



Examining social capital and individual motivators to explain the adoption of online citizen participation

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HIGHLIGHTS

- Social capital in the community plays a key role for the adoption of e-participation.
- Males are more willing than females to increase their actual usage of e-participation.
- Social influence, reputation, and reciprocity were not significant for e-participation usage at city level.
- Local governments should promote how e-participation brings benefits for the community.
- Local government should highlight and praise the effort devoted by participants.

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ABSTRACT

Online citizen public participation in consultation and decision-oriented processes supported by local governments is a key ingredient for successful digital democracy. As the participatory process is a voluntary activity, social capital, and individual motivation can help to understand citizen engagement in the usage of electronic participatory platforms (e-participation). This study presents and discusses the results of a research model evaluated with 200 respondents who experienced e-participation. The research model integrates a well-known theory of information systems, UTAUT, with the social capital theory, and the individual motivators. We found that, besides the positive effects of UTAUT constructs, such as perceived usefulness, effort expectancy, and facilitating conditions on the intention to use e-participation; altruism also plays a role as a driver of the intention to use. Social capital partially impacts on the actual usage of e-participation.

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1. Introduction

Citizen engagement in the consultation and decision-making process along with local governments is a key factor in strengthening and supporting modern democracy [1,2]. E-participation can bring positive outcomes for a given community if the members of the community use the system regularly. This usage is entirely voluntary, which implies that citizens need to be highly motivated to use e-participation. According to a Uni [3] report, in a sample of 40 major cities around the globe, 85% of the municipalities already implemented social networking features, 55% have online deliberation processes, and 23% implemented participatory budgeting projects. This means that local governments are making

significant progress in the implementation of e-participation at an information and consultation level but are still struggling at a decision-making level.

Regardless of the technical advancement and ease of use of different e-participation tools, the successful adoption and usage of e-participation is not only explained by information technology factors but also strongly relies on factors e.g., individual motivators and social capital of the community. However, scant research has addressed the effect of those factors on the usage of e-participation [4]. We address this gap by integrating UTAUT with social capital theory and individual motivators to investigate the effect of these drivers on the intention to use and usage behaviour of e-participation.

Levels of social capital reside in the social realm. Social capital can be considered as the resources embedded in the networks between individuals and their communities [5,6]. As the city and the communities existing in the city are a social structure, social capital is considered a critical factor to engage citizens in e-participation

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[7,8]. Additionally, the level of individual motivation driven by altruism and perception has been proven as an important component of citizen public participation in online communities [9–11]. Warren et al. [12] suggest that institutions, such as local governments, may enhance their citizens' trust by developing social capital via the online civic engagement of citizens. E-participation grants an opportunity for online civic engagement.

This study makes two main contributions to the theoretical body of knowledge. First, as research on citizens' social capital in the context of e-participation remains scant [13], we contribute by proposing and evaluating a research model that explores the impact of a well-known theory of technology adoption – UTAUT [14], social capital, and individual motivators, as drivers of the intention to use and use of e-participation. No prior study has verified the effects of social capital and individual motivators in combination with information technology factors. Second, based on the results from the evaluation of the research model, we provide insights for local governments that implement e-participation platforms.

The article is organised as follows: Section 2 provides the theoretical basis to support the development of our research model. Section 3 describes the methodology, including the context, data collection, and the evaluation method. Section 4 presents the results of the measurement and structural model. Section 5 furnishes a discussion of the theoretical findings, the implications, and the limitations. Finally, Section 6 provides a brief conclusion of the study.

2. Theoretical background and hypotheses development

E-participation is considered as a branch of e-government oriented to consultation and decision-making [15]. The adoption of e-participation by the community may have positive outcomes in long-term usage. Consequently, this requires the active engagement and involvement of citizens. Most e-participation studies rely on single theories from the information technology field to explain the intention to use and usage of e-participation [4]. For instance, Wang and Shih [16] analysed the adoption of information kiosks using UTAUT, Choi and Kim [17] studied the intention to use e-voting using the technology acceptance model (TAM) [18]. The single-theory model's approach provides little insights into the information technology exogenous elements that may help to explain e-participation usage.

The unified theory of acceptance and use of technology (UTAUT) [19] is oriented to the study of information systems adoption. Even though UTAUT was designed for organisational use settings, it is an appropriate theoretical approach to study the adoption of e-participation. UTAUT is suitable to study complex scenarios of technology adoption [14], which is the case of the e-participation context due to the number of different tools, data types, and data volumes, different stakeholders, and multiple-way of interactions between citizens and governments [20]. Moreover, UTAUT takes into account both information technology factors and social factors [21] which may yield valuable insights for theory and practice in the e-participation adoption context.

Literature discusses the concept of social capital as a set of dimensions and not as a unidirectional concept [5], the structural, the rational, and the cognitive dimension. For this study, we adopt the definition coined by Nahapiet and Ghoshal [22, p. 243] that states that social capital is “*the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit*”. The dimensions for citizens' social capital are represented by social ties, shared goals, and trust [23,24]. In the context of e-participation adoption, social ties represent the network between the citizens who use technology for a common goal; the goals are the benefits for a community as a city, parish, or neighbourhood.

Social capital has been studied in literature from different perspectives and contexts, for instance, Acedo et al. [7] spatialised social capital from the geographical approach. Chang and Chuang [25] and Hau et al. [24] showed evidence that social capital enhances the tacit and explicit knowledge sharing intention of employees in an industry context. Social capital has been evaluated as a second-order construct across various studies [24,26], which may limit the examination in detail of the effects of each social capital dimension on e-participation use behaviour. As e-participation is an information technology that relies on adoption by a given community, it is highly probable that the social capital inherent to the members of that community may positively influence their use behaviour of e-participation. Consequently, we assess the effects of each of the four dimensions of social capital. Trust in government over intention to use and identification, interaction, and reciprocity over the use behaviour.

Individual motivators have also been theorised as crucial factors for online participation. Eddleston and Kellermanns [27] found evidence that altruism enhances the participative process and reduces relationship conflict. Reputation has been found to be a predictor of online knowledge sharing in blogs [11]. The impact of individual motivators in the context of consulting and decision-oriented e-participation, to the best of our knowledge, has not been evaluated yet.

2.1. UTAUT

In many cases, performance expectancy has been found as the most successful predictor of intention to use in various contexts of information technology adoption [28,19]. This study defines performance expectancy as the perception of the citizen that using e-participation will increase the benefits or contributions to the community.

H1. Performance expectancy positively impacts on the intention to use e-participation.

Effort expectancy is the degree of ease regarding the use of e-participation technologies [19]. As the use of e-participation is voluntary and oriented toward the general public, the perception that the effort required to use e-participation is not a barrier, it may positively influence the intention to use it.

H2. Effort expectancy has a positive effect on the intention to use e-participation.

Social influence can be defined as the influence of others over using e-participation [29]. This influence could come from friends, members of the community, or even family members. Positive opinions and recommendations from those that may influence the behaviour of the individual could also increase the intention to use e-participation.

H3. Social influence has a positive effect on the intention to use e-participation.

Besides access to technology and the Internet, the citizens need to have access to the information regarding the usage of e-participation processes. The perception of having access to these resources, namely technology, and information, is known as facilitating conditions [14,19]. For instance, when a citizen uses online participatory budgeting, they may need information regarding the projects available on the platform and be able to ask questions about those projects. Appropriate facilitating conditions may increase the intention to use and the frequency of use of e-participation technologies.

H4. Facilitating conditions has a positive effect on the intention to use e-participation.

H5. Facilitating conditions has a positive effect on the use behaviour of e-participation.

Behavioural intention is the immediate readiness of the individual regarding the actual usage of e-participation [14]. Previous

studies showed that there is a strong positive effect of behavioural intention to actual usage [30].

H6: Intention to use positively influences the actual usage of e-participation.

2.2. Individual motivators

Altruism is defined as a form of “unconditional kindness” [31], this is, the individual does not expect anything in return. Altruism has been found to positively influence the intention to share knowledge with others as a way of helping them [32,33]. In the context of e-participation, citizens do not directly help a specific individual, but rather a community. Citizens who use e-participation tools may have the intention to contribute to the community without expecting anything in return for their help.

H7: Altruism has a positive effect on the intention to use e-participation.

Reputation is defined as the degree to which a citizen considers that e-participation may increase personal reputation in the community [11]. It has been found as a motivator in the context of knowledge-sharing with others in online forums [34]. As e-participation allows citizens to achieve benefits for their community, the perception of enhancing their reputation by contributing through e-participation may be a motivator for the intention to use.

H8: Reputation has a positive effect on the intention to use e-participation.

2.3. Social capital

Inter-personal trust between members of a network has been theorised as a relational dimension of social capital, and there is evidence that trust positively affects knowledge sharing [25]. In an e-participation context, citizens interact with the government and other community citizens directly or indirectly. As in e-participation, it is the government who finally implements the outcomes of a consulting or decision-oriented processes where citizens were involved, trust in government is a crucial element to enhance the intention to use e-participation [35]. We hypothesise:

H9: Trust in local government will have a positive effect on the intention to use e-participation.

Identification is part of the relational dimension of social capital, this is defined as the feeling of belonging of the citizen to a community [36], the rationale is that when a citizen feels identified with the community, they will be more willing to use e-participation or use it more frequently to contribute to that community. Previous studies found that the feeling of identification in the individual positively affects knowledge sharing behaviour in terms of quality and quantity [25].

H10: The feeling of identification of a citizen with the community will have a positive effect on the actual usage of e-participation.

Interaction is considered as part of the structural dimension of the social capital [37]. In the e-participation context, interaction can be citizen to citizen and citizen to government. Lin and Lu [38] found evidence that interaction has a positive effect on the continuous intention to use online social networks. Chang and Chuang [25] also found that interaction positively impacts on the quality of knowledge sharing behaviour. Even though e-participation may involve thousands of citizens that could not know each other, existing online social networks can be used by citizens to promote what they are pursuing on consultation and decision-making e-participation tools supported by local governments. Therefore, we hypothesise:

H11: The social interaction between the members of a given community has a positive effect on the actual usage of e-participation.

In the context of e-participation usage, reciprocity can be seen as a perception of supportiveness between the members of a participatory community [39], even though the members are strangers to each other, they make contributions on e-participation for a common goal which may lead to creating a perception of reciprocity in the collective of the community. Therefore, we hypothesise:

H12: The reciprocity between members of the participatory community has a positive effect on the actual usage of e-participation.

2.4. Moderating effect of individual differences

Individual differences between citizens, such as age and gender, may affect the way citizens perceive e-participation technologies [40]. Previous literature showed evidence that younger individuals are more willing to engage with technology [41], and men are more likely to use e-participation technologies [42]. We include age and gender in the model as variables that moderate the effect of intention to use and usage of e-participation. Therefore, we hypothesise:

H13: Gender moderates the positive effect of intention to use over the actual usage of e-participation, this effect being stronger for men than for women.

H14: Age moderates the effect of intention to use e-participation over the actual usage, this effect being positive and stronger when citizens who use e-participation are younger (see Fig. 1).

3. Methodology

3.1. Research context

The research is developed in a Portuguese city where the municipality has implemented a set of e-participation tools in the last few years to promote the involvement of citizens in consultation and decision-making. One of the most well-known ones is online participatory budgeting [43], which are considered as e-participation platforms on which citizens can submit project initiatives through a web portal, and then vote by means of SMS messages or through the web portal (<https://op.lisboaparticipa.pt/home>) to choose the project(s) to be funded and implemented by the local government. The workflow of the call for project proposals and voting process is repeated every year. After the voting process, a set of projects is selected based mainly on the number of votes received, and then the local government implements the projects.

3.2. Data collection

We used an electronic questionnaire. The questions were derived from previously validated scales in the literature and adjusted to the context of this study (see Table A.1 in Appendix). Initially, the questionnaire was prepared in the English language and then translated to Portuguese and back to English by a different professional to ensure equivalence. The wording in Portuguese was discussed and polished among colleagues in the faculty and public officials at the municipality. The research model reflects all the measurement items. The scale used is a seven-point range scale from 1 (totally disagree) to 7 (totally agree), except for use behaviour which is from “never” to “always when I have the chance”. Gender was coded with a dummy variable where 1 represents men. Age was measured in years. The questionnaire was designed to be answered in a time-frame of 5 to 10 min.

The data were collected during December 2016. The questionnaire was prepared in SurveyMonkey (<https://pt.surveymonkey.com/>), an online survey tool. An e-mail containing an introductory text explaining the objectives of the study and a hyperlink to

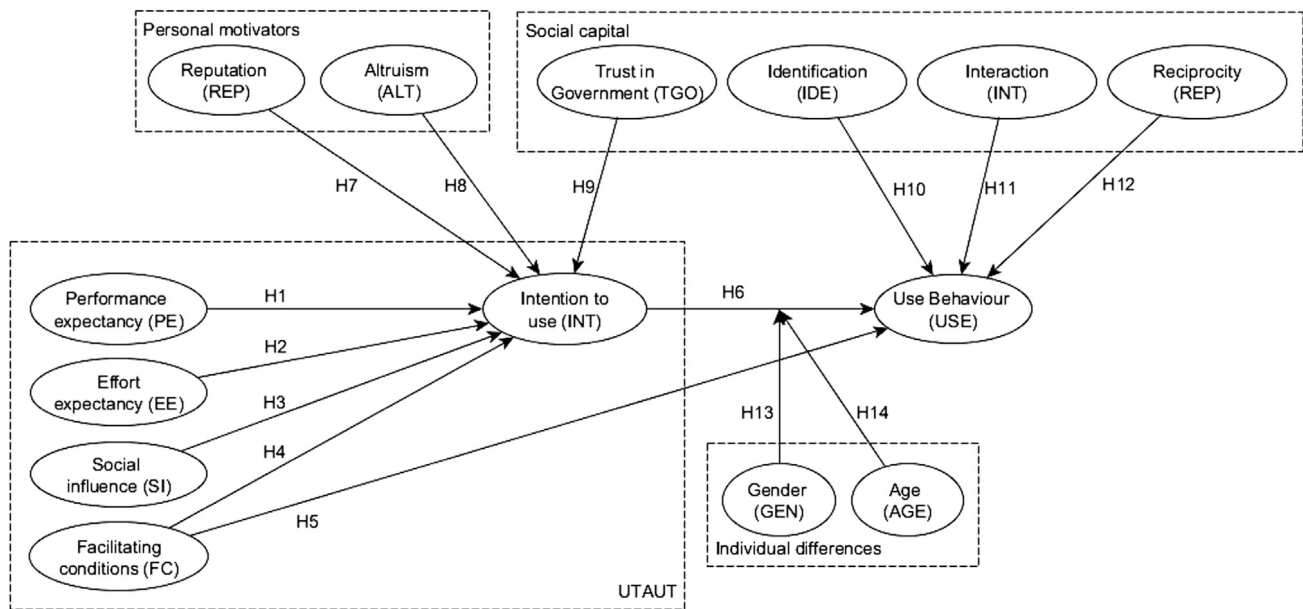


Fig. 1. Research model.

Table 1

Demographics.

Demography	Observations (N = 200)	%
Age (years)		
20–35	42	21
36–45	76	38
46–55	40	20
56 or more	42	21
Gender		
Masculine	106	53
Feminine	94	47
Education		
Bachelor's degree	69	34.5
Master's degree	48	24
Post-graduation	35	17.5
High school	31	15.5
Doctorate	15	7.5
Primary school	1	0.5
N/A	1	0.5
Profession		
Paid employment	126	63
Self-employed	26	13
Retired	15	7.5
Freelancer	14	7
Unemployed	10	5
Other	5	2.5
Student	4	2

the questionnaire was sent to the citizens who have experienced online participatory budgeting. The email was sent by the municipality for privacy reasons. Participation in the study was entirely voluntary. The respondents to the questionnaire were offered a lottery prize as an incentive for their participation. We obtained 200 valid responses. See Table 1 for the demographic characteristics of the respondents.

3.3. Evaluation method

Partial least squares structural equation modelling method (PLS-SEM) [44] was used to evaluate the research model. The PLS method is appropriate when the model complies with the following considerations: the objective is to predict the key drivers of an information technology adoption, the research model is considered complex, and the sample size is at least ten times the highest

number of paths directed to a construct in the model. The model presented in this study complies with those considerations. We first assessed the measurement model for reliability and validity of the survey instrument, and then the structural model was tested. The model was estimated with SmartPLS 3.0 software [45].

4. Results

4.1. Measurement model

Indicator reliability was analysed by the criterion that the loadings should preferably be greater than 0.7 [46]. Three items, from facilitating conditions and use behaviour constructs, resulted in values between 0.65 and 0.67. However, we decided to retain those items due to their proximity to 0.7. These results suggest the internal consistency of our model (see Table A.1 in Appendix). Construct reliability was assessed based on composite reliability and Cronbach's Alpha, which are above 0.7 in all cases, suggesting reliable constructs [47]. Convergent validity was tested using the indicator reliability and the average variance extracted (AVE) higher than 0.5, indicating that the latent variables account for more than half of the variance of its indicators [44]. The loadings and the AVE are above 0.7 and 0.5 respectively (Table 2), in almost all cases, showing a good convergent validity [44]. For discriminant validity we used two criteria, cross-loadings, in which the loading of each indicator must be greater than any of the cross-loadings; and that the square root of AVE should be greater than its correlation with any other construct in the model [48] (Table 2).

Henseler et al. [49] suggest assessing the criterion of the Heterotrait–Monotrait ratio (HTMT) as an additional test to ensure a good discriminant validity which requires the HTMT ratios to be below 0.9 (Table 3). Consequently, we conclude that our measurement model is reliable and valid.

4.2. Structural model

We followed the approach of Hair et al. [44] to evaluate the structural model. The R^2 indicates the predictive power of the model, this is, the research model explains the 57.1% of the variation in the intention to use and 34.5% of the variation in the use behaviour of e-participation. We used the bootstrapping technique

Table 2

Quality assessment for the measurement model (square root of AVE in bold).

Construct	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Performance expectancy	0.86													
2. Effort expectancy	0.49	0.92												
3. Social influence	0.4	0.28	0.96											
4. Facilitating conditions	0.44	0.67	0.31	0.77										
5. Intention to use	0.64	0.54	0.28	0.59	0.94									
6. Altruism	0.39	0.34	0.25	0.47	0.51	0.91								
7. Reputation	0.18	0.14	0.32	0.19	0.18	0.49	0.92							
8. Trust in Government	0.21	0.3	0.17	0.35	0.28	0.32	0.27	0.92						
9. Identification	0.25	0.33	0.31	0.43	0.39	0.54	0.57	0.36	0.93					
10. Interaction	0.04	0.03	0.28	0.07	0.04	0.3	0.5	0.15	0.54	0.94				
11. Reciprocity	0.27	0.21	0.34	0.32	0.31	0.43	0.42	0.35	0.54	0.51	0.9			
12. Use Behaviour	0.37	0.32	0.27	0.31	0.48	0.43	0.27	0.19	0.43	0.29	0.3	0.75		
13. Age	−0.03	−0.13	0.07	−0.11	−0.07	−0.1	−0.04	0.03	0.06	0.11	0.01	0.02	1	
14. Gender	−0.19	−0.1	0.02	0	−0.2	−0.04	0.09	−0.11	0.01	0.13	0.01	−0.17	−0.02	1
Cronbach's Alpha	0.83	0.94	0.96	0.77	0.94	0.93	0.94	0.94	0.94	0.96	0.89	0.74	1	1
Composite Reliability	0.9	0.96	0.97	0.85	0.96	0.95	0.95	0.96	0.96	0.97	0.93	0.83	1	1
Average Variance Extracted	0.74	0.86	0.92	0.6	0.89	0.82	0.84	0.85	0.86	0.88	0.82	0.56	1	1
Mean	5.87	5.95	4.28	6.21	6.10	5.42	3.26	4.14	4.39	2.87	4.45	5.15	44.77	0.53
Standard Deviation	1.03	1.15	1.64	0.84	1.00	1.35	1.61	1.37	1.65	1.75	1.47	1.34	11.76	0.50

Table 3

Heterotrait–Monotrait ratio.

Construct	1	2	3	4	5	6	7	8	9	10	11	12
1. Performance expectancy												
2. Effort expectancy	0.56											
3. Social influence	0.45	0.30										
4. Facilitating conditions	0.55	0.78	0.37									
5. Intention to use	0.72	0.57	0.29	0.69								
6. Altruism	0.43	0.36	0.28	0.55	0.53							
7. Reputation	0.20	0.14	0.34	0.21	0.18	0.53						
8. Trust in Government	0.24	0.31	0.17	0.41	0.29	0.34	0.28					
9. Identification	0.28	0.35	0.33	0.51	0.41	0.58	0.60	0.38				
10. Interaction	0.05	0.06	0.30	0.09	0.05	0.32	0.53	0.15	0.56			
11. Reciprocity	0.31	0.22	0.37	0.40	0.34	0.47	0.45	0.39	0.59	0.55		
12. Use Behaviour	0.44	0.34	0.30	0.38	0.53	0.51	0.31	0.21	0.50	0.35	0.37	

with 5000 iterations. Eight hypotheses were supported as the paths are positive and statistically significant (H1, H2, H4, H6, H8, H10, H11, H13) and six were not supported (H3, H5, H7, H9, H12, H14) as the paths are not statistically significant, then not confirmed (see Fig. 2).

5. Discussion

As suggested by Venkatesh et al. [41] we integrated the UTAUT theory with other theoretical perspectives, namely individual motivators (reputation and altruism), and components of social capital theory (trust in government, identification, interaction, and reciprocity) to provide a better understanding of the effect that these factors may have on the intention to use and usage of e-participation. The results show that UTAUT variables, individual motivators, and social capital partially impact on the intention to use and actual usage of e-participation, respectively.

The study analyses the mediating effect of individual differences, age, and gender, between the intention to use and the actual use of e-participation. The average age of the respondents is 44.8 years, with a standard deviation of 11.73 (Table 2), which can be considered as middle-aged citizens. The biggest group of respondents is in the group from 36 to 45 years. This may explain why age did not have a significant moderating effect between intention to use and usage of e-participation. In the case of gender, results showed a moderating effect. Gender moderates the effect between intention to use and use of e-participation, the moderation being stronger for males, in other words, males are more willing than females to increase their actual usage of e-participation when motivated by the intention to use (see Fig. 3).

These results are in line with previous literature that suggests that men participate more actively as front liners in collective activities, like marches or petitions, and females are more likely to participate in non-collective activities such as health care or youth programs [50,51].

From the UTAUT constructs, performance expectancy, effort expectancy, and facilitating conditions were found to be significant over the intention to use e-participation. These findings are consistent with previous literature [52,21]. Performance expectancy was the strongest predictor of intention to use, implying that citizens feel that they can make a bigger contribution to the community by using e-participation.

Social influence from UTAUT was found as non-significant, this contradicts previous findings [16] in the use of e-participation technologies. The non-significance of social influence can be explained by the high number of participants in e-participation which is at a city level. The consequence of too many participants is that they do not know each other, and this may diminish social influence.

Regarding individual motivators, namely altruism and reputation, only altruism appeared positive and significant for the intention to use e-participation. In the case of altruism, this finding is in line with previous studies, for instance, Hsu and Lin [11] in the context of knowledge sharing, and Cheung and Lee [53] in the context of electronic word of mouth. The latter showed evidence that enjoyment of helping others is a critical factor to encourage consumers to share their experience in consumer-opinion platforms. In the context of e-participation, altruism can be considered as enjoyment to help the community and not a particular individual.

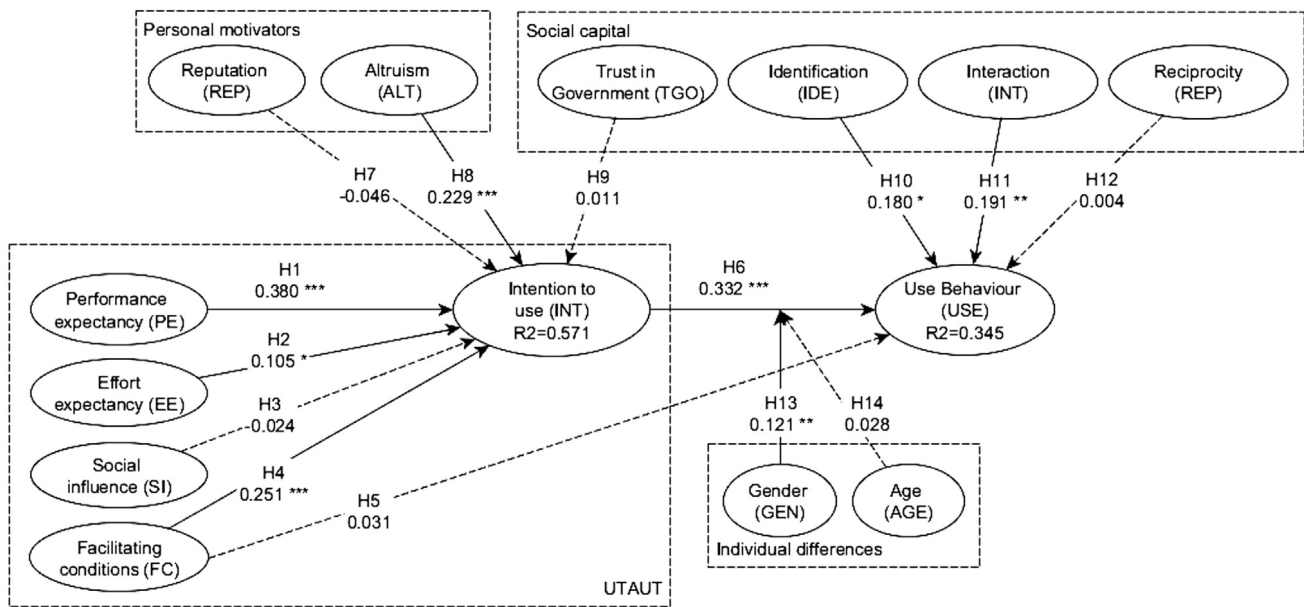


Fig. 2. Results for the structural model. Notes: significant at *10%; **5%; ***1%. Non-significant paths are in dotted arrows.

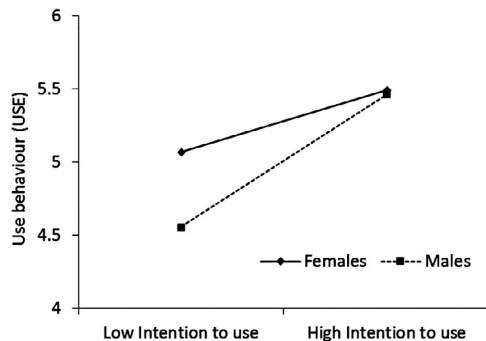


Fig. 3. Moderating effect of gender between intention to use and use behaviour.

Social capital has a partial effect on the usage of e-participation technologies. On the one hand, identification with the community and the interaction between them resulted in positive and significant over the use behaviour of e-participation [54]. Even though users of e-participation do not know each other, they may pursue similar goals when using e-participation technologies which could create a perception that others are supporting the same goals for the community. On the other hand, trust in government and reciprocity resulted in non-significant on intention to use and usage behaviour of e-participation, respectively. The non-significance of trust in government contradicts previous studies in this context [55,56]. This could be explained because the respondents of this study perceive that the outcomes of e-participation technology are independent of the government which manages the technological platform. Regarding the non-significance of reciprocity, citizens who use e-participation are pursuing a common goal for a community, in most cases, there are not strong ties between them. This coincides with previous findings, Wasko and Faraj [34] found that contribution on an electronic forum occurred without the expectation of reciprocity from other members.

5.1. Implications

One of the main advantages of e-participation is inclusiveness regardless of space and time. When e-participation is used at a

city level, the number of citizens involved may achieve thousands. However, the ties between those citizens are almost non-existing. This is confirmed by the non-significant effect of reputation and reciprocity on the intention to use and usage of e-participation respectively. In this scenario of weak or non-existing ties between the participating citizens, the intrinsic motivations (altruism) are more influential than extrinsic rewards (reputation) [25], which represents a theoretical implication of this study. For local governments that want to promote the use of e-participation tools, the positive and significant effect of altruism may suggest that they should highlight and praise the effort devoted by participants in the actual use of e-participation and how those efforts positively impacted on the community.

The significant and positive effects of perceived usefulness may imply that local governments should continuously inform about the benefits for the community resulting from the usage of e-participation, so citizens can maintain the perception that their contributions have a positive effect. Furthermore, the positive effect of effort expectancy and facilitating conditions may indicate the importance of keeping e-participation technologies easy to use and providing a facilitating environment, for instance, a call-centre where citizens can ask any questions and obtain answers about the participatory process.

Surprisingly, citizens' trust in government had no effect on the intention to use e-participation. However, the usage of e-participation in the long term may help to increase citizens' trust in local governments which will indirectly foster social capital in the participative community [12]. Social capital and trust in government are considered essential elements to keep social order in a local community [57].

5.2. Limitations

First, since the study was conducted in Portugal, culture and the popularity of e-participation tools may differ among countries. Caution is needed to generalise the results to different locations. Second, the 200 respondents in this study have already experienced e-participation tools. Consequently, they are probably more digitally savvy in comparison with the rest of the population in the city. The sample size of 200 is indeed not representative of the general population aimed to get involved in the use of e-participation.

Table A.1

Construct	Item	Loading	Source
Performance expectancy	I consider e-participation useful in my daily life in the community	0.83	Venkatesh et al. [19]
	Using e-participation helps me accomplish my objectives in the community more quickly	0.89	
	Using e-participation increases my contribution to the community	0.87	
Effort expectancy	Learning how to use e-participation is easy for me	0.91	
	My interaction with e-participation is clear and understandable	0.93	
	I find e-participation easy to use	0.92	
	It is easy for me to become skilful at using e-participation.	0.94	
Social influence	People who are important to me think that I should use e-participation	0.97	
	People who influence my behaviour think that I should use e-participation	0.96	
	People whose opinions I value prefer that I use e-participation	0.95	
Facilitating conditions	I have the necessary resources for using e-participation	0.72	
	I have the necessary knowledge to use e-participation	0.87	
	E-participation is compatible with other technologies that I used	0.82	
	I can get help from others whenever I have difficulties using e-participation	0.67	
Intention to Use	I plan to use (or continue to use) e-participation in my community	0.94	Chang and Chuang [25]
	I anticipate that I will use (or continue to use) e-participation in my community	0.94	
	I intend to apply (or continue to apply) e-participation to improve my community	0.95	
Reputation	I earn respect from others through e-participation	0.90	
	I feel that e-participation improves my status in the community	0.94	
	E-participation can enhance my reputation in my professional field	0.91	
	I can get some feedback or rewards through e-participation in terms of reputation and status	0.92	
Altruism	I am willing to help other participants in the e-participation community	0.92	
	I like to help other participants in the e-participation community	0.94	
	I feel happy to support other participants in the community to solve their problems through e-participation	0.93	
	I like to help other participants in the e-participation community since this results in my own achievement	0.83	
Trust in Government	I think I can trust the government of our community	0.92	Carter and Bélanger [58]
	The government of our community is reliable	0.94	
	In my opinion, the government of our community defends our interests	0.94	
	I trust the government of our community regarding the use of e-participation	0.89	
Identification	I feel a sense of belonging towards the e-participation community	0.92	Chang and Chuang [25]
	I have a feeling of closeness and communication in the e-participation community	0.94	
	I have a strong feeling of belonging to the e-participation community	0.90	
	I am proud to be a member of the e-participation community	0.94	
Interaction	I maintain close social relationships with some members in the e-participation community	0.95	
	I spend a lot of time interacting with some members of the e-participation community	0.94	
	I have frequent communication with some members of the e-participation community	0.95	
	I know some members of the e-participation community on a personal level	0.92	
Reciprocity	It is fair to help each other between members of the e-participation community	0.86	
	I know that other members of the e-participation community will help me, so it's also fair to help other members	0.93	
	I believe that members of the e-participation community will help me if I need it	0.93	
Usage Behaviour	(a) Search for information	0.78	Venkatesh et al. [19]
	(b) E-voting	0.67	
	(c) Share or comment projects on social networks	0.87	
	(d) Submission of projects	0.65	

6. Conclusions

This study investigates the effect of social capital and individual motivators, integrated with UTAUT, on the intention to use and usage of e-participation. Overall, the study confirms a partial effect of individual motivators and social capital over the e-participation intention to use and usage, respectively. The effect is considered partial because of not all the variables either from social capital nor individual motivators resulted significant. Since e-participation is much more inclusive than traditional participatory processes offline in terms of number of participants and community size, for instance, at a city level, variables that depend on the existence of ties between the users of e-participation, namely reciprocity, and reputation, become not significant to explain the usage of e-participation. The results of this study may help local governments design their strategies to promote the use of e-participation. Specifically, highlighting the potential benefits for the community and praising the contributions received by participants and how those contributions had a positive effect on the community.

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Appendix. Measurement items

See Table A.1.

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