeger (2007) argues that access to adequate and appropriate information is crucial for participation. Controllability over online participation can thus be enhanced by the belief that adequate information will be present. This belief is mostly held by employed respondents, or respondents with tertiary education.

Information Presentation
Apart from the availability of information, also the presentation of information can positively affect perceived behavioral control. Within this theme, respondents noted that online participation gives a clear overview of the information and that the information itself is clear. Conceptually, information presentation matches well with the following theme about platform design. Both themes link to beliefs about system quality, meaning the desired characteristics of an information system (DeLone and McLean 1992). Information
presentation beliefs are more often mentioned by employed respondents with tertiary education.

Platform Design
This theme covers beliefs about the technological characteristics of online platforms. Respondents mostly mentioned this belief when they were skeptical about the quality of the online participation platform. This belief will mostly have a negative impact on controllability when citizens perceive the platform to be low-quality or missing important functionalities. Similar to beliefs about information presentation, also platform design beliefs are more often mentioned by employed respondents with tertiary education.

Interaction
Finally, respondents mentioned a range of beliefs commenting on the interaction or communication on online platforms. These sentiments were mostly listed as affecting controllability negatively. Respondents disliked several aspects about computer-mediated communication, stating for example that communication was less personal and that they lacked sufficient opportunities to clarify their opinions to others. This theme is more often mentioned by women than by men and it is less often mentioned by respondents who are retired. Noteworthy is that respondents with lower education more often listed interaction as affecting controllability positively rather than negatively. These respondents appreciated that they could make direct contact online and that there are less lengthy discussions.

Propositions
The following five propositions are formulated based on where the selective sample shows the most between-group differences and for which theoretical and/or research support can be identified in existing literature. These propositions provide a basis for future, empirical research focusing on the different routes by which citizens from diverse sociodemographic groups form intentions to participate.

Behavioral Beliefs and Gender
The data show a difference between which behavioral beliefs are influential in forming intentions to participate for men and women. Specifically, it was found that women more often held inclusion beliefs, whereas men more often held influence beliefs. This difference matches the gender roles as explained in social role theory. As stated before, the gender role for women is to be more communal (Eagly and Wood 2012). In society, women are expected to show concern for others to a greater extent than men are expected to (Eagly 1986). It is fitting with this role that women value inclusivity in online participation, as it signals that they are concerned about others having equal opportunities to participate. In contrast, stereotypical for men is to be agentic and dominant (Eagly and Wood 2012). According to male gender roles, men are expected to be more assertive and controlling than women (Eagly 1986). It is congruent with this role that men value influence, as this belief links to the degree to which they can assert themselves and control the outcome of participation. It is therefore proposed that:

Proposition 1: Women are more likely to hold inclusion beliefs than men.
Proposition 2: Men are more likely to hold influence beliefs than women.

Before continuing, there are two notes to be made related to propositions 1 and 2. First, examining these gender differences at the intersection of other sociodemographic variables, it can be seen that while these differences are pronounced for employed respondents, they are not present for retired respondents. Presumably, this should be explained by looking at age rather than job status. Examining the content of the inclusion beliefs, younger women often mentioned concerns about older people being excluded. It could be that the gender difference for inclusion beliefs is not present for older respondents because that particular inclusion belief is not held by older people themselves. With regard to influence, earlier research has shown that self-interest may be an important driver for participation of older people (Gustafson and Hertting 2017). This age trend might have a bigger impact than gender roles, which can explain why older women mention influence more often than younger women, and as frequently as older men. Second, gender roles are closely linked to social desirability, which raises questions about the authenticity of these beliefs. Regarding the extent to which these beliefs will indeed impact behavior, it is relevant to question whether these gender roles are truly internalized, or only activated because respondents gave socially desirable answers in the questionnaire. This could be addressed in future research.

Behavioral Beliefs and Education
The data show that involvement and crowdsourcing beliefs were particularly held by respondents with lower or intermediate education. These beliefs both stress the community aspect in participation. Even though it is reported that people with lower levels of education are less active in formally organized participation, they are generally more active in informal community participation, which includes social behaviors such as neighboring (i.e., giving and receiving instrumental help to and from neighbors; Perkins and Long 2002). Similarly, Prezza et al.
(2001) find that neighborhood relations are stronger for lower educated than higher educated people. Perceiving that formal participation can contribute to strengthening one's connection to the neighborhood may thus especially be an important behavioral belief for this sociodemographic group. Second, crowdsourcing beliefs emphasize bottom-up governance, with statements such as that locals should have the opportunity to bring forward ideas and state their preferences. This sometimes reflects a form of mistrust toward government, particularly in statements such as that locals know better than government what is needed in the area. It has repeatedly been reported that people with lower education are less likely to find government trustworthy (Bouckaert and Van de Walle 2003; Christensen and Lægreid 2005). It is suggested that people who have more trust in government are happier to allow government to make decisions in their regard (Goldfinch, Gauld, and Herbison 2009), and conversely people who have less trust in government may think that they are better able to make these decisions themselves. This could explain why respondents with lower and intermediate education hold more beliefs about crowdsourcing than respondents with tertiary education. Because people with lower and intermediate education are, on average, harder to reach for participation (Fung 2006), the following proposition is especially relevant to examine further.

Proposition 3: People with lower or intermediate education are more likely to hold involvement or crowdsourcing beliefs than people with tertiary education.

Control Beliefs and Age
Moving toward control beliefs, it is observed that beliefs about location, time and effort were more often held by employed and younger respondents than by retired and older respondents. A commonality in these three themes is that they all allude to the amount of time it requires to participate. This is particularly evident for the theme “time,” but it also holds for location, which links to whether time is required for traveling to a specific location, and effort, which relates to the time required to learn and perform a behavior. This time aspect can support the reasoning behind why this difference is observed. On average, younger and employed citizens have less free time than older and retired citizens; paid work takes up a lot of time and, conversely, for retirees the absence of work-demands opens up time for undertaking other activities (Lee, Chi, and Ailshire 2020). Furthermore, the data suggest that age is also an important contributing factor for whether or not somebody holds these beliefs. For this difference, varying degrees of unpaid work may be an explanation, particularly related to childcare. Younger adults are more likely to have childcare duties than older adults and childcare is most time consuming with the birth of the first child or when children are younger (Craig 2007). Therefore, time demands of unpaid work may be more present for younger adults than older adults, which can explain why these time-related control beliefs are of more importance to them. Because of these mechanisms, the following proposition is proposed:

Proposition 4: Younger and employed citizens are more likely to hold location, time, and effort beliefs than older citizens.

Control Beliefs and Education
In the theory section, it was proposed that education level could especially impact the control beliefs of respondents. This education difference is not observed for the themes discussed in the previous section (location, time, and effort). The data do show, however, that the control beliefs related to system quality (i.e., information presentation and platform design) are more often held by higher educated respondents than by respondents with lower levels of education. Previous research supports that higher education levels are correlated with having more content-related internet skills (Van Deursen and Van Dijk 2011). These content-related internet skills can be divided into information internet skills and strategic internet skills, which match well with these control beliefs. First, information internet skills, include finding, selecting, processing, and evaluating information (Van Deursen and Van Dijk 2011). Because higher educated internet users generally have more information internet skills, they are more likely to evaluate the presented information and subsequently hold control beliefs about information presentation. Second, strategic internet skills are about reaching online goals in an efficient manner (Van Deursen and Van Dijk 2011). Again, because higher educated internet users are more likely to have well-developed strategic internet skills, they are more likely to notice when an online platform has a design that is illogical or hinders efficient reach of the goal, which is reflected in control beliefs about platform design.

Proposition 5: People with tertiary education are more likely to hold information presentation or platform design beliefs than people with lower or intermediate education.

For proposition 5, it should be noted that this education difference emerges more strongly for employed respondents than retired respondents. Considering job status, employed respondents use (and strengthen) internet skills often during their jobs (Van Deursen...
and Van Dijk 2014), which is not true for respondents who are retired. Another explanation lies in the age difference between retired and employed respondents. It is noted that internet skills are sequential and conditional, meaning that before somebody develops content-related skills, one must first have acquired medium-related skills (i.e., skills related to using technology and navigating online; Van Deursen and Van Dijk 2011). Since older people more often have lower medium-related skills (Van Deursen and Van Dijk 2011), this may also explain why retired (and thus older) respondents reflect less on content-related system quality beliefs.

**Discussion and Conclusion**

This article used the TPB as theoretical lens to study which factors influence whether citizens from different sociodemographic backgrounds form the intention to participate in online public participation platforms. TPB posits that citizens with more favorable attitudes and perceived norm toward online participation, and greater perceived behavioral control over online participation will have stronger intentions to participate in online platforms. This article conducted a qualitative study to identify behavioral, normative and control beliefs that underly attitudes, perceived norm, and perceived behavioral control in the context of online citizen participation. The qualitative data supports the notion that these beliefs vary between different sociodemographic groups and, hence, that there is variation in how people with different sociodemographic backgrounds come to participation. For inclusive participation, this entails that elements in the design of participatory processes can unequally affect groups. Considering behavioral beliefs, propositions were formed about differences with regard to education level and gender. For control beliefs, the propositions addressed differences for education level and age.

TPB served well as an integrative framework to help identifying relevant beliefs and theories while looking both in and beyond the boundaries of public administration literature. The theory, in combination with the collected qualitative data, pointed to work about offline participation that translated well to the online context, such as voice (Fung 2006) and influence (Arnstien 1969), as well as concepts or theories from other disciplines, such as internet skills (Van Deursen and Van Dijk 2011), system quality (DeLone and McLean 1992), and social role theory (Eagly and Wood 2012). Grounding this theorizing in qualitative observations allowed for openness toward new perspectives, beyond drawing from current theoretical insights to select which factors to consider (e.g., Choi and Song 2020; de Jong, Neulen, and Jansma 2019). For example, democratic values such as transparency and trust were not all that often mentioned by respondents, while these are often a focal point in research on participation and digital government (e.g., Alarabiati, Soares, and Estevez 2021; Kim and Lee 2012). Instead, involvement, crowdsourcing, and incentive surfaced as relevant factors that might deserve more emphasis in future work. Another relevant contribution in this article is the incorporation and identification of control beliefs, such as location, time, and effort. These factors are easily overlooked when research focuses on motivations for participation (e.g., Gustafson and Hertting 2017), because these beliefs do not necessarily reflect the presence of motivating factors but rather emphasize the absence of hindering factors. Effort, for example, is not likely to be brought forward as a motivation for participation, but this factor does affect participation when citizens generally have the intention to participate under the condition that it does not cost too much effort. Including control beliefs thus assists in capturing a more complete overview of the factors that impact participation.

The contribution of this article is not solely theoretical, but the insights can also be used by public managers for the design of inclusive participation processes. The findings emphasize the importance that participatory programs allow for enough opportunities for citizens to voice their opinion and influence outcomes. Moreover, particularly the control beliefs underline the importance that the process itself is conveniently organized. Because many control beliefs were particularly held by younger respondents, public managers should be aware that these control factors are especially important to enable participation of younger citizens. The findings not only give concrete suggestions about how participation should be organized but can also be used in government communication and behavioral interventions (Ajzen 2011). By successfully incorporating specific beliefs in government communication, citizens can be primed to think about these beliefs. Especially when these beliefs are shown to affect participation for a certain sociodemographic group, emphasizing these beliefs can make the belief more salient for these citizens and maybe lead to increased participation from this group. For example, the findings suggest that if government communication emphasizes that participation can increase involvement or crowdsourcing, priming these beliefs may especially impact attitudes and subsequently intentions to participate for lower educated citizens. The beliefs and propositions point to relevant factors that impact participation, which can inform behavioral interventions that can be tested in future research or be used by public managers.
An interesting observation is that respondents did not list any normative beliefs. In TPB, normative beliefs and their associated perceived norms are important determinants of behavioral intentions. Previous research supports that perceived norms are correlated to online participation (Choi and Song 2020). As discussed, a possible explanation why normative beliefs were not mentioned is because the question about normative beliefs in the research instrument was formulated too implicit. Moreover, norms are generally more difficult to identify because people are known to underestimate the extent to which they are influenced by social norms (Nolan et al. 2008). Therefore, the fact that respondents did not list any referents with whom they are motivated to comply does not mean that there are no such referents who would be able to influence them. At the moment, it remains an open question whether perceived norms vary between sociodemographic groups. Future research could zoom in on this, for example, by asking about referents that are often used in TPB research, such as friends, family, coworkers, and neighbors (Fishbein and Ajzen 2010). In a quantitative design, respondents can be asked about the extent to which they agree with statements to measure injunctive norms, that is, “[my friends] think that I should participate,” and descriptive norms, that is, “most of [my friends] participate” (Fishbein and Ajzen 2010).

It is important to emphasize that this article theorized about factors that explain why citizens form the intention to participate, but did not address the perhaps equally important question of why certain citizens do not form this intention. Future research can fill this gap by using other research methods, such as focus groups or qualitative interviews, to gather data about nonparticipants. Online questionnaires are less useful to provide information about people who refrain from online participation, because the behaviors of participating in an online questionnaire and in online participation are quite similar. It is also recommended to use these other qualitative methods for further examination into the (non)participation of minorities. This research did include respondents from groups that are considered to be minorities in participation (e.g., citizens who are younger and lower educated, and citizens who are unemployed or unfit for work), however these were self-selected and active minorities, and may therefore not be representative of the whole group. Future research could focus on one minority group at a time and adopt a research design that is specifically aimed at recruiting representative respondents for this group. Further exploration on what activates minorities, or conversely keeps them inactive, is definitely necessary.

Related to the previous remark, it should be noted that this article examined a limited set of background factors. There are further sociodemographic characteristics that reflect divisions in society, for which it would also be relevant to research group differences in the beliefs underpinning intention to participate online. Ethnicity, for example, is a sociodemographic characteristic that is commonly emphasized in digital divide research as being related to inequalities in access to technologies (Van Dijk 2020). It would be interesting to know if this impacts beliefs about online participation, and these insights could for instance be utilized in affirmative action programs of government. Another relevant sociodemographic characteristic is immigration status, which is also linked to differences in participation (Amuedo-Dorantes and Lopez 2017). Moreover, as the TPB model shows, there are categories of background factors beyond sociodemographic characteristics that can impact beliefs, such as individual dispositions (e.g., personality, mood, values, etc.) and information (e.g., knowledge, media, and intervention; Fishbein and Ajzen 2010). While these factors may to a lesser extent be linked to inclusion in online participation, to advance theorizing about the citizens in (online) participation these factors are also relevant to examine in future research.

As final suggestion for future research it would be relevant to not only focus on individual level factors, but also on the impact of context factors. Relevant factors are, for example, the national context, socioeconomic distributions, technological maturity, and level of government. The current research was carried out in a particular social context, namely in a developed democracy, with technologically advanced government and citizens, and at a local level. It is worthwhile to conduct this type of research in different contexts to theoretically and empirically explore how situational factors affect beliefs and behavioral intentions. First of all, it is possible that additional relevant beliefs surface when this research is conducted in different contexts, but this research would contribute to further establishing this theoretical framework. Second, in a different strand of research, empirical studies could focus on comparing different contexts. For example, research could examine whether influence beliefs have a weaker or stronger impact on behavioral intentions in varying democratic contexts. The bottom line is that the field is definitely not satiated and that future work on this topic is highly encouraged.

To conclude, this article contributed to the theory about citizen participation by examining the sociodemographic characteristics of participating citizens and the factors that impact their participation. It was observed that there are differences in the beliefs that are prominently held by citizens from varying sociodemographic groups, which illustrates that people with different backgrounds are to some extent affected by different factors when forming the intention to
participate. These observations, linked to theory and previous research, formed the basis for five propositions about the relationship between sociodemographic characteristics and beliefs. Being aware of the factors that impact the intention to participate for specific sociodemographic groups can help governments to design more inclusive participation processes and is an important building block for further theorizing about the citizens in participation.

References

Ajzen, Icek. 1991. The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 50 (2): 179–211.

———. 2011. Behavioral interventions: Design and evaluation guided by the theory of planned behavior. In *Social psychology and evaluation*, eds. Melvin M. Mark, Stewart I. Donaldson, and Bernadette Campbell, 74–101. New York, NY: The Guildford Press.

———. 2019. Constructing a TPB questionnaire: Conceptual and methodological considerations. http://www.people.umass.edu/azien/pdf/tpb.measurement.pdf (accessed January 25, 2021).

Alarabat, Ayman, Delfina Soares, and Elisa Estevez. 2021. Determinants of citizens’ intention to engage in government-led electronic participation initiatives through Facebook. *Government Information Quarterly* 38 (1): 101537.

Amuedo-Dorantes, Catalina, and Mary J. Lopez. 2017. Interior immigration enforcement and political participation of us citizens in mixed-status households. *Demography* 54 (6): 2223–47.

Arnstein, Sherry R. 1969. A ladder of citizen participation. *Journal of the American Institute of Planners* 35 (4): 216–24.

Barnes, Marian, Janet Newman, Andrew Knops, and Helen Sullivan. 2003. Construing the 'public' in public participation. *Public Administration* 81 (2): 379–99.

Bearfield, Domica A. 2009. Equity at the intersection: Public administration and the study of gender. *Public Administration Review* 69 (3): 383–6.

Bouckaert, Geert, and Steven Van de Walle. 2003. Comparing measures of citizen trust and user satisfaction as indicators of ‘good governance’: Differences in linking trust and satisfaction indicators. *International Review of Administrative Sciences* 69 (3): 329–43.

Braun, Virginia, and Victoria Clarke. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3 (2): 77–101.

Bryson, John M., Kathryn S. Quuck, Carissa Schively Slotterback, and Barbara C. Crosby. 2012. Designing public participation processes. *Public Administration Review* 73 (1): 23–34.

CBS. 2017. Standaard onderwijsindeling 2006—Editie 2016/'17. https://www.cbs.nl/-/media/_pdf/2020/25/pubsoi2016_ed1920.pdf (accessed January 25, 2021).

Choi, Ju-Choeil, and Changsoo Song. 2020. Factors explaining why some citizens engage in e-participation, while others do not. *Government Information Quarterly* 37 (4): 101524.

Christensen, Tom, and Per Legrèed. 2005. Trust in government: The relative importance of service satisfaction, political factors, and demography. *Public Performance & Management Review* 28 (4): 487–511.

Clark, Jill K. 2018. Designing public participation: Managing problem settings and social equity. *Public Administration Review* 78 (3): 362–74.

Cohen, Aaron, Etan Vigoda, and Aliza Samorly. 2001. Analysis of the interaction between socioeconomic status and political participation: A structural equations framework. *Political Psychology* 22 (4): 727–57.

Craig, Lyn. 2007. *Contemporary motherhood: The impact of children on adult time*. Aldershot, UK: Ashgate Publishing.

de Jong, Menno D. T., Sharon Neulen, and Sikke R. Jansma. 2019. Citizens’ intentions to participate in governmental co-creation initiatives: Comparing three co-creation configurations. *Government Information Quarterly* 36 (3): 490–500.

DeLone, William H., and Ephraim R. McLean. 1992. Information systems success: The quest for the dependent variable. *Information Systems Research* 3 (1): 60–95.

Den Haag in Cijfers. 2021. Den haag in cijfers. https://denhaag.mncijfers.nl/ (accessed April 29, 2021).

Eagly, Alice H. 1986. *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Eagly, Alice H., and Wendy Wood. 2012. *Chapter 49: Social role theory*. In *Handbook of theories of social psychology: Volume 2*, eds. Paul A. M. Van Lange, Arie W. Kruglanski, and E. Tory Higgins. London: SAGE Publications Ltd.

Feldman, Martha S., and Anne M. Khademian. 2007. The role of the public manager in inclusion: Creating communities of participation. *Government Administration Review* 20 (2): 305–24.

Fishbein, Martin, and Icek Ajzen. 2010. *Predicting and changing behavior: The reasoned action approach*. New York: Psychology Press.

Foster-Fishman, Penne G., Charles Collins, and Steven J. Pierce. 2013. An investigation of the dynamic processes promoting citizen participation. *American Journal of Community Psychology* 51 (3–4): 492–509.

Fung, Archon. 2006. Varieties of participation in complex governance. *Public Administration Review* 66: 66–75.

———. 2015. Putting the public back into governance: The challenges of citizen participation and its future. *Public Administration Review* 75 (4): 513–22.

GGD Haaglanden. 2021. Bevolkingsomvang en -samenstelling. https://gezondheidsmonitor.ggdhaaglanden.nl/gemeenten/den-haag/thema/bevolking/bevolkingsomvang-en-samenstelling/ (accessed April 29, 2021).

Gilens, Martin, and Benjamin I. Page. 2014. Testing theories of American politics: Elites, interest groups, and average citizens. *Perspectives on Politics* 12 (3): 564–81.

Gillespie, Tarleton. 2010. The politics of ‘platforms’. *New Media & Society* 12 (3): 347–64.

Goldfinch, Shaun, Robin Gauld, and Peter Herbskov. 2009. The participation divide: Political participation, trust in government, and e-government in Australia and New Zealand. *Australian Journal of Public Administration* 68 (3): 333–50.

Greenwood, Dara N., and Julia R. Lippman. 2010. Gender and media: Content, uses, and impact. In *Handbook of gender research in psychology*, eds. Donald R. McCreary and Joan C. Chrisler, 643–69. New York, NY: Springer.

Grimmelikhuijsen, Stephan G., and Eric W. Welch. 2012. Developing and testing a theoretical framework for computer-mediated transparency of local governments. *Public Administration Review* 72 (4): 562–71.

Gustafson, Per, and Nils Hertting. 2017. Understanding participatory governance: An analysis of participants’ motives for participation. *The American Review of Public Administration* 47 (5): 538–49.

Hagger, Martin S., Kyra Hamilton, Icek Ajzen, Michael Bosnjak, and Peter Schmidt. 2019. *Testing the replicability of the theory of planned behavior: A large-scale multi-sample registered replication study*. Trier: Leibniz Institut für Psychologische Information und Dokumentation (ZPID).

Irvin, Renee A., and John Stansbury. 2004. Citizen participation in decision making: Is it worth the effort? *Public Administration Review* 64 (1): 55–65.

Jaeger, Paul T. 2007. *Information policy, information access, and democratic participation: The national and international implications of the bush administration’s information politics*. *Government Information Quarterly* 24 (4): 840–59.

Kim, Soonhee, and Joohoo Lee. 2012. E-participation, transparency, and trust in local government. *Public Administration Review* 72 (6): 819–28.

———. 2019. Gender and e-participation in local government: Citizen e-participation values and social ties. *International Journal of Public Administration* 42 (13): 1073–83.
Lee, Yura, Iris Chi, and Jennifer A. Ailshire. 2020. Life transitions and leisure activity engagement among older Americans: Findings from a national longitudinal study. *Ageing & Society* 40 (3): 537–64.

Ma, Liang, and Yuepin Zheng. 2018. Does e-government performance actually boost citizen use? Evidence from European countries. *Public Management Review* 20 (10): 1513–32.

Meier, Kenneth J. 2019. Theoretical frontiers in representative bureaucracy: New directions for research. *Perspectives on Public Management and Governance* 2 (1): 39–56.

Michels, Ank, and Laurens De Graaf. 2010. Examining citizen participation: Local participatory policy making and democracy. *Local Government Studies* 36 (4): 477–91.

Michelbrink, Koen, and Steven Van de Walle. 2020. When will public officials listen? A vignette experiment on the effects of input legitimacy on public officials’ willingness to use public participation. *Public Administration Review* 80 (2): 271–80.

Nabatchi, Tina, and Ines Mergel. 2010. Participation 2.0: Using internet and social media technologies to promote distributed democracy and create digital neighborhoods. In *Promoting citizen engagement and community building*, eds. James H. Svara and Janet Denhardt, 80–7. Phoenix, AZ: Alliance for Innovation.

Naff, Katherine C. 2018. To look like America: Dismantling barriers for women and minorities in government. New York, NY: Routledge.

Nam, Taewoo. 2012. Suggesting frameworks of citizen-sourcing via government 2.0. *Government Information Quarterly* 29 (1): 12–20.

Nolan, Jessica M., P. Wesley Schultz, Robert B. Cialdini, Noah J. Goldstein, and Vladas Griskevicius. 2008. Normative social influence is underdetected. *Psychological sense of community*, 291–318.

Perkins, Douglas D., and D. Adam Long. 2002. Neighborhood sense of community and social capital. In *Psychological sense of community*, 291–318. Boston, MA: Springer.

Pitts, David W., and Lois Recascino Wise. 2010. Workforce diversity in the new millennium: Prospects for research. *Review of Public Personnel Administration* 30 (1): 44–69.

Prezza, Miretta, Matilde Amici, Tiziana Roberti, and Gloria Tedeschi. 2001. Sense of community referred to the whole town: Its relations with neighboring, loneliness, life satisfaction, and area of residence. *Journal of Community Psychology* 29 (1): 29–32.

Rijksoverheid. 2019. Voortgangsrapportage Versterking lokale democratie en bestuur. https://www.rijksoverheid.nl/documenten/rapporten/2019/06/26/voortgangsrapportage-%E2%80%98versterking-lokale-democratie-en-bestuur%E2%80%99 (accessed June 26, 2019).

Riley, Matilda W. 1973. Aging and cohort succession: Interpretations and misinterpretations. *Public Opinion Quarterly* 37 (1): 35–49.

Robbins, Mark D., Bill Simonsen, and Barry Feldman. 2008. Citizens and resource allocation: Improving decision making with interactive web-based citizen participation. *Public Administration Review* 68 (3): 564–75.

Roberts, Nancy. 2004. Public deliberation in an age of direct citizen participation. *The American Review of Public Administration* 34 (4): 315–53.

Thijssen, Peter, and Wouter Van Dooren. 2016. Going online. Does ICT enabled-participation engage the young in local governance? *Local Government Studies* 42 (5): 842–62.

Van den Berg, Annelieke C., Sarah N. Giest, Sandra M. Groeneveld, and Wessel Kraaij. 2020. Inclusivity in online platforms: Recruitment strategies for improving participation of diverse sociodemographic groups. *Public Administration Review* 80 (6): 989–1000.

Van Deursen, Alexander J. A. M., and Jan A. G. M. van Dijk. 2011. Internet skills and the digital divide. *New Media & Society* 13 (6): 893–911.

———. 2014. The digital divide shifts to differences in usage. *New Media & Society* 16 (3): 507–26.

Van Dijk, Jan A. G. M. 2020. *The digital divide*. Cambridge, UK: Polity Press.

Vigoda, Eran. 2002. From responsiveness to collaboration: Governance, citizens, and the next generation of public administration. *Public Administration Review* 62 (5): 527–40.

Walther, Joseph B. 2017. The merger of mass and interpersonal communication via new media: Integrating metaconstructs. *Human Communication Research* 43 (4): 559–72.

Welch, Eric W., Charles C. Hinnant, and M. Jae Moon. 2005. Linking citizen satisfaction with e-government and trust in government. *Journal of Public Administration Research and Theory* 15 (3): 187–201.

Wessel Kraaij. 2020. Inclusivity in online platforms: Recruitment strategies for improving participation of diverse sociodemographic groups. *Public Administration Review* 80 (6): 989–1000.

———. 2019. From responsiveness to collaboration: Governance, citizens, and the next generation of public administration. *Public Administration Review* 80 (6): 989–1000.

Yi, Hyun Young, I. Iris G. M. van Dijk. 2011. Internet skills and the digital divide. *New Media & Society* 13 (6): 893–911.

———. 2014. The digital divide shifts to differences in usage. *New Media & Society* 16 (3): 507–26.