

# **E-participation and social housing**

A nested analysis on the relationship between  
e-participation and civic engagement.

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## Preface

Writing this thesis was not the easiest task, even though writing a thesis probably never is easy. In the beginning of the process, finding relevant literature about housing corporations proved to be very difficult. Yet, a solid research plan was made, based on the notion that interviews could be held with tenants of a specific housing corporation. Quickly, but much too late, it became clear that conducting these interviews would not be possible. As such, new plans had to be made. This turned out to be a stressful time, during which I was left waiting for organizations to make decisions. I did not sit still, however, creating various plans to conduct this study. This meant compiling a plethora of different theoretical frameworks and methodologies, even some that did not require collecting any new data. Taking matters into my own hands once more, I decided to contact all 270 housing corporations and corresponding tenant associations in the Netherlands. This was a tedious task, but it felt great to be in control of my own thesis again. Looking at the theoretical framework of this thesis, it thus seems the need for autonomy is important for me. All this hard work paid off, as I gathered enough responses for the analysis. On top of that, at the last moment I was able to work together with housing corporation Havensteder, which resulted in valuable outcomes.

Throughout this thesis process, I felt the positivity of tenants and employees of housing corporations, who were happy this sector is receiving some attention. To my surprise, people emailed me based on my survey to share more opinions and insights. As such, writing this thesis turned out to be a meaningful experience for me.

First, I would like to thank Claartje ter Hoeven for helping me throughout this thesis process. Particularly by being quickly available when new setbacks took place. I would also like to thank Justien Dingelstad for her valuable feedback. Second, I would like to thank Rachid Agourram and Renske ten Brinke for the idea for this study and their help throughout the thesis process. Thirdly, I would like to thank all the employees of Havensteder who organized the interviews and survey distribution on extremely short notice. In particular, I would like to thank Anthonie Mullié, Isabelle van der Poel, Nazia Tahraoui and Lucas Gelder. Finally, I would like to thank all housing corporations and tenants' associations who have distributed my survey and all tenants who have completed the survey.

## **Abstract**

Livability is a problem in vulnerable neighborhoods with much social housing. As housing corporations play an active role there, they may improve livability by improving community ties and increasing civic engagement. In doing so, housing corporations use e-participation to foster civic engagement. E-participation entails the usage of digital technology to facilitate civic engagement. Therefore, this study quantitatively investigated whether e-participation by housing corporations affects the civic engagement of tenants. In doing so, this study used a nested analysis. A quantitative large n analysis of tenants living in standard neighborhoods ( $n=415$ ) is combined with a small n mixed methods analysis of an extreme case: neighborhood Het Lage Land ( $n=67$ ). Using a linear regression for both analyses, this study assessed whether the outcomes of the model stayed the same in a vulnerable neighborhood. Interviews and qualitative survey data were used to explain the results of the small n analysis. The large n analysis found that e-participation is positively and significantly associated with both civic engagement, as well as intrinsic and extrinsic motivation. The small n analysis found no statistically significant results. Based on the qualitative data, e-participation does not work in Het Lage Land due to a lack of trust amongst tenants and the digital divide. In this neighborhood, tenants lack the digital proficiency to properly use e-participation. Furthermore, as community ties are bad, tenants do not help each other to use e-participation. When designing e-participation, policy makers should thus carefully consider whether this is suitable for the target group.

## **Civic engagement, public housing and e-participation**

Neighborhoods where a high proportion of housing is provided by housing corporations (HCs) increasingly face problems of livability (SCP, 2021: Srivarathan et al., 2020). In these areas, residents face issues such as crime and nuisance (Leidelmeijer et al., 2020). When this takes severe levels, a neighborhood is called vulnerable by the Dutch government (SCP, 2021). One way the Dutch government addresses this issue is through civic engagement (De Zeeuw et al., 2019). Civic engagement means citizens mobilize themselves, individually or collectively, to improve their community and environment (Dang et al., 2021: Schuilenberg, 2017). Empirically, civic engagement has been found to be an important tool in improving living conditions (Dang et al., 2021: Schuilenberg, 2017). By focusing on civic engagement, the Dutch government is trying to create what it calls a participation society, where citizens take ownership over their community (Rauwerdink-Nijland et al., 2024). Yet, civic engagement is decreasing in the Netherlands (Meijeren et al., 2023), and is particularly low in vulnerable neighborhoods (van de Wetering & Groenleer, 2024).

HCs have been limited in their tasks as of 2015, meaning they can mostly only focus on buying and maintaining property, yet they still seek to facilitate and boost civic engagement (AEDES, 2015: SCP, 2021). Some qualitative studies by governmental research institutes suggest the relationship between a HC and their tenants influences the civic engagement of tenants through a variety of mechanisms, particularly through bettering community ties (SCP, 2015: 2021). Based on this research, the question remains whether the relationship between tenants and their HC statistically affects community ties and civic engagement.

One way low levels of civic engagement are being addressed by governments and scholars, is through the usage of e-participation (David, 2018: Malodia et al., 2021: Pérez-Morote et al., 2020). E-participation involves the use of information technology to foster civic engagement, for example by creating an online platform that allows citizens to gather support and funding for an initiative. Using e-participation, governments can make participation more accessible to citizens and promote a good relationship between government organizations and citizens (Malodia et al., 2021: Vicente & Novo, 2014). Furthermore, government organizations use e-participation as it might increase tenants' motivation for civic engagement (Hassan & Hamari, 2020). Yet, it is unclear what e-participation does in a specific context, for example that of public housing (Krath & Korflesch 2021). The e-participation of HCs forms a relevant case, as e-participation might not

be suitable for people with less digital resources and education, which is often the case for people eligible for social housing (Adnan et al., 2022; Van Weersch, 2022). Furthermore, if operationalized incorrectly, e-participation can also have adverse effects on motivation for civic engagement (Alsawaier, 2017; Lewis et al., 2016). Therefore, it is unclear what effect e-participation has on civic engagement in the context of HCs and whether it affects motivation in this regard.

This study focuses on civic engagement in the context of public housing, by conducting a nested analysis to investigate the following relationships. First, this study builds on evidence and theory from qualitative studies, that argue, from the perspective of HCs, that the relationship between HCs and their tenants affects tenants' civic engagement and community ties (SCP, 2015; SCP, 2021). In doing so, this study quantitatively investigates this relationship, from the perspective of tenants. Second, as it is unclear what e-participation does in the context of public housing, this study investigates whether e-participation issued by HCs affects civic engagement, as well as motivation for civic engagement. By conducting a nested analysis, this study can research these relationships for both a standard neighborhood, as well as a vulnerable neighborhood. This is valuable, considering the lack of civic engagement in vulnerable neighborhoods with many HC homes, and the limitations e-participation might have for people living there (van de Wetering & Groenleer, 2024; Van Weersch, 2022). In doing so, this nested analysis is mixed methods, meaning qualitative data is used to explain the quantitative outcomes. Thus, this study investigates: to what extent do housing corporations affect civic engagement? To answer the research question, this study uses the following sub questions:

1. What is the effect of HCs on the civic engagement of tenants?
2. What is the effect of HCs on the community ties in their neighborhoods?
3. What is the effect of e-participation by HCs on the civic engagement of tenants?
4. What is the effect of e-participation on motivation for civic engagement?
5. What is the effect of e-participation on tenants in a vulnerable neighborhood?

To answer the research question, this study uses a nested analysis. A nested analysis combines large  $n$  and small  $n$  research, allowing both the testing of a large conceptual model as well as the in-depth investigation of causal mechanisms (Harbers & Ingram, 2017). This nested analysis combines a large  $n$  analysis (Lna) on standard Dutch neighborhoods, with a small  $n$  analysis (Sna)

on a vulnerable neighborhood. The large n analysis tests an extensive conceptual framework using a quantitative survey. The small N analysis investigates relevant parts of the conceptual model on tenants of HC Havensteder living in the neighborhood Het Lage Land. This neighborhood is a relevant extreme case, as each home is owned by Havensteder and civic engagement is very low (Gemeente Rotterdam, 2022). Furthermore, interviews and qualitative survey data are used to explain the results of the Sna. As such, the purpose of this analysis is to investigate whether the conceptual model holds true in a vulnerable neighborhood and why, or why not, this is the case.

This research has academic relevance as it aims to solve multiple gaps in the literature, adding to the field of civic engagement, e-government and motivation for civic engagement. Firstly, this study investigates whether HCs influence civic engagement quantitatively, from the perspective of tenants. This builds on qualitative research that investigates this relationship qualitatively, from the perspective of street level bureaucrats (SCP, 2015: SCP, 2021). Thus, this study looks at this phenomenon from a new angle. Secondly, this study adds to the current knowledge about e-participation. As Hassan & Hamari (2020) argue, more research is needed about the effects of e-participation in specific contexts. This study builds on this notion by investigating e-participation in the context of public housing. Thirdly, this study extends the research on e-participation by looking at motivation. In the literature, various theories about the effect of e-participation on motivation exist (Lewis et al., 2016: Mekler et al., 2017: Schmidhuber et al., 2017). These theories describe both positive and negative relationships. Furthermore, scholars often focus on motivation for civic engagement in general as opposed to looking at types of motivation separately (Alasawaier, 2017: Hassan & Hamari, 2020: Mekler et al., 2017: Thiel et al., 2017). This study extends this research by investigating these previously assumed relationships and by looking at both intrinsic and extrinsic motivation separately. Finally, this study creates new knowledge about the empirically established relationship between community ties and civic engagement (Arvanditis, 2017: Dang et al., 2021). In doing so, this study builds on the notion that community ties lead to more civic engagement, by investigating whether this effect has something to do with motivation for civic engagement.

This study has policy relevance as it investigates potential solutions to a policy problem in the Netherlands. The Dutch government wants the Netherlands to become a participation society (Weger et al., 2020). Yet, civic engagement does not seem to increase over the past years (SCP, 2019). Instead, civic engagement remains mostly limited to highly educated people with a Dutch

background (CBS, 2024). Furthermore, trust in institutions is required to facilitate engagement, yet this has been decreasing in the Netherlands, particularly amongst low educated people (CBS, 2023). As a result, the Dutch government is struggling to increase civic engagement. This is a particular problem amongst citizens living in neighborhoods with a lot of social housing (SCP, 2021; Srivarathan et al., 2020). This study investigates if HCs can play a role in solving this policy problem, thus creating more knowledge about solutions to this policy problem. Furthermore, this study looks at e-participation as a possible solution for a lack of civic engagement. In doing so, this study not only studies a potential solution to the civic engagement problem, but also the implications of digital government in general. The Dutch government is becoming increasingly digital, but due to the digital divide, digital government can leave citizens behind, as some citizens lack the skills and resources to use digital government services, even in a developed country. (Van Deursen and Van Dijk, 2018). By researching e-participation in the context of a vulnerable neighborhood, this study thus also creates more knowledge about the feasibility of digital government, taking into account the digital divide.

First, the theoretical framework is laid down. Second, the methodology is explained. Third, the results are presented, starting with the quantitative results of the Lna, then the quantitative results of the Sna and finally the qualitative findings of the Sna. Fourth, the results are summarized and discussed.

### **Theoretical framework**

Civic engagement is a broad concept that can refer to a variety of actions (Adler & Goggin 2005: David, 2018). Adler and Goggin (2005) have investigated different conceptualizations of civic engagement. They describe variables these conceptualizations vary on, such as how broad or narrow the definition is. As such, civic engagement can be individual or collective and political or non-political. Regardless of these dimensions, the goal of civic engagement remains relatively the same among each typology. The goal of civic engagement is to improve the wellbeing of others, or to contribute to the future of a community (Adler & Goggin 2005: David, 2018). In doing so, civic engagement is voluntary in intent (Arvanditis, 2017). This means tenants could be paid for actions falling under civic engagement, for example with a contribution for volunteers, but their intention behind engagement must not be the monetary reward itself. Furthermore, this voluntary aspect also means that civic engagement should not be coerced. If a tenant for example must help a neighbor because they would otherwise get a fine, this does not constitute civic engagement.

Synthesizing research on civic engagement and considering the above, Adler and Goggin (2005, p241) find that civic engagement can be operationalized as follows: *Civic engagement describes how an active citizen participates in the life of a community in order to improve conditions for others or to help shape the community's future.*

Civic engagement brings forward a number of societal and personal benefits, yet often tenants do not conduct civic engagement on their own initiative (Dang et al., 2021: Hassan, 2017: Schuilenberg, 2017). As a result, governmental organizations, including quasi-governmental organizations, continuously set up programs to foster civic engagement (Arvanditis, 2017: Schuilenberg, 2017).

A HC can be seen as a quasi-governmental organization, having a private legal status, but striving for public goals and being fully regulated by both national and local governments (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2024). Before 2015, HCs played an important role in fostering civic engagement (SCP, 2021). As of 2015, HCs have been allotted less time and resources to do so. HCs are especially suited to boost civic engagement for several reasons (SCP, 2015: SCP, 2021). These reasons stem from reports by Dutch national research bureaus, as scientific research is lacking in this area. Firstly, HCs have more direct contact with citizens. This direct contact is relatively close and frequent, particularly compared to the contact between municipalities and citizens. Citizens contact their HC for many questions, for example about maintenance and nuisance. Citizens have less need to interact with their municipality on such a frequent basis. Secondly, many neighborhoods consist of houses belonging to one HC. As a result, HCs have bonds with particular communities, as opposed to dispersed groups. Thirdly, based on a report from 2015, before the new regulations, HCs possess the means for civic engagement initiatives, both financially and managerial (SCP, 2015). HCs for example possesses the real estate to create community centers, or they can create a stock of party props tenants can borrow. Similarly, HCs have the organizational capacity to organize and coordinate community events. Thus, HCs could provide tenants with resources to engage, yet it is unclear to what extent this remains true as of 2015, due to the new regulations.

Community ties are empirically important for civic engagement (Putnam, 2000). HCs (can) play an important role in local communities, HCs might improve community ties by organizing community events where tenants can get to know each other, as well as play an important role in preventing conflicts (SCP, 2015: SCP, 2021). For HCs to play this role, a positive relationship



between tenants and HCs is important, however. What defines if the relationship is positive or negative is dependent on various factors, from the perspective of a tenant (Jo et al., 2004). A positive relationship means that a tenant is satisfied with their HC, is committed to maintaining the relationship with their HC and believes their HC is doing their best for them and their community. If these relationship requirements are not met, and thus a negative relationship exists, tenants are less likely to join events organized by the HC. Furthermore, if a negative relationship exists, HCs are less able to play an arbitrating role amongst conflicts arising in their neighborhoods. This relationship can also be seen the other way around, as Schieffer and van der Nol (2016) argue that the participation with quasi-governmental organizations by citizens is seminal for good community ties. However, for citizens to do this, they should have a good relationship with these quasi-governmental organizations. Therefore, hypothesis one is:

**H1:** A positive relationship between tenant and HC is associated with better community ties.

As of 2015, the role of HCs in this regard has been limited (SCP, 2021). As a result, HCs get less resources from the government to conduct tasks outside of its core tasks, being the procurement and renting of properties. This was not done because policy makers felt HCs were unsuccessful in fostering civic engagement. Instead, this was a political reaction to certain faulty investments made by HCs, aiming to limit those happening in the future. Even with the new legislation, HCs are still focusing a significant amount of their personnel and resources on civic engagement (AEDES, 2024).

According to the current state of scientific research, it seems unlikely that HCs can foster civic engagement, that is when using traditional offline ways, such as by going door to door to promote an initiative (Hassan & Hamari, 2020). Empirically, there is a strong lack of civic engagement, particularly amongst tenants of HCs (Hassan & Hamari, 2020: SCP, 2021). A lack of motivation is the most important factor hindering tenants from civic engagement according to Hassan and Hamari (2020) and Townley and Koop (2024). For citizens, civic engagement often does not have clear enough benefits (Townley & Koop, 2024). As a result, certain citizens are completely indifferent towards civic engagement (Hassan & Hamari, 2020). For other citizens, the amount of motivation is not enough to cause action.

To solve the lack of civic engagement, governments resort to E-participation (Vicente & Novo, 2014). E-participation is a way governments might mitigate flaws of offline civic engagement (Vicente & Novo, 2014). E-participation can be defined as the usage of information and communication technologies to mediate the relationship between governmental organizations and citizens (Vicente & Novo, 2014). Hence, e-participation is a form of e-government, which means governmental organizations use information and communication technology to conduct their tasks or provide services (Signore et al., 2005). By using e-participation, governments try to take away many barriers that exist for offline civic engagement, such as barriers stemming from time and location constraints. E-participation saves people time as they can plan or conduct civic engagement digitally, whilst doing other tasks. Furthermore, e-participation allows people to plan civic engagement from any place, without having to physically meet neighbors. On top of that, governments can make it easier to spread information, using digital platforms such as websites and apps. This does not mean that civic engagement then takes place online. Instead, e-participation can promote offline civic engagement (Tai et al., 2019). This means that civic engagement is planned and organized digitally, benefiting from the advantages regarding time and location, but the actual civic engagement takes place offline. Thus, the implementation of e-participation should lead to more civic engagement as it takes away constraints and provides tenants more easily with information about civic engagement.

HCs are using E-participation and are planning to use even more in the future (Actieagenda wonen, 2021). Yet, the tenants of HCs often lack digital proficiency, meaning that e-participation for them might not be effective (Van Weersch, 2022). This raises the question whether e-participation works in this context. Examples of e-participation of HCs in practice include: a digital platform and digital tenant evenings where tenants can propose and develop new ideas, a digital platform where people can post civic engagement ideas for crowdfunding and volunteer recruitment (Ymere, 2019; Havensteder, n.d.). These e-participation arrangements should boost civic engagement as explained by the benefits above. For example, the crowdfunding platform makes it easier to make tenants aware of civic engagement initiatives.

Thus, theoretically speaking, e-participation should increase civic engagement. Empirically speaking, there is no statistical evidence in this field suggesting whether e-participation leads to more civic engagement of tenants. Furthermore, scientifically, it is unclear

whether or not e-participation increases civic engagement, as there are mixed results in practice (Alsawaier, 2017; Lewis et al., 2016). Therefore, hypothesis two of this study is:

**H2:** E-participation, as initiated by a HC, is associated with more civic engagement.

Civic engagement does not merely have to be a direct result of e-participation, extrinsic and intrinsic motivation are important also important mechanisms for this relationship (de Vreede et al., 2017). Below these potential two mediators are elaborated on.

According to Ryan and Deci (2000), extrinsic motivation means people do something for either a reward or because of expectations from others. Regarding the reward, this can mean people are motivated to do a task because of a tangible imminent reward. However, the reward can also be opaquer, meaning that people are motivated to do something as it aligns with a goal they want to achieve, or a value they want to adhere to. Regarding the expectations of others, Ryan and Deci (2000) argue people are motivated to do something either because they fear judgment or expect praise.

On a micro and meso level, benefits exist for civic engagement (Dang et al., 2021; Schuilenberg, 2017). Such as a safer neighborhood (Schuilenberg, 2017) and overall better livability (Dang et al., 2021). On a macro level civic engagement improves policy outcomes and reduces government costs (Hassan, 2017). Thus, civic engagement inherently has benefits that might cause extrinsic motivation for civic engagement.

Institutions also play a role in causing extrinsic motivation for civic engagement (Arvanditis, 2017; Schuilenberg, 2017; SCP, 2015; SCP, 2021). Institutions can provide tenants with rewards for civic engagement, in various ways. HCs can for example reward the most engaged street with a prize, creating more extrinsic motivation through this reward. Besides creating a reward for civic engagement, institutions can also provide tenants with information about the benefits of civic engagement, thus creating extrinsic motivation through existing benefits, for example those mentioned above. Similarly, institutions can impose expectations on tenants. A HC can for example conduct information campaigns stressing that the HC, or the neighborhood, expects people to civically engage.

Theoretically, e-participation can lead to more civic engagement through an increase in extrinsic motivation as it makes it easier for people to communicate social expectations of civic

engagement (Vincente & Novo, 2014). E-participation platforms allow people to exchange information and deliberate how and when to engage civically digitally (Zheng, 2017). This can be done through short text messages, whilst conducting other tasks, thus taking away spatial and temporal constraints.

For organizations, E-participation allows organizations to better reach people (Vincente & Novo, 2014). Thus, organizations should better be able to deliver information to tenants about both expectations and benefits of civic engagement, which could motivate civic engagement. Furthermore, e-participation allows organizations to utilize nudging (Alasawaier, 2017; Hassan & Hamari, 2020; Mekler et al., 2017). Organizations can structure e-participation platforms in such a way that tenants are being motivated to conduct certain activities, whilst not directly stating they must do so.

In practice, e-participation and in particular nudges have also been found to have no effect, or even negative effects (Hassan & Hamari, 2020; Lewis et al., 2016). According to Hassan, Hamari (2020) and Lewis et al. (2016), whether e-participation interventions yield any effect depends on its design and context. Yet at the same time, they argue it is unclear what works for which context. Thus, even though there is theoretical evidence suggesting e-participation leads to more civic engagement by increasing extrinsic motivation, this remains unclear. Therefore, hypothesis three is:

***H3:*** E-participation is associated with more civic engagement via extrinsic motivation.

Besides extrinsic motivation for civic engagement, scholars argue intrinsic motivation for civic engagement is much more important in determining tenants' behavior (de Vreede et al., 2017; Kaufman et al., 2011). According to Ryan and Deci (2000), intrinsic motivation entails people do something because they think doing the activity itself is fun or fulfilling. For intrinsically motivated people, it does not matter whether there is a reward or expectation. Scholars find intrinsic motivation to be the strongest motivator because, compared to extrinsic motivation, it is not reliant on any externalities (de Vreede et al., 2017). To illustrate, if a reward or expectation is taken away, intrinsically motivated people will continue to do the activity. Furthermore, intrinsic motivation is more long lasting and sustainable compared to extrinsic motivation, as rewards and expectations are rarely continuously present.

E-participation might lead to civic engagement via an increase in intrinsic motivation (Alsawaier, 2017; Lewis et al., 2016). E-participation can do so via the fulfillment of psychological needs, as belonging to self-determination theory (Alsawaier, 2017; Lewis et al., 2016). For example, e-participation platforms can give tenants a sense of social connectivity, when it allows them to connect with one another. At the same time, e-participation could have adverse effects on intrinsic motivation (Alsawaier, 2017; Lewis et al., 2016). For example, through e-participation tenants can feel as if they are forced to conduct certain tasks. Because this hampers their feeling of autonomy, this will decrease their intrinsic motivation (Alsawaier, 2017; Lewis et al., 2016). The question thus arises what the effects of e-participation on civic engagement via intrinsic motivation is. Therefore, hypotheses four and five are:

**H4:** E-participation is associated with (more or less) civic engagement, via intrinsic motivation.

Intrinsic motivation for civic engagement is also important for e-participation usage (Thiel et al., 2017). According to Schmidhuber et al. (2017) tenants need intrinsic motivation to use e-participation platforms. The fact that these platforms might have rewards or nudges might not motivate tenants enough to use them, they might not even know they exist. Instead, tenants who are intrinsically motivated towards civic engagement use e-participation more (Thiel et al., 2017). This means that because of this intrinsic motivation they will explore new opportunities regarding civic engagement, such as e-participation (Schmidhuber et al. 2017). Thus, amongst tenants who are more intrinsically motivated, e-participation might have a bigger effect on extrinsic motivation due to the amount of e-participation usage (Vincente & Novo, 2014). Based on this notion, it seems that intrinsic motivation moderates the relationship between e-participation and extrinsic motivation. Therefore, hypothesis five is:

**H5:** Intrinsic motivation moderates the relationship between e-participation and extrinsic motivation, in such a way that intrinsic motivation makes the relationship stronger.

Based on the report by SCP (2015), the relationship between a HC and their tenant might moderate the effect both extrinsic and intrinsic motivation have on civic engagement. Regarding extrinsic motivation, HCs can give stimulants to tenants (SCP, 2015; SCP, 2021). If a good

relationship exists, this could increase the effect of extrinsic motivation for civic engagement on actual civic engagement. This is true for both the reward and expectation part of extrinsic motivation. If a bad relationship exists tenants will avoid communication with and by the HC, hence a good relationship is required for tenants to be aware of the rewards as communicated by their HC. Similarly, if tenants do not like their HC, they are less likely to feel motivated towards civic engagement by expectations the HC has of them. Besides the extrinsic motivation HCs can provide tenants with, there are various other ways tenants could be extrinsically motivated towards civic engagement. Therefore, instead of a direct effect of the relationship on extrinsic motivation, the relationship between a HC and tenants might make the overall effect of extrinsic motivation for civic engagement on actual civic engagement stronger.

Similarly, the relationship between tenants and housing corporations is suggested to impact the effect of intrinsic motivation for civic engagement on actual civic engagement as well (SCP, 2015; SCP, 2021). For intrinsic motivation, tenants need to perceive civic engagement activities as fun or interesting (Ryan & Deci, 2000). If they do not like their HC, they might find civic engagement activities organized or promoted by their HC less fun or interesting. Similarly to extrinsic motivation, tenants' intrinsic motivation for civic engagement could arise from various other sources. Therefore, it is not likely that the relationship influences overall intrinsic motivation for civic engagement, however it might make the relationship between intrinsic motivation for civic engagement and actual civic engagement stronger.

Although the above-mentioned effects have not been scientifically studied for HCs, Zhang and Seltzer (2010) found that the relationship between voters and political parties positively impacted voting behavior. In this case, political parties are motivators for voting behavior, but a good relationship needs to exist for voters to be motivated by them. Thus, there also is scientific evidence that the moderating effects mentioned above might be true in the context of HCs. Thus, the relationship between tenants and HCs might influence how much intrinsic motivation and extrinsic motivation affect civic engagement. Therefore, hypotheses six and seven are:

**H6:** Relationship HC moderates the relationship between extrinsic motivation and civic engagement, in such a way that the effect becomes stronger.

**H7:** Relationship HC moderates the relationship between intrinsic motivation and civic engagement, in such a way that the effect becomes stronger.

As also mentioned earlier, community ties are important for intrinsic motivation to civic engagement (Putnam, 2000). Community ties entail the quantity and quality of an interaction between people within a neighborhood, thus strong community ties mean people have frequent and meaningful interactions with many members of their community Dang et al., 2021. Community ties make tenants feel more strongly about the well-being of their community (Dang et al., 2021). As a result, they are more likely to take actions aimed at supporting or improving their community. Empirically, community ties have been found to directly influence civic engagement by multiple authors (Dang et al., 2021). Yet, these authors have not investigated how community ties relate to intrinsic motivation for civic engagement and extrinsic motivation for civic engagement. Stronger community facilitate cooperation between tenants and make that tenants follow each other's lead, as such the actual realization of civic engagement because of either intrinsic or extrinsic motivation becomes more likely (Dang et al., 2021). The question thus arises to what extent community ties influence the two motivations' effect on civic engagement. Therefore, hypotheses eight and nine are:

**H8:** Community ties moderate the relationship between extrinsic motivation and civic engagement, so that the relationship becomes stronger.

**H9:** Community ties moderate the relationship between intrinsic motivation and civic engagement, so that the relationship becomes stronger.

The visualization of the conceptual model laid down in this theoretical framework is shown in figure A1 in appendix A.

## **Methodology**

### **Research design**

To answer the research question, this study utilizes a nested analysis (Lieberman, 2005). A nested analysis entails conducting both statistical large n research as well as mixed methods small N research on a case. This study combines large n research of the population ( $n=415$ ) with small N

research of a specific extreme case ( $n=67$ ), including seven interviews. Firstly, this study consists of a survey that has been addressed to the entire population of tenants of HCs in the Netherlands, which is used to test the entire theoretical model. This population includes neighborhoods and cities that have normal levels of livability and civic engagement. Secondly, this study consists of a case study on an extreme case, a vulnerable neighborhood in Rotterdam, Het Lage Land. This case study tests part of the theoretical model using a quantitative survey ( $n=67$ ). In doing so, this survey looks if the outcomes are the same in a vulnerable neighborhood. Which part of the model that was tested is based on the wishes of Havensteder as well as the outcome of the Lna. Furthermore, the case study consists of six interviews and qualitative survey data. This qualitative data is used to explain the Sna results and particularly why these results might differ from the Lna.

This design has been chosen for both methodological, practical and theoretical reasons. Firstly, regarding the methodological aspect of this design, combining both large  $n$  analysis and small  $N$  analysis provides better possibilities for causal inference (Harbers & Ingram, 2017). For this study, conducting a nested analysis allows for comparison to be made between regular neighborhoods and a vulnerable neighborhood. In doing so, this study can assess if the causal model is holds true for a vulnerable neighborhood. Secondly, from a practical perspective, during this study's data collection process, an opportunity arose to study a neighborhood of a particular HC, using the survey and qualitative interviews. This neighborhood can be seen as vulnerable, being reported by case workers in the neighborhood to have low civic engagement levels. It became clear however, that studying this neighborhood would result in a significantly lower  $N$  compared to the sampling technique first utilized. Hence, this survey is used for both the Sna and Lna. Finally, from a theoretical perspective the case used is relevant, as it is a vulnerable neighborhood which means the dynamics of the model are extreme for this case (Schuilenburg, 2017).

### **Data collection & Sample**

This study uses snowball sampling for the survey used for the Lna, as well as a purposive sampling for the survey and interviews of the Sna. People were stimulated to conduct the survey using a razzle. Measures were undertaken to prevent people from misusing the survey for this razzle, to ensure proper data quality. People could only fill in the survey once. Moreover, if they indicated they did not currently rent a property from a HC, the survey would end. In practice this proved to be effective in preventing misuse.



The snowball sampling was conducted by contacting all HCs in the Netherlands through email. This excluded those focused on only students or elderly to prevent bias in the sample, as elderly might not be able to conduct civic engagement, whereas for students civic engagement might not be interesting. The focus of this study is the perception of individual tenants regarding their HC. As a result, overrepresentation of a certain area is not relevant, if these tenants do not live in a vulnerable neighborhood, where dynamics might be more extreme or different (Schuilenburg, 2017). Therefore, this study prevented vulnerable neighborhoods from being included in the Lna sample, based on the Dutch governments list of vulnerable neighborhoods (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2022). Moreover, this prevents overlap with the Sna, which focuses on a vulnerable neighborhood, to ensure that a proper analysis can be made. When a HC responded they would not cooperate with the research, the tenant association belonging to the HC was contacted. From this snowball sampling, three HCs from different parts in the Netherlands shared the survey with all their tenants. On top of that, ten HC shared the survey with a smaller group of tenants. Two tenant committees shared the survey with their entire following, whereas about fifteen other tenant committees shared the survey with a few members. All in all, this resulted in a sample of 415 valid responses. No response rate could be calculated for this sample.

Regarding the Sna, HC Havensteder provided the tenants to study. Havensteder is a HC in Rotterdam, a city in which 60% of inhabitants have a low income that makes them eligible for social housing and with the lowest political participation in the Netherlands (Kiesraad, 2023; NOS, 2024). Hence, Rotterdam is an interesting so-called extreme case to investigate an area with much social housing, but little civic engagement. Havensteder decided on a neighborhood, Het Lage Land. This is a neighborhood with little social cohesion and civic engagement according to the social workers of the HC, which is also shown by neighborhood data of the municipality of Rotterdam (Gemeente Rotterdam, 2022). All tenants of Havensteder in this area, having an email address on file, were emailed with the survey. Furthermore, flyers were distributed amongst the area. For the quantitative survey, this resulted in a sample of 67 valid responses, a response rate of 9%.

Regarding the interviews, a case worker in the area approached tenants and asked them to be interviewed. This resulted in a sample of six interviews, during which seven interviewees were interviewed, five of which tenants and two of which employees active in the neighborhood. This

is a relatively low number of interviews, however they were used to interpret the survey outcomes, which the interview data adequately did. Interviews were semi-structured, allowing for this study to use an abductive methodology (Boeije, 2009; Meyer & Lunney, 2013). For the employees, the interview questions were adapted to adhere to their perspective as an employee. Thus, interview questions are based on theory, whilst at the same time allowing for new findings to arise which fits a nested analysis Nohrsted (2018). Knott et al. (2022) present a structure for conducting semi-structured interviews. This structure moves from questions comfortable to interviewees, to questions more central to the research questions and finally reflective questions. Using this approach, this study first asks about the neighborhood, then about the HC, moving on to the relationship between the two and finally about digitalization. The topic guides can be found in table B1 and B2 appendix B. Furthermore, tenants could voice their opinions using the voluntary open questions of the interview, which most tenants did. These open questions were: ‘what do you think of your HC’, ‘what do you think of your neighborhood’, ‘what do you think about your HC using digital means for civic engagement’. These opinions have also been coded according to the code book used for the interviews.

### **Measurements and control variables**

This study measures six concepts based on the conceptual model and four control variables. The control variables are trust, level of education, duration of tenancy and duration of relationship with HC. Each of these control variables affect civic engagement based on earlier research by Arvanditis (2017) and Dang et al. (2021). All constructs that use a scale are shown in table 1, whereas level of education is an ordinal variable and duration of tenancy and duration of relationship HC are continuous variables. Education level is asked based on the typology of Statistics Netherlands which researchers use for statistical analysis (CBS, n.d.). Duration of tenancy is measured by asking how long someone has lived in a neighborhood, duration of relationship with HC is obtained by asking how long someone has been renting via the housing corporation they currently rent from.

For relationship and community ties  $\alpha < 0.7$ , as a result, items were omitted to increase  $\alpha$  (Tavakol & Dennick, 2011). For Relationship items four and six were deleted, for community ties item four was deleted, resulting in satisfactory levels of  $\alpha$ , as can be seen in table 1. The full survey can be seen in appendix C.

## Method of analysis

To test the hypotheses, this study uses linear regression. Before the regression is conducted, this study conducts a confirmatory factor analysis (CFA) to establish the reliability of the constructs. This is done as survey questions had to be translated to Dutch. The CFA is conducted using the Lavaan extension of R (Rosseel, 2012). The data was tested for the assumptions of linear regression, thus whether the data was normally distributed, this was the case (Osborn & Waters, 2002). Furthermore, the relationships were tested for linearity and homoscedasticity, both of which were the case for all relationships (Poole & O'Farrel, 1971).

Linear regression is conducted using SPSS. The direct relationships tested are: hypothesis one,  $x = e$ -participation is associated with  $y =$  civic engagement and hypothesis two,  $x =$  relationship HC is associated with  $y =$  community ties. For hypotheses three and four extrinsic and intrinsic motivation are tested as mediating variables. The mediating effect is tested using the classic method by Barron and Kenny (1986), looking at the direct and total effect of  $e$ -participation when controlling for the mediating variables, as well as the PROCESS extension of SPSS developed by Hayes (2018) to establish the strength and significance of the indirect effect. For hypothesis five intrinsic motivation is a potentially moderating variable which might moderate the effect of  $e$ -participation on extrinsic motivation. On top of that, for hypotheses six, seven, eight and nine the moderating variables are relationship HC and community ties, which potentially moderate the relationship between the two motivations and civic engagement. To test the moderators, interaction terms are created for the five moderated relationships tested.

**Table 1**

### *Measurements*

Description	Construct	Questions	Answer options	Example question	Reference	$\alpha$ Lna sample	$\alpha$ Sna sample	Variable type
How much civic engagement tenants conduct, Dutch.	Civic engagement	6	Multiple choice. Five-point Likert scale completely disagree, completely agree.	I help people in my neighborhood.	Doolittle and Faul (2013)	0.87	0,80	Dependent

Description	Construct	Questions	Answer options	Example question	Reference	$\alpha$ Lna sample	$\alpha$ Sna sample	Variable type
How well tenants value the ties with their neighbors, Dutch.	Communities	5	Multiple choice. Five-point Likert scale completely disagree, completely agree.	I have a lot of contact with other tenants.	Statistics Netherlands (N.d.)	0.87	0,80	Independent, moderator
Amount of e-participation present, Dutch.	E-participation	11	Multiple choice .Yes/no.	The housing corporation enabled tenants to participate in a poll or survey.	Reddick and Norris (2013)	Not applicable	Not applicable	Independent
How extrinsically motivated tenants are towards civic engagement, Dutch.	Extrinsic motivation	4	Multiple choice. Five-point Likert scale completely disagree, completely agree.	Civic engagement benefits me	Guay et al. (2000).	0.79	0,81	Independent, mediator
How intrinsically motivated tenants are towards civic engagement, Dutch.	Intrinsic motivation	4	Multiple choice. five-point Likert scale completely disagree, completely agree.	Civic engagement is fun.	Guay et al. (2000).	0.95	0,91	Independent, mediator and moderator
How well is the relationship between tenants and their HC, from the perspective of the tenant, Dutch.	Relationship HC	4	Multiple choice. five-point Likert scale completely disagree, completely agree .	I am happy with my HC.	Hon and Grunig (1999)	0.91	0,92	Independent, moderator
How much trust tenants have in institutions, Dutch.	Trust	3	Multiple choice. six-point Likert scale completely untrustworthy, completely trustworthy.	How trustworthy is the government?	Mingo and Faggiaono (2020)	0.73	0,92	Independent, control variable

*Note.* This table shows how each construct was measured in the survey and how it is used in the analysis. The  $\alpha$  is shown for both the Lna and Sna datasets. ‘Questions’ shows the amount of questions.

As the Sna cannot test the entire model due to its sample size, part of the model is chosen based on the wishes of Havensteder and the outcome of the Lna. For the Sna, hypotheses two, three, four, eight and nine are tested. The same analysis will be used as for the Lna.

The qualitative data is coded using AtlasTi. In doing so, this study applies abductive coding. The aim of the qualitative data is to explain the results, thus the data is coded according to the theoretical model used for the survey. However, new information is also coded if it explains the results. First, the interviews are coded. Subsequently, the qualitative survey data is coded according to the interview codes.

## **Results**

### **Confirmatory factor analysis, Lna**

As this study had to translate the scales used and rewrite them to make them more understandable for tenants, this study conducted a confirmatory factor analysis to establish the internal reliability of the constructs (LaNasa et al., 2009). This was done using the Lavaan extension of R (Rosseel, 2012). This resulted in a comparative fit index of 0.930, a Tucker-Lewis index of 0.921 and a RMSEA 0.060, all indicating a sufficient fit. Furthermore, the factor loadings for each item were sufficient, at a level of  $\lambda > 0,80$ .

All variables included in the model, including confounders, were tested for multicollinearity using VIF. Based on the guidelines by Daoud (2017), the VIF levels are all sufficient. VIF levels can be seen in table D1 in appendix D.

### **Descriptives and correlation, Lna**

The tables E1 and E2 in appendix E show the descriptives and Pearson correlation of the Lna dataset. All variables from the theoretical model significantly correlate with one another. The control variable trust significantly correlates with the variables in the model. The other control variables show almost no significant correlations.

### **Direct relationships, Lna**

The direct relationships this study tests are hypothesis one, Relationship HC is associated with better community ties and hypothesis two e-participation is associated with more civic engagement. The regression analysis of  $x = \text{Relationship HC}$  and  $y = \text{community ties}$  yields a significant result, with  $\beta = 0,34$  at  $p < 0.001$  and  $R^2 = 0,11$ . The regression analysis  $x = \text{e-participation}$  and  $y = \text{civic engagement}$  yields a significant result, with  $\beta = 0.24$  at  $p < 0.001$  and  $R^2$  is 0,06.

When using the control variables in the model for both relationship HC -> community ties and e-participation -> civic engagement, both results remained significant. The relationship between relationship HC and community ties remained significant with  $\beta=0,31$  at  $p<0,001$ . The control variable trust had a significant effect of  $\beta=0.11$  and  $p<0.005$ , whereas other control variables had insignificant effects. Similarly, the relationship between e-participation and civic engagement remained significant with  $\beta=0.22$  at  $p<0.001$ . Here the control variable trust also had a significant effect of  $\beta=0.12$  and  $p=0.012$ , and other control variables had no significant effect. Therefore, hypotheses one and two are accepted for the Lna. Table two shows the results for hypothesis one, whereas table three shows the result for hypothesis two.

**Table 2**

*Relationship HC -> community ties including control variables*

Variable	R2	Unstandardized B	$\beta$	Significance
<i>x -&gt; y</i>	0,13			
Constant		9,99		<0.001
Duration of relationship		0,02	0,05	0,397
Duration of tenancy		-0.03	-0.10	0,096
Education		0,05	0,01	0,820
Relationship HC		0,38	0,31	<0,001
Trust		0,19	0,11	0,025

*Note.* This table shows the outcomes of the linear regression for hypothesis one using the Lna dataset, the dependent variable is community ties.

**Table 3***E-participation -> civic engagement including control variables*

Variable	R2	Unstandardized B	$\beta$	Significance
X -> y	0,08			
Constant		9,99		<0.001
Duration of relationship		0,02	0,05	0,429
Duration of tenancy		0.00	0.00	0,952
Education		0,16	0,04	0,415
E-participation		0,53	0,22	<0,001
Trust		0,22	0,12	0,012

*Note.* This table shows the outcomes of the linear regression for hypothesis two, using the Lna dataset, the dependent variable is civic engagement.

### **Mediating variables, Lna**

For the potential mediation factors, the classic method was used to establish the nature of the mediation and the method by Hayes (2018) using PROCESS was used to establish the indirect effect. Partial mediation was supported for extrinsic motivation, whereas full mediation was supported for intrinsic motivation. The results are shown in tables four and five.

As shown in table four, extrinsic motivation has a significant partial mediation effect. This effect is partial, as the association between e-participation and civic engagement becomes lower when adding extrinsic motivation to the equation, but not insignificant. The effect of e-participation on civic engagement through extrinsic motivation is significant with  $\beta=0,11$  and  $p<0.001$  estimated based on the bootstrapped confidence intervals.

Intrinsic motivation has a significant full mediation effect, as can be seen in table five. Intrinsic motivation increases the total association between the independent variables and civic engagement, whilst e-participation is no longer significant. Furthermore, the indirect effect  $\beta=0,18$  is significant at  $p<0.001$  estimated based on the bootstrapped confidence intervals. Therefore, hypotheses three and four are accepted for the Lna.

Based on the findings discussed above, figure one shows the regression model of the Lna with the direct and mediating effects.

**Table 4**

*PROCESS analysis of extrinsic motivation*

Effect	$\beta$	$p$	BootLLCI	BootULCI
EP -> EM	0,22	<0.001	*	*
EM -> CE	0,52	<0.001	*	*
Total EP -> CE	0,24	<0.001	*	*
Direct EP -> CE	0,14	<0.001	*	*
Indirect EP -> EM - > CE	0,11	**	0,055	0,160

*Note.* This table shows the outcomes of the PROCESS analysis of mediation for extrinsic motivation using the Lna data. EP= e-participation, EM= extrinsic motivation and CE= civic engagement. The total effect shows the association between e-participation and civic engagement without controlling for extrinsic motivation, whereas the direct effect shows the effect whilst doing so. The indirect effect shows the association between e-participation and civic engagement via extrinsic motivation.

\*BootLLCI & BootULCI unknown

\*\*exact  $p$  value unknown



**Table 5***PROCESS analysis of intrinsic motivation*

Effect	$\beta$	$p$	BootLLCI	BootULCI
EP -> IM	0,28	<0.001	*	*
IM -> CE	0,76	<0.001	*	*
Total EP -> CE	0,24	<0.001	*	*
Direct EP -> CE	0,15	0,108	*	*
Indirect EP -> IM - > CE	0,18	**	0,116	0,242

*Note.* This table shows the outcomes of the PROCESS analysis of mediation for intrinsic motivation using the Lna data. EP= e-participation, IM= intrinsic motivation and CE= civic engagement. The total effect shows the association between e-participation and civic engagement without controlling for intrinsic motivation, whereas the direct effect shows the effect whilst doing so. The indirect effect shows the association between e-participation and civic engagement via intrinsic motivation.

\*BootLLCI & BootULCI unknown

\*\*exact  $p$  value unknown

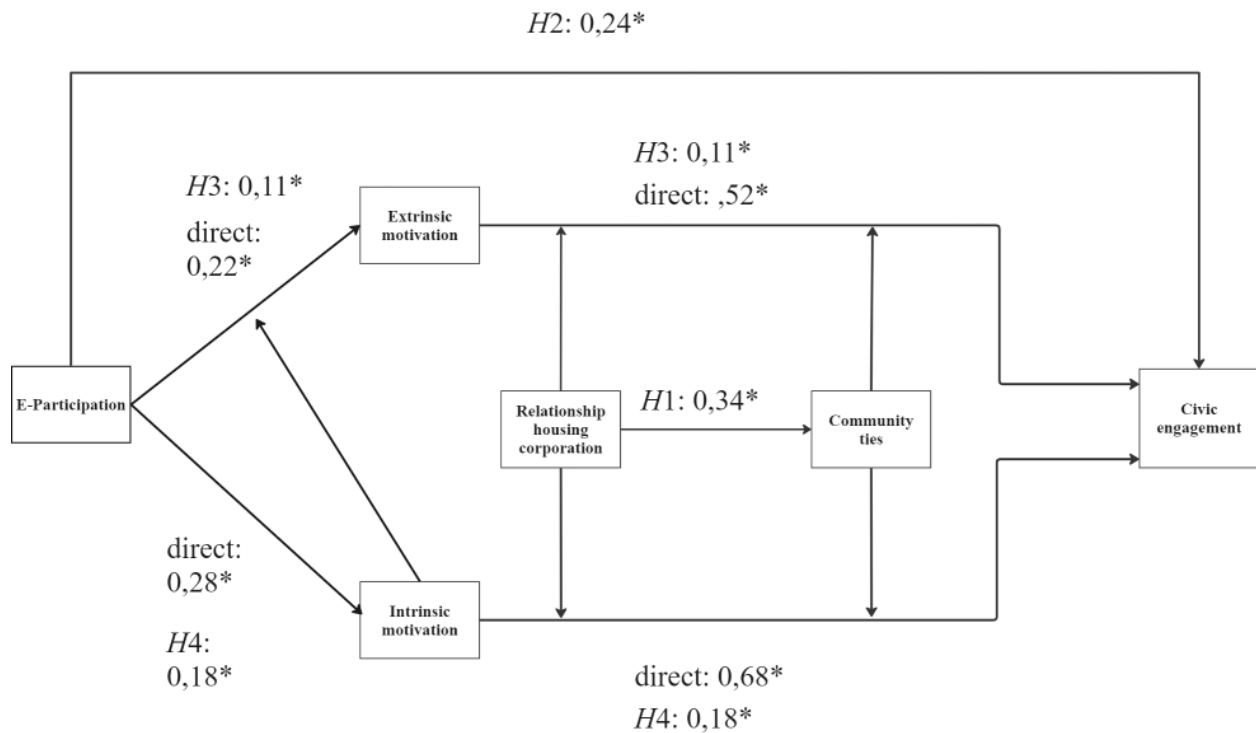
### **Moderating variables, Lna**

For hypothesis five to nine, this study tests three potentially moderating variables and thus five relationships. The moderating variables are: community ties, intrinsic motivation and relationship HC. To test for moderation, centered variables were created to limit the risk of multicollinearity (Jaccard & Turrisi, 2003). Subsequently, an interaction term was created for all five potential moderations: hypothesis five intrinsic motivation \* e-participation, hypothesis six relationship HC \* extrinsic motivation, hypothesis seven relationship HC \* intrinsic motivation, hypothesis eight community ties \* extrinsic motivation and hypothesis nine community ties \*

intrinsic motivation. Neither of these relationships yielded statistically relevant results, as can be seen in tables F1-F5 in appendix F. Therefore, this study rejects hypotheses five, six, seven, eight and nine for the Lna.

**Figure 1**

*Regression model Lna*



*Note.* This figure shows the regression model. Relationships without value are moderating relationships. Values shown are  $\beta$ . The direct relationships, including hypotheses one and two, show the direct association of one variable with another. Hypotheses three and four show the effect of e-participation on civic engagement via the mediating variables intrinsic and extrinsic motivation, as measured with the PROCESS analysis.

\* $p < 0.001$

### **Descriptives and correlation, Sna**

No additional CFA was conducted for the Sna as the CFA of the Lna did not raise any concerns and the results of  $\alpha$  are consistent with the larger sample, as shown in table 1. The descriptives and Pearson correlations of the Sna are shown in tables G1 and G2 in appendix G. All

non-control variables correlate with one another, except for e-participation. For e-participation there is no significant correlation with any of the other variables. Furthermore, trust is correlated with the non-control variables except for e-participation. Based on these findings, it is unlikely the regression will yield any significant result.

### **Direct relationships, Sna**

The direct relationship assessed for the Sna is hypothesis two, and thus e-participation -> civic engagement. As shown in table six, the relationship is insignificant, this is both true with and without the control variables. The control variables all have insignificant associations with civic engagement, except for trust which has an association of  $\beta=0,43$  at  $p<0.001$ . Therefore, hypothesis two cannot be accepted for the small N analysis.

**Table 6**

*E-participation -> civic engagement*

	<i>R</i> <sup>2</sup>	<i>B</i>	$\beta$	Significance
<i>X -&gt; y</i>	0,24			
Constant		6,34		<0.001
Duration of relationship		0,13	0,27	0.151
Duration of tenancy		-0,14	-0,86	0,647
Education		0,62	0,13	0,263
E-participation		0,09	0,03	0,794
Trust		0,78	0,43	<0.001

*Note.* This table shows the outcomes of the linear regression for hypothesis two, using the Sna dataset.

### Mediating variables, Sna

Hypotheses three and four are also tested for the Sna, thus testing the possible mediation effect of extrinsic and intrinsic motivation. For the possible mediating variables, the classic method and PROCESS were once again combined. No mediating effect was established. E-participation was not associated with either extrinsic or intrinsic motivation, meaning that according to the classic method there cannot be mediation. On top of that, for both variables the indirect effect was insignificant, as the bootstrapped confidence interval includes zero. The full results are shown in tables seven and eight. Thus, for the Sna, hypotheses three and four are rejected.

Based on the findings discussed above, figure two shows the regression model of the Sna with the direct and mediating effects.

**Table 7**

*PROCESS analysis of extrinsic motivation*

Effect	$\beta$	$p$	BootLLCI	BootULCI
EP -> EM	0,23	0,306	*	*
EM -> CE	0,75	<0.001	*	*
Total EP -> CE	0,04	0,767	*	*
Direct EP -> CE	-0,06	0,485	*	*
Indirect EP -> EM -> CE	0,27	**	-0,260	0,694

*Note.* This table shows the outcomes of the PROCESS analysis of mediation for extrinsic motivation using the Sna data. EP= e-participation, EM= extrinsic motivation and CE= civic engagement. The total effect shows the association between e-participation and civic engagement without controlling for extrinsic motivation, whereas the direct effect shows the effect whilst doing so. The indirect effect shows the association between e-participation and civic engagement via extrinsic motivation.

\*BootLLCI & BootULCI unknown

\*\*exact *p* value unknown

**Table 20**

*PROCESS analysis of intrinsic motivation*

Effect	$\beta$	<i>p</i>	BootLLCI	BootULCI
EP -> IM	-0,03	0,839	*	*
IM -> CE	0,95	<0.001	*	*
Total EP -> CE	0,04	0,767	*	*
Direct EP -> CE	-0,06	0,485	*	*
Indirect EP -> IM -> CE	-0,07	**	-0,656	0,452

*Note.* This table shows the outcomes of the PROCESS analysis of mediation for extrinsic motivation using the Sna data. EP= e-participation, IM= intrinsic motivation and CE= civic engagement. The total effect shows the association between e-participation and civic engagement without controlling for intrinsic motivation, whereas the direct effect shows the effect whilst doing so. The indirect effect shows the association between e-participation and civic engagement via intrinsic motivation.

\*BootLLCI & BootULCI unknown

\*\*exact *p* value unknown

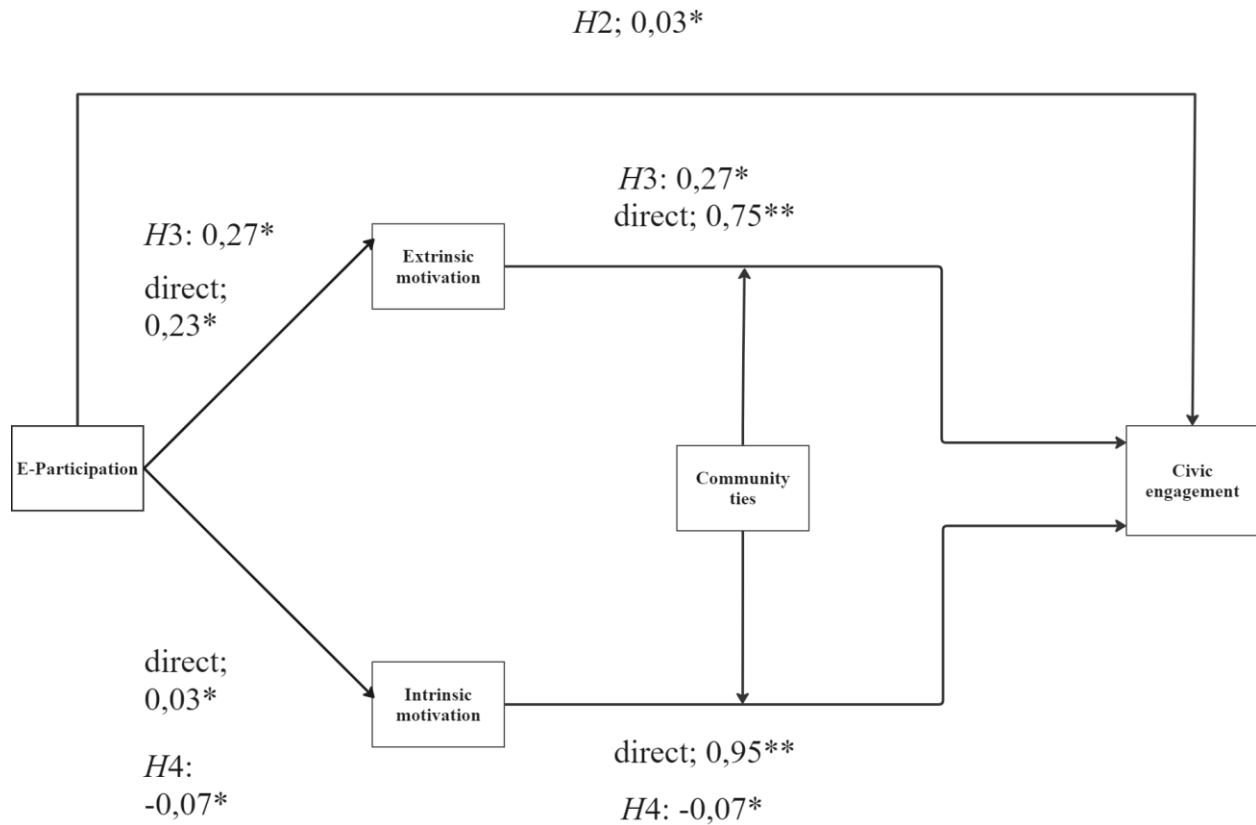
### **Moderating variables, Sna**

Hypotheses eight and nine were tested for the Sna regarding moderation. Thus, the potential moderating variable is community ties, which is tested as a moderator on the relationship between both types of motivation and civic engagement. The variables were again centered to limit the risk of multicollinearity (Jaccard & Turrisi, 2003). When plotted as a direct effect, community ties affects civic engagement and intrinsic motivation, but not extrinsic motivation. Yet, no

moderating effect was found for either motivators, with very low levels of  $\beta$  and no significant  $p$  value, as can be seen in tables H1 and H2 in appendix H. Therefore, hypotheses eight and nine are rejected.

**Figure 2**

*Regression model Sna*



*Note.* This figure shows the regression model. Relationships without value are potential moderators. Values shown are  $\beta$ . The direct relationships, including hypothesis one, show the direct association of one variable with another. Hypotheses three and four show the effect of e-participation on civic engagement via the mediating variables intrinsic and extrinsic motivation, as measured with the PROCESS analysis.

\* $p > 0.05$

\* $p < 0.01$

## Qualitative results, Sna

The section below lays down the qualitative results of this study, which are based on both the interviews and the open questions of the survey, being ‘what do you think of your HC’, ‘what do you think of your neighborhood’, ‘what do you think about your HC using digital means for civic engagement’. Whereas the Lna yielded significant outcomes, the Sna did not. This section lays down the qualitative findings aiming to explain why the population outcomes are not found in the vulnerable neighborhood Het Lage Land. The coding tree is shown in figure I1 in appendix I.

E-participation did not affect either civic engagement or motivation in Het Lage Land. The most obvious explanation is the fact that e-participation is not applied widely in Het Lage Land. This notion was expressed by both tenants and employees and came forward from both data sources. To illustrate, on the survey question ‘what do you think about your HC using digital means for civic engagement’, nine people responded this was not the case. For example, one tenant (anonymous survey respondent, tenant) responded: *“It would be nice if they did”*.

The primary form of e-participation identified is the OppApp. This app allows tenants to give their opinion when Havensteder posts a question in this app. Each question is set out for all tenants of Havensteder and covers general topics. Next to the OppApp, tenants do communicate with the HC via telephone or online contact forms. However, Havensteder does not approach tenants digitally regarding participatory events or initiatives. Instead, approaching tenants for engagement happens mostly offline. For example, interviewee seven explained how an opportunity for civic engagement was shared through mail:

*“[...] we immediately included that in a letter saying yes, do you want to think along, do you want to participate in the discussion, sign up for the input group.”*- interviewee 7 (employee)

Besides the notion that e-participation is not applied in the neighborhood, tenants also shared the notion that e-participation might not be suitable for them. This came forward from both the interviews and the survey. For example, interviewee three (tenant) said when asked about e-participation:

*“I think digital is really a barrier for people again. Because there are a bunch of illiterates here.”* - interviewee 3 (tenant)

Similarly, multiple survey respondents touched upon this notion. For example, survey respondents said it would be too complicated for them or warned that e-participation should be accessible for everyone (six anonymous survey respondents). On top of that, survey respondents shared a sense of distrust regarding e-participation, arguing that they prefer face to face contact, as they want to know who they are talking to (five anonymous survey respondents). On the other hand, some interviewees feared e-participation would allow tenants to easily spread hate and negativity (Interviewees 1, 4, 5, tenants; interviewee 6 employee). Yet not all responses to e-participation were negative: instead, survey respondents and interviewees also indicated they were interested in e-participation (five anonymous survey respondents). Furthermore, civic engagement in general was extremely low based on the interviews, as only one tenant structurally conducted civic engagement, and others did close to no civic engagement.

Extrinsic motivation is a significant driver of civic engagement, based on the regression. However, e-participation does not lead to more extrinsic motivation for the Sna dataset. Based on the notions shared above, e-participation might not affect extrinsic motivation as e-participation is scarce and not suitable for this target group. Zooming in at the specific information the tenants gave about extrinsic motivators, personal benefits is the most prominent important motivator for civic engagement. For example, interviewee five who was part of a tenant input committee said:

*“It should deliver something, that is important.”* - interviewee five

Similarly, other tenants argued they cleaned the mess in their apartment complex whereas other tenants would not, because they liked their environment to be clean (interviewees one, two and three, tenants). For them, the cleanness of the environment after they conducted the civic engagement tasks is the benefit. Therefore, it might be the case that e-participation does not promote this extrinsic motivator.

Besides direct personal benefits, other parts of extrinsic motivation, adhering to expectations, avoiding disapproval and external indirect rewards, were not present according to interviewees (interviewees 1, 2, 3 and 4, tenants; interviewee 7, employee). Perhaps extrinsic



motivation for civic engagement could be increased if e-participation is utilized and focuses on promoting these extrinsic motivators. However, the question remained as to whether rewards would work. Interviewees were ambiguous about whether this would motivate them (interviewees one, two and four, tenants). For example, interviewee one (tenant) explained he felt motivated to do his civic engagement activities because of praise from Havensteder and a volunteer day he could attend due to his civic engagement. At the same time, he argued tangible rewards would not motivate him. Similarly, interviewee four (tenant) who was completely unmotivated towards civic engagement felt rewards were not helpful.

Intrinsic motivation is the strongest driver for civic engagement based on the regression but is also not affected by e-participation, based on the Sna dataset. Again all factors explained above indicate why this might be the case. Furthermore, from the interviews it did not become entirely clear if intrinsic motivation for civic engagement was present for tenants. Interviewees (1, 2, 3 and 5, tenants) did indicate they liked to see their environment clean after they cleaned something, which might relate to the need for competence, however this is uncertain. The most direct mentioning of intrinsic motivation came from interviewee four (tenant) who said about civic engagement:

*'It has to come spontaneously from your own mind.'* - interviewee four (tenant)

This notion could explain why no significant regression effect was established. E-participation might not have a linear relationship with intrinsic motivation, as it might make some tenants feel their autonomy is hampered, as for others it might have a positive effect.

No moderating effect of community ties was found for the Sna dataset. All interviewees (tenants) reported having mostly bad community ties. Both the tenants and the employees argued this was due to the composition of tenants, which is increasingly including problematic tenants. People did argue that the bad community ties and behavior of others impacted their motivation (Interviewees 1, 2, 3, 5 and tenants). In doing so, they felt it wrong to conduct civic engagement activities aimed at improving the mess these other people created. Furthermore, the aspect of shared values also came forward here. Tenants seem to struggle to connect with new tenants from a different background (interviewees 1, 2, 3, 4 and 5, tenants: interviewee 6, employee). For example, interviewee five said:

*“Often, mainly people of a somewhat older age in the flats, when they see people with different backgrounds coming, they say: ‘I don’t go outside anymore, I find it scary, I don’t even want them to live here.’ But they live there anyway and more will come. And yes, that also determines the frustration and almost hatred that then arises, so that it is no longer possible to say ‘hello, how are you’ or ‘good afternoon’ normally.”* - interviewee six (employee)

This fear tenants have for each other means they do not dare to speak up when other tenants create nuisances. Multiple tenants also reported having actual experiences where they asked someone to clean something up and they were attacked verbally (interviewees 2,3,4 and 5, tenants). At the same time, tenants also felt it was a good idea to bring together people from all backgrounds. Interviewees argued a party that was organized by Havensteder after the renovation improved connections between each other, but only momentarily (interviewees 2,3 and 5, tenants: interviewees 6 and 7, employees). At the same time, all tenants' interviewees argued it would be good to bring all different people together. Thus, on the one hand the interviews showed a link between community ties and motivation. Yet, on the other hand it became clear from the interviews that still some people conducted civic engagement regardless of these dynamics (interviewees 1, 2 and 3, tenants). Thus, a linear relationship might not be present for these dynamics.

Finally, an overarching paradox came forward from the interviews, which could explain why e-participation does not impact motivation or civic engagement in Het Lage Land. Both tenants and employees argued there is a divide between working tenants and non-working tenants (Interviewee 1, 4 and 5, tenants: interviewee 6 and 7, employees). Working tenants were reported to be better for social cohesion and to have more resources for civic engagement. Similarly, according to the interviews these working tenants are better able to work together with Havensteder and to comprehend and use e-participation. At the same time however, these tenants have less time for civic engagement, which greatly impacts their time and ability to engage civically. Interviewee four (tenant) for example argued she would not be more motivated if additional resources were provided, due to the time constraints of being a working mother. Therefore, it seems as if the group of people most susceptible to e-participation, are inherently lacking the motivation and time for civic engagement, explaining why the relationship was not proven.

## Conclusion

This study investigated the effect of e-participation of HCs on civic engagement using both a quantitative analysis with a population sample (Lna) and a mixed methods analysis of a specific neighborhood in the Netherlands (Sna). From the Lna, a significant effect of relationship HC on community ties was found and a significant effect of e-participation on civic engagement was found, including mediating effects for both extrinsic and intrinsic motivation. Moderating effects of community ties and relationship HC on the motivators were not found. From the Sna, no statistically significant effects were found. Qualitative data explained this was due to a lack of e-participation and the tenants not being susceptible to e-participation amongst various factors.

## Discussion of results

Hypothesis one was confirmed for the Lna and not tested for the Sna. Some caution is needed when concluding that the relationship HC affects community ties, as it could also be true that this correlation is due to another factor. Schieffer and van der Nol (2016) have investigated the core aspects of community ties. They found that community ties are an important factor for community ties. Social relations entail the relations citizens have with other members of their own, and other, communities. Therefore, for tenants community ties could also reflect the relations with employees of a HC. This raises the question as to whether the variable relationship HC reflects the social relations tenants have with employees of their HC. This seems unlikely however, as the formulation of the community ties questions do not touch upon this relationship. On top of that, the CFA showed the two to be separate constructs. Furthermore, Schieffer and van der Nol (2016) argue that participation with quasi-governmental organizations is crucial for good community ties, and a good relationship with such an organization is needed for this participation. Thus the results of hypothesis one are in line with this theoretical notion.

Hypothesis two was confirmed for the Lna, but not for the Sna. From a methodological point of view, this might be due to the differences in sample size, particularly taking into consideration the  $R^2=0,113$  of this relationship tested with the Lna. On the other hand, for the Lna  $\beta=0,242$  was much higher than for the Sna  $\beta=0,030$ , indicating that there might be factors besides sample size explaining this difference as well. As mentioned in the qualitative section, an absence of e-participation from Havensteder might be the primary cause of this difference. Furthermore, considering both the qualitative data and theory, various constraints seems to play a role in this regard, such as time constraints and a lack of digital literacy. The qualitative findings show that

many tenants of Havensteder believe e-participation might not be accessible for them, for example due to a lack of education or proficiency in Dutch. Furthermore, the lack of community ties, as a result of tenants not seeing similarities with one another, also means people do not help one another to use e-participation. Regarding the first notion, Adnan et al. (2022) argue that some citizens might not be able to use e-participation as they do not have the means, such as the required technology or an internet connection. On top of that, some citizens lack digital literacy, for example due to their age or educational background (Van Deursen & Van Dijk, 2018). Regarding the second notion, Jennissen et al. (2023) argue that diversity can be detrimental for community ties, as people in neighborhoods start living in separate groups based on their background, instead of being one community. Jennissen et al. (2023) argue that to solve this issue, governments should facilitate face to face interaction between members of a community, in order to get neighbors acquainted to one another. For these two reasons mentioned above, e-participation might not be the solution for civic engagement in communities with bad community ties and little digital literacy. The paradox presented in the qualitative results section ties into this as well. According to this paradox, tenants in Het Lage Land who work are better able to use e-participation but lack motivation for civic engagement as a result of time constraints. This ties into the theoretical notion of Hassan and Hamari (2020) who argue e-participation does not solve the issue of motivation for people with time constraints. Another factor explaining the difference between the Lna and Sna for hypothesis two might be trust. According to Santamaría-Philco and Wimmer (2018), various forms of trust affect the effectiveness of e-participation. For example, distrust in institutions hampers e-participation usage as people will avoid platforms created by those institutions. Similarly, people who do not trust the internet in general will avoid e-participation. For both the Lna and Sna model, trust significantly affected civic engagement. For the Sna, this effect was stronger  $\beta = 0,426$  than for the Lna  $\beta = 0,123$ . Furthermore, trust levels are particularly low in vulnerable neighborhoods (CBS, 2023). Therefore, there are various indications that trust influences the relationship between e-participation and civic engagement.

Hypotheses three and four were confirmed for the Lna, but not for the Sna. The explanatory factors seem largely the same as for hypothesis two. Firstly, the absence of e-participation, and the accessibility issues for the Sna might explain why it does not affect motivation in this case. Secondly, trust might play a role in this relationship again. Antonini et al. (2015) for example found that trust influenced the motivation of citizens to participate in public policy making

processes. If citizens lacked trust, they lacked motivation to participate. Similarly, Arvanditis (2017) argues that trust facilitates motivation for civic engagement. A person who does not trust institutions generally also feels less secure about their environment. As a result, they are prone to believe their engagement will not be sustained by the environment, this makes tenants unmotivated (Dang et al., 2021). Based on this notion, it could be true that for the distrusting tenants, the e-participation of Havensteder is not suitable to create motivation. Furthermore, from the Sna interviews, the notion also arose that civic engagement has to be on someone's own initiative. This somewhat supports the notion by Alsawaier (2017) and Lewis et al. (2016) that e-participation could negatively impact the need for autonomy.

Hypothesis five was rejected for the Lna and not measured for the Sna. Hypothesis five was built on the notion that tenants need to be intrinsically motivated towards civic engagement in order to use e-participation (Schmidhuber et al., 2015). Therefore, the effect of e-participation on extrinsic motivation might be greater for intrinsically motivated people. This relationship might be too opaque for intrinsic motivation to act as a moderator of the effect of e-participation on extrinsic motivation. Instead, significant results might be yielded if the effect of intrinsic motivation on e-participation usage is measured. Furthermore, older tenants are usually more civically engaged (Arvanditis, 2017). Yet for them e-participation might be more difficult (Adnan et al., 2022). Therefore, tenants who are more intrinsically motivated for civic engagement might be the ones for e-participation causes extrinsic motivation for, explaining why this moderating effect was not found.

Hypotheses six and seven were rejected for the Lna and not tested for the Sna. A possible reason might stem from the starting point of this study, the fact that HCs have limited resources to promote civic engagement as of 2015 (SCP, 2021). Relationship HC would influence motivation to engage, as it would impact tenants motivation to engage with civic engagement initiatives organized by HCs. Thus, it could be the case that HCs are not implementing civic engagement initiatives enough to make any difference in the motivation of tenants to civically engage. Furthermore, Hassan and Hamari (2020) argue that people have a lack of motivation for civic engagement as they have other primary interests and a lack of time. Actions by HCs aimed at fostering civic engagement might not solve these issues by making it more interesting for tenants or creating time for them, thus not affecting motivation.

Hypotheses eight and nine were rejected for both the Lna and the Sna. Theoretically community ties impact civic engagement directly (Arvanditis, 2017; Dang et al., 2021). When there are strong community ties people feel more motivated to improve their community, there is more social control to conduct socially desirable behavior and civic engagement is easier through cooperation. Empirically, this effect has been directly measured (Arvanditis, 2017; Dang et al., 2021). This study investigated whether community ties moderated the relationship between the two motivators and civic engagement. This effect was not found. Based on the qualitative findings, the Sna tenants argued bad community ties hampered their motivation, whilst at the same time it did not necessarily influence their actual civic engagement. A methodological reason therefore might be that there is a mediation effect instead of a moderation effect. If this mediation effect is also not present, community ties might only affect civic engagement by facilitating cooperation between tenants (Dang et al., 2021).. A final explanation might lie in the paradox presented in the qualitative results section. This paradox entailed that tenants who worked had better community ties and a better ability to use e-participation. At the same time these tenants are not motivated towards civic engagement as they do not have time due to their work schedule. Next to that, tenants with bad community ties also are not motivated towards civic engagement, even if this did not necessarily affect their actual civic engagement. Therefore, various levels of community ties both coincide with a lack of motivation for civic engagement, explaining why no moderation effect was found. Looking at theory, Snel et al. (2018) partially support this notion. They also argue that working people do not conduct civic engagement due to time constraints. At the same time, non-working people conduct more civic engagement, particularly because they feel they need to do something for society as they are not working (Snel et al., 2018). Based on this notion, and the findings of this study, community ties might affect civic engagement, but only for people who do not work. Further studies could thus focus on looking at only the non-working group.

### **Theoretical implications**

This study investigated four main gaps in the literature. Firstly, it extended the qualitative, government centered research on HCs and civic engagement (SCP, 2015; SCP, 2021). In doing so, this study quantitatively tested whether the relationship between HCs and tenants influences community ties and civic engagement. Using the Lna dataset, this study confirmed the theory that the relationship between HCs and tenants influences community ties. For the notion that the relationship between a HCs and tenants influences civic engagement, this study found no

significant effect, indicating that either theory on this relationship should be revised, or other research designs should be implemented to further test this relationship.

Secondly, this study also extended the research on e-participation, investigating what the effect of e-participation is in the context of HCs (Hassan & Hamari, 2020). In doing so, this study found that e-participation as issued by a HCs does influence civic engagement, however this is not true in the vulnerable neighborhood Het Lage Land. On the one hand, this adds to the theoretical gap identified by Hassan & Hamari (2020), who argue that research on e-participation is missing empirical findings about its effects in specific contexts. Furthermore, this confirms both theory by Arvanditis (2017) and Schieffer and van der Nol (2016) that quasi-governmental organizations can influence civic engagement. On the other hand, this study found that e-participation may not work in a vulnerable neighborhood, due to a lack of digital literacy and trust among these tenants. Theoretically, this reinforces existing theory arguing that e-participation might not be for everyone (Åström and Karlsson, 2016; Deursen & Van Dijk, 2018). In doing so, based on the qualitative data this study found that e-participation yielded different outcomes for the Sna, because tenants lacked the digital proficiency to use it. This confirms the existence of the digital divide, as mentioned by Van Deursen & Van Dijk (2018). Looking specifically at e-participation, Åström and Karlsson (2016) argue that it overrepresents young, digitally savvy and already engaged people. Thus, the results of this study also confirm this theoretical notion. Regarding trust, this study thus confirmed theory about the importance of trust for civic engagement (Antonini et al., 2015; Arvanditis, 2017; Dang et al., 2021). On top of that, the findings of this study support the theory by Santamaría-Philco and Wimmer (2018), who argue that various forms of trust are required for e-participation to work.

Thirdly, this study empirically tested theory on the effect of e-participation on extrinsic and intrinsic motivation for civic engagement. In doing so, this study extended theory on e-participation and motivation by looking at the two motivations separately, instead of motivation as a general concept (Hassan & Hamari, 2020; Mekler et al., 2017; Thiel et al., 2017). In addition, this study is based on an ambiguous theory where it is unclear whether e-participation increases or decreases intrinsic motivation (Alsawaier, 2017; Lewis et al., 2016). This showed that e-participation leads to civic engagement through both intrinsic and extrinsic motivation, thus creating new knowledge about the effect of e-participation on motivation and civic engagement. Furthermore, this study adds to solving some of the ambiguity surrounding the effect of e-

participation on intrinsic motivation, by assessing that e-participation increases intrinsic motivation, instead of decreasing it (Alsawaier, 2017; Lewis et al., 2016).

Finally, this study investigated the effect of community ties on motivation for civic engagement, building on the notion that community ties directly affect civic engagement (Dang et al., 2021; Putnam, 2000). In doing so, this study found that community ties do not moderate the effect of both motivations on civic engagement, thus indicating that this direct effect might stem from something other than motivation. Furthermore, this study extends the theory on the relationship between community ties and civic engagement, as the qualitative data indicated that community ties might only affect motivation for civic engagement for non-working tenants.

### **Limitations**

By conducting a nested analysis, this study evaluated the e-participation of HCs on a population level and by looking at an extreme case. This proved to be useful because the extreme case appeared to show different relationships than the larger, more general sample of HC tenants. Using qualitative data, this study was able to investigate how and why the dynamics of e-participation, civic engagement and HCs differ in a vulnerable neighborhood.

A primary limitation of this study is the limited sample size of the Sna. Due to this limited sample size, this study was unable to investigate the entire theoretical model for the Sna. Furthermore, this limited sample size also decreased the chances of finding significant results for the relationships studied. None of the relationships tested with the Sna were significant. On the one hand, the  $R^2$  of the relationships studied with the Lna are all relatively low, indicating that sample size plays a role. On the other hand, the qualitative findings did explain the difference in results, meaning that a larger sample size might not have resulted in a significant result.

A second limitation of this study is the construct validity of the measurements. Although scientifically validated scales were used, these scales had to be translated into Dutch and sometimes rewritten for better readability. This process can negatively affect both construct validity and reliability. The reliability of the measurements was confirmed by conducting a CFA and measuring Cronbach's  $\alpha$ . Furthermore, the regression analysis resulted in significant correlations in line with the theory. Despite the study's limited scope preventing a full assessment of construct validity, the outcomes regarding reliability and correlation suggest that construct validity is sufficient.



A third limitation regards the sample of the Lna. This sample overrepresents tenants from certain HC's. This might have resulted in some bias in the Lna data. This bias should be minimal, as there are no indications that the HC or neighborhood influences the results if the neighborhood is not vulnerable. The overrepresented groups of tenants live in neighborhoods which are standard for each of the values studied, and hence not in vulnerable neighborhoods.

A fourth limitation is the lack of theory regarding tenants of HC. Even though this study uses an abundance of scientific theory in e-participation and civic engagement, it lacks specific theory about tenants of HC in the Netherlands. For some relationships, this study could use theory on HC and tenants is derived from Dutch governmental research bureau's SCP and CBS. On the one hand these are respectable organizations, on the other hand this study was not able to confirm whether these works were peer reviewed. As a result, this lack of theory increases the risk of false causal claims. This study partially makes up for this lack of theory by explaining the results of the Sna with qualitative interviews and survey data.

A final limitation is the fact that this study did not include digital literacy and trust in its theoretical model. As became clear from the qualitative section of this study, digital literacy might be detrimental for e-participation to work. However, this study was not able to quantitatively measure whether this is statistically true. Similarly, trust was included as a control variable, but not in the theoretical model, meaning that this study could not fully investigate the effect of trust.

### **Further research**

Based on the findings above, this study brings forward four concrete suggestions for further research. Firstly, further research could investigate the different dynamics between standard neighborhoods and vulnerable neighborhoods further. In doing so, this research should conduct a field experiment. Conducting a field experiment should allow for the dynamic between e-participation, HCs and civic engagement to be further unraveled, comparing different neighborhoods both quantitatively and qualitatively. Furthermore, conducting an experiment will give better ability to make causal claims between the different types of neighborhoods. In doing so, it is important that such research investigates the needs and wishes of tenants.

Secondly, as HCs have been limited in their ability to facilitate civic engagement and this made it more difficult for this study to make any claims about the effects of HCs on civic engagement, further research could investigate specific civic engagement initiatives by HCs, investigating what the effect is of such initiatives.

Thirdly, the role of trust in civic engagement, e-participation and social housing should be further investigated. This study has clear implications that trust plays a seminal role in these relationships, but how this exactly works is unclear as this was not included in the scope of this study. Further research should focus not only on why and how tenants are distrustful and how this affects their civic engagement, but also on how to make them more trusting.

Fourthly, the role of digital literacy in implementing e-participation should be further studied. This study has clear indications that digital literacy prevents e-participation from being effective and that the digital divide plays a role in this. However, how this exactly works and what can be done to solve this issue remains unclear. Therefore, future research should investigate if and how e-participation can be made accessible amongst the digital divide.

### **Policy implications**

This study brings forward four policy implications. The first two policy implications stem from two findings: the positive statistically significant effect of relationship HC on community ties for the Lna, and the qualitative interviews from the Sna where tenants and employees argued events organized by Havensteder were good for community ties. Community ties are good for civic engagement, which in its turn is good for the liveability of neighborhoods. Therefore, policy implication one is that HCs should take on a leading role in facilitating community ties, by being a positive and proactive presence in their neighborhoods. Subsequently, policy recommendation two is that local governments, in particular municipalities, should consider working together with HCs to improve neighborhoods.

The third policy recommendation is based on the notion that the e-participation of HCs influences civic engagement, whilst at the same time this might not be true in a vulnerable neighborhood. Furthermore, tenants were afraid e-participation platforms would simply be a place to spread hate. Therefore, HCs should continue developing e-participation applications, as it can positively influence motivation and engagement. However, this should be done with caution. E-participation should need leave tenants with less digital literacy and accessibility behind. Furthermore, E-participation should not reinforce the inequality that exists today. On top of that, e-participation should not become a platform that affirms already bad community ties. E-participation should thus be designed with caution, making sure that it is inclusive and positive. Furthermore, e-participation should be in line with the needs and concerns of tenants.

The final policy recommendation focuses on trust. Governmental organizations and HCs should focus on restoring trust in institutions. Trust seems to be a requirement for many variables in this study. Trust is necessary for tenants to feel motivated towards civic engagement. Trust is necessary for e-participation to work. Currently, trust levels are continuously decreasing in the Netherlands (CBS, 2023). Therefore, creating the participation society the Dutch government wants, and using e-participation to do so, requires governmental organizations to restore trust.

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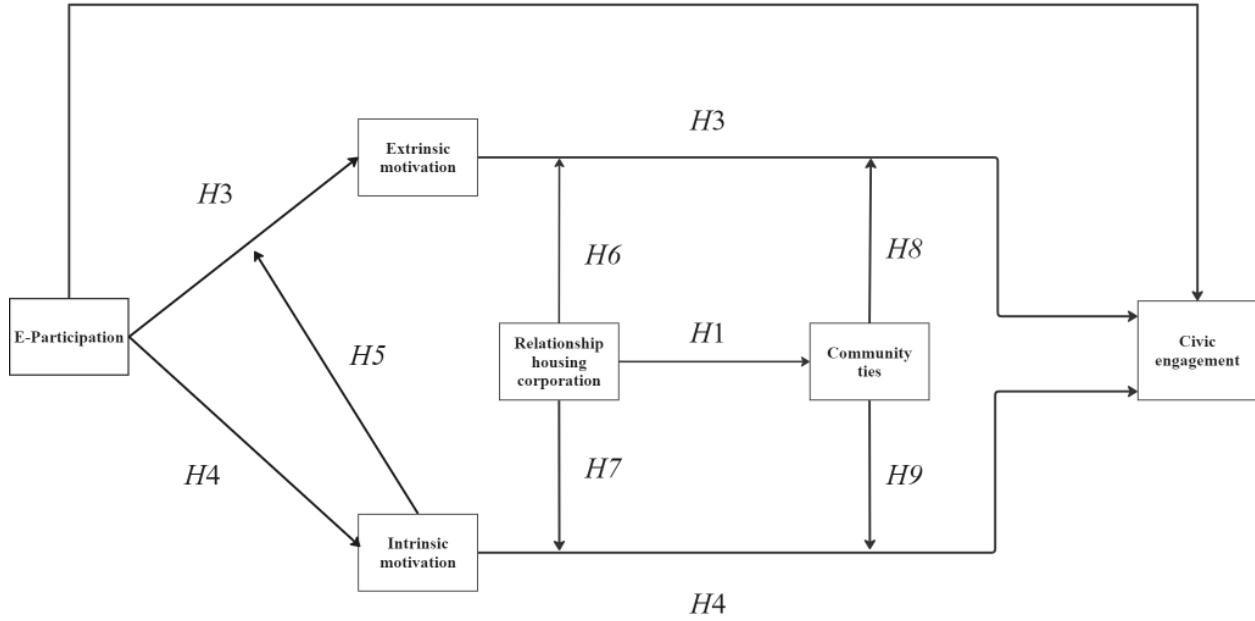
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**Appendix A**  
Conceptual model

*H2*



*Note.* This figure shows the conceptual model.

## Appendix B

### Topic Guides

**Table B1**

*Topic guide tenants*

Question	Probe 1	Probe 2	Type of question	Theme
Hoe lang woont u al in Het Lage Land?	Wat vindt u van deze buurt?		Introduction to rq	Community ties
Hoe zou u uw band met uw buurtgenoten omschrijven?	Wat beïnvloedt deze band?	Heeft u veel overeenkomst en met uw burenen?	Research question	Community ties
<i>Wanneer mensen burenen helpen, of bijvoorbeeld buurtfeesten organiseren, noemen we dit actief deelnemen in de buurt.</i>			Introduction to rq	Civic engagement
Op welke manieren neemt u actief deel in uw buurt?				
Wat motiveert u om deel te nemen in uw buurt?			Research question	Civic engagement
Hoe lang huurt u al via Havensteder?			Introduction to Rq	Housing Corporation

Hoe vaak heeft u contact met Havensteder?	Wat voor contact heeft u met Havensteder?	Met wie is dat contact?	Introduction to Rq	Housing Corporation
Wat vind u van uw relatie met Havensteder?	In hoeverre hebben de medewerkers van Havensteder dezelfde mening als u? <i>Bijvoorbeeld over nieuwe gebiedsontwikkelingen.</i>	Wat vind u belangrijk voor een goede relatie met Havensteder?	Research question	Housing Corporation
Hoe faciliteren instanties, bijvoorbeeld de gemeente, u om deel te nemen in uw buurt?			Introduction to rq	Institutions and civic engagement
Welke rol speelt Havensteder in uw buurt?	Welke invloed heeft Havensteder op uw motivatie iets te doen in uw buurt?		Research question	Institutions and civic engagement
Op welke manieren bereikt Havensteder u digitaal? Bijvoorbeeld via email, telefoon, met een website of app.	Waarvoor benadert Havensteder u digitaal?	Wat vind u hiervan?	Introduction to RQ	E-participation
Heeft u digitaal contact met uw buurtgenoten, bijvoorbeeld via whatsapp, social media?	Welke rol speelt Havensteder hierbij?	Wat denkt u, zou Havensteder hier een rol in kunnen spelen?	Research question	E-participation
<i>Stel u zou voor buurtparticipatie activiteiten punten krijgen</i>			(optional) Research question	(optional) Munt

*via een app.  
Deze punten  
kan u  
inwisselen voor  
een activiteit,  
zoals schaatsen,  
of een kadobon.*

Wat vind u  
hiervan?

*Note.* This table shows the topic guide used for interviews with tenants.

**Table B2**

*Topic guide employees*

Question	Probe 1	Probe 2	Type of question	Theme
Wat doet u voor werk?	Hoe lang doet u dat al in Het Lage land?		Introduction to rq	Community ties
Hoe zou u uw band met de bewoners omschrijven?	Wat beïnvloedt deze band?		Research question	Community ties
<i>Wanneer mensen burenen helpen, of bijvoorbeeld buurtfeesten organiseren, noemen we dit actief deelnemen in de buurt.</i>			Introduction to rq	Civic engagement
Op welke manieren gebeurt dit in Het Lage Land?				

Hoe vaak heeft u contact met huurders?	Wat voor contact heeft u met Huurders		Introduction to Rq	Housing Corporation
Wat vinden de huurders van Havensteder?	In hoeverre heb je meningsverschillen met de buurt?		Research question	Housing Corporation
Hoe faciliteert Havensteder buurtparticipatie?			Introduction to rq	Institutions and civic engagement
Op welke manieren bereikt u bewoners digitaal? Bijvoorbeeld via email, telefoon, met een website of app.	Waarvoor benadert u bewoners digitaal?	Wat vind u hiervan?	Introduction to RQ	E-participation

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*Note.* This table shows the topic guide used for interviews with employees.

## Appendix C

### Survey

The text below shows the survey used to gather the data, as seen by tenants in the program Qualtrics.

#### **Beoordeling woningcorporatie en leefbaarheid**

Onderzoek: bewoner-verhuurder relatie en publieke participatie, de casus van Nederlandse woningcorporaties: **Wat vindt u van uw woningcorporatie en de buurt waarin u woont?**

U bent uitgenodigd om deel te nemen aan dit onderzoek naar het effect van woningcorporaties op uw buurtparticipatie. Dit onderzoek wordt uitgevoerd voor de Erasmus Universiteit Rotterdam. Voor dit onderzoek worden enkele persoonlijke gegevens verwerkt (Leeftijd, buurt). Deze gegevens zijn in geen geval terug te herleiden naar uzelf. Het invullen van deze enquête duurt tussen de 5 en 10 minuten.

Door deel te nemen aan dit onderzoek gaat u er mee akkoord dat uw ingevulde antwoorden statistisch geanalyseerd worden. Vervolgens worden deze resultaten verwerkt in een rapport. Hierbij blijft uw privacy volledig gewaarborgt. Bovendien worden individuele antwoorden niet gedeeld met corporaties. Op elk moment kunt u met de survey stoppen, de antwoorden worden dan niet verwerkt.

Met uw deelname aan dit onderzoek maakt u kans op **één van de drie bol.com kadokaarten (t.w.v. 20 euro)** die worden verloot. Nadat u de survey hebt ingeleverd wordt u gevraagd om hiervoor uw emailadres op te geven. Dit emailadres is dus niet gelinkt aan uw antwoorden.

Vragen kunt u stellen door te mailen naar: [699536yg@student.eur.nl](mailto:699536yg@student.eur.nl). Voor de volledige informatie over dit onderzoek, [kunt u op deze link klikken](#).

Ik ga akkoord met deelname aan dit onderzoek

- Ja (1)
- Nee (2)

Q26 Ik huur een woning bij een woningcorporatie. (i.a. woningbouwvereniging)

- Ja (1)
- Nee (2)

Q7 De onderstaande stellingen gaan over uw tevredenheid met uw woningcorporatie. Geef voor elke stelling aan hoe erg u het met de stelling eens bent.

	Helemaal niet mee eens (1)	Enigszins mee oneens (2)	Noch eens noch oneens (3)	Enigszins mee eens (4)	Helemaal mee eens (5)
Ik ben blij met mijn woningcorporatie. (1)	0	0	0	0	0
Huurders vinden dat mijn woningcorporatie op een goede manier met je omgaat. (2)	0	0	0	0	0
De meeste mensen vinden het prettig om met mijn woningcorporatie om te gaan. (3)	0	0	0	0	0
Mijn woningcorporatie lukt het niet om aan de behoefte van huurders te voldoen. (4)	0	0	0	0	0
Mijn woningcorporatie vindt huurders belangrijk. (5)	0	0	0	0	0
Over het algemeen komt er niets waardevols uit	0	0	0	0	0

het contact  
tussen de  
woningcorpora  
tie en  
huurders. (6)

Q8 Wat kan uw woningcorporatie beter doen? (niet verplicht)

Q17 Onderstaande vragen gaan over uw meningen en ervaringen met betrekking tot uw buurt.  
Geef voor elke stelling aan in hoeverre u het er mee eens bent.

	Helemaal niet mee eens (1)	Enigszins mee oneens (2)	Noch eens noch oneens (3)	Enigszins mee eens (4)	Helemaal mee eens (5)
Ik heb veel contact met andere buurtbewoners. (1)	0	0	0	0	0
In deze buurt gaat men op een prettige manier met elkaar om. (2)	0	0	0	0	0
Ik woon in een gezellige buurt waar mensen elkaar helpen en samen dingen doen. (3)	0	0	0	0	0
Mensen kennen elkaar in deze buurt nauwelijks. (4)	0	0	0	0	0
Ik ben tevreden met de bevolkingssamenstelling in deze buurt. (5)	0	0	0	0	0
Ik voel mij thuis in deze buurt. (6)	0	0	0	0	0



Q18 Wat maakt uw buurt leuk/niet leuk? (niet verplicht)

Q9 De onderstaande stellingen gaan over uw buurtparticipatie. Buurtparticipatie houdt in dat u zich inzet met of voor u buurt. Bijvoorbeeld door samen met buren afval op te ruimen. Geef voor elke stelling aan hoe vaak u zich met de stelling bezighoudt. Als u bijvoorbeeld nooit vrijwilligerswerk doet, kiest u bij stelling één 'nooit'.

	Nooit (1)	Zelden (2)	Regelmatig (3)	Vaak (4)	Altijd (5)
Ik ben betrokken bij vrijwilligerswerk in mijn buurt. (1)	0	0	0	0	0
Als ik met anderen samenwerk, zorg ik voor positieve veranderingen in mijn buurt. (2)	0	0	0	0	0
Ik help mensen in mijn buurt. (3)	0	0	0	0	0
Ik blijf op de hoogte van gebeurtenissen in mijn buurt. (4)	0	0	0	0	0
Ik neem deel aan gesprekken over de gezamenlijke verantwoordelijkheid voor mijn buurt. (5)	0	0	0	0	0
Ik draag bij aan goede doelen in de buurt. (6)	0	0	0	0	0

Q19 De onderstaande stellingen gaan over uw motivatie om iets te doen in uw buurt. Buurtparticipatie kan bijvoorbeeld het helpen van buren, of vrijwilligerswerk zijn. Geef voor elke stelling aan in hoeverre deze voor u van toepassing is.

	Helemaal niet mee eens (1)	Enigszins mee oneens (2)	Noch eens noch oneens (3)	Enigszins mee eens (4)	Helemaal mee eens (5)
Ik haal plezier uit buurtparticipa tie. (1)	0	0	0	0	0
Ik haal voldoening uit buurtparticipa tie. (2)	0	0	0	0	0
Buurtparticip atie is leuk. (3)	0	0	0	0	0
Ik vind buurtparticipa tie interessant. (4)	0	0	0	0	0
Anderen verwachten dat ik iets bijdraag in de buurt. (5)	0	0	0	0	0
Buurtparticip atie is iets wat ik moet doen. (6)	0	0	0	0	0
Buurtparticip atie levert mij iets op. (7)	0	0	0	0	0
Ik doe aan buurtparticipa tie, omdat ik hiertoe wordt aangespoord. (8)	0	0	0	0	0

Q10 De onderstaande vragen gaan over uw vertrouwen in instanties. Geef voor elke instantie aan hoe betrouwbaar u deze vindt.

	Volledig onbetrouw baar (1)	Erg onbetrouw baar (2)	Onbetrouw baar (3)	Betrouwba ar (4)	Erg betrouwba ar (5)	Volledig betrouwba ar (6)
Hoe betrouwba ar vindt u de overheid? (1)	0	0	0	0	0	0
Hoe betrouwba ar vindt u de tweede kamer? (2)	0	0	0	0	0	0
Hoe betrouwba ar vindt u politieke partijen? (3)	0	0	0	0	0	0

Q20 De onderstaande stellingen gaan over de digitale middelen die uw woningcorporatie heeft ingezet om u te bereiken. Geef voor elke stelling aan of dit in het verleden ten minste één keer het geval is geweest.

	Nee (1)	Ja (2)
De woningcorporatie ging online het gesprek aan met bewoners. (1)	0	0
De woningcorporatie faciliteerde online gesprekken tussen bewoners. (2)	0	0
De woningcorporatie faciliteerde of beheerde chatrooms. (3)	0	0

De woningcorporatie vroeg digitaal bewoners om hun mening. (4)	0	0
De woningcorporatie liet bewoners meedoen aan een peiling of enquête. (5)	0	0
De woningcorporatie liet bewoners online meekijken met een vergadering. (6)	0	0
De woningcorporatie liet bewoners online meedoen met een vergadering. (7)	0	0
De woningcorporatie faciliteerde bewoners digitale petitie op te zetten. (8)	0	0
De woningcorporatie liet bewoners stemmen met verkiezingen of referenda. (9)	0	0
De woningcorporatie organiseerde een digitale bewonersavond. (10)	0	0
De woningcorporatie liet bewoners opmerkingen plaatsen. (11)	0	0

Q1 Wat is uw hoogst afgeronde opleiding?

- Basisschool (1)
- Vmbo (2)
- Havo/Vwo (3)
- Mbo (4)
- Hbo (5)
- Universiteit (6)

Q2 Wat is uw leeftijd?

Q3 In welke buurt woont u?

Q4 Hoe lang woont u al in uw buurt? (Jaren)

Q5 Bij welke corporatie huurt u?

Q6 Hoe lang huurt u al een woning bij deze corporatie?

Q22 Wilt u kans maken op een van de 3 bol.com kadokaarten?

- Ja, ik wil mijn email adres invullen. (1)
- Nee, lever mijn antwoorden in. (2)

Q23 Bedankt voor het invullen van deze enquête!

## Appendix D

### Vif levels

**Table C1**

*Multicollinearity*

Variable	VIF
Duration of tenancy	1,86
Duration of relationship	1,92
Education	1,11
Relationship	1,23
Community ties	1,60
Intrinsic motivation	2,42
Extrinsic motivation	1,95
Trust	1,12
E-participation	1,18

*Note.* This table shows the VIF levels as measured for the Lna dataset.

## Appendix E

### Descriptives and correlations

**Table D1**

*Descriptives of the Lna dataset*

Variable	<i>n</i>	Range	Mean	SD
Community ties	415	5-25	17,8	5,2
Duration of tenancy	415	Continuous	18,6	16
Duration of relationship	415	Continuous	18,2	16
Education	415	1-6	3,8	1,2
E-participation	415	0-11	2,4	2,1
Extrinsic motivation	415	4-20	10	3,6
Intrinsic motivation	415	4-20	12,5	4,4
Relationship HC	415	4-20	14,6	4,3
Trust	415	3-18	8,5	2,9

*Note.* This table shows the descriptive statistics for the Lna data. The range shows the minimum and maximum value of each construct. Continuous variables have a minimum value of zero and no maximum value.

**Table D2**

*Correlations of the Lna dataset*

		1	2	3	4	5	6	7	8	9	10
1	Civic Engagement	1									
2	Community ties	0,41*	1								
3	Duration of relationship	0,04***	-	1							
			0,02***								
4	Duration of tenancy	0,03***	-0,10**	0,64*	1						
5	Education	0,06***	-	-0,14**	-0,13**	1					
			0,02***								
6	E-participation	0,24*	0,18*	0,00***	0,04***	0,06***	1				
7	Extrinsic motivation	0,52*	0,333*	0,02***	-	-	0,22*	1			
					0,02***	0,03***					
8	Intrinsic motivation	0,68*	0,539*	0,06***	0,00**	0,06***	0,28*	0,68*	1		
9	Relationship	0,05*	0,33*	-	-	-0,14*	0,25*	0,14*	0,17*	1	
				0,01***	0,08***						
10	Trust	0,17*	0,16*	0,05***	-	0,10**	0,16*	0,24*	0,16*	0,15*	1
					0,02***						

*Note.* This table shows the Pearson correlation for each construct as measured for the Lna dataset. \* $p < 0.01$ , \*\* $p < 0.05$  \*\*\* $p > 0.05$



## Appendix F

### Outcomes of moderation analysis

**Table E1**

*Intrinsic motivation \* e-participation*

	<i>R</i> <sup>2</sup>	<i>B</i>	Significance
<i>x</i> -> <i>y</i>	0,00		
Constant		-0,05	0,779
Interaction		0,02	0,261

*Note.* This table shows the regression outcome where intrinsic motivation is a moderator for the relationship between e-participation and extrinsic motivation.

**Table E2**

*Relationship \* extrinsic motivation*

	<i>R</i> <sup>2</sup>	<i>B</i>	Significance
<i>x</i> -> <i>y</i>	0,27		
Constant		13,31	<0.001
Interaction		0,06	0.15

*Note.* This table shows the regression outcome where relationship HC is a moderator for the relationship between extrinsic motivation and civic engagement.

**Table E3**

*Relationship \* intrinsic motivation*

	<i>R</i> <sup>2</sup>	<i>B</i>	Significance
<i>x</i> -> <i>y</i>	0,46		
Constant		13,95	<0.001
Interaction		0,00	0.969

*Note.* This table shows the regression outcome where relationship HC is a moderator for the relationship between intrinsic motivation and civic engagement.

#### **Table E4**

*Community ties \* extrinsic motivation*

	<i>R</i> <sup>2</sup>	<i>B</i>	Significance
<i>x</i> -> <i>y</i>	0,27		
Constant		13,97	<0.001
Interaction		0,02	0.565

*Note.* This table shows the regression outcome where community ties is a moderator for the relationship between extrinsic motivation and civic engagement.

#### **Table E5**

*Community ties \* intrinsic motivation*

	<i>R</i> <sup>2</sup>	<i>B</i>	Significance
<i>x</i> -> <i>y</i>	0,00		

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Constant	13,91	<0.001
Interaction	0,01	0.497

---

*Note.* This table shows the regression outcome where Community ties is a moderator for the relationship between extrinsic motivation and civic engagement.

## Appendix G

### Descriptives and correlations

**Table F1**

*Descriptives of the Sna dataset*

Variable	<i>n</i>	Range	Mean	SD
Community ties	67	5-25	16,4	4
Duration of tenancy	67	Continuous	17,6	14,3
Duration of relationship	67	Continuous	16,3	12,4
Education	67	1-6	3,7	1,2
E-participation	67	0-11	1,7	2
Extrinsic motivation	67	4-20	8,7	3,8
Intrinsic motivation	67	4-20	12	4,5
Trust	67	3-18	7,8	3,2

*Note.* This table shows the descriptive statistics for the Lna data. The range shows the minimum and maximum value of each construct. Continuous variables have a minimum value of zero and no maximum value.

**Table F2***Pearson correlations of the Sna dataset*

		1	2	3	4	5	6	7	8	9
1	Civic Engagement	1								
2	Community ties	0,42**	1							
3	Duration of relationship	0,05***	-0,02***	1						
4	Duration of tenancy	0,03***	-0,10***	0,64*	1					
5	Education	0,06***	-0,02**	-0,14***	-0,13***	1				
6	E-participation	0,24***	0,18***	0,00***	0,04***	0,06***	1			
7	Extrinsic motivation	0,52*	0,33***	0,04***	-0,02***	-0,03***	0,22***	1		
8	Intrinsic motivation	0,68*	0,54**	0,06***	-0,04***	0,06***	0,28***	0,68*	1	
9	Trust	0,17*	0,16**	0,05***	-0,02***	0,10***	0,16***	0,24**	0,16*	1

*Note.* This table shows the Pearson correlation for each construct as measured for the Sna dataset. \* $p < 0.01$ , \*\* $p < 0.05$  \*\*\* $p > 0.05$

## Appendix H

### Outcomes of moderation analysis

**Table G1**

*Social ties and extrinsic motivation*

	<i>R</i> <sup>2</sup>	<i>B</i>	Significance
<i>x</i> -> <i>y</i>	0,00		
Constant		12,05	<0.001
Interaction		-0,01	0.786

**Table G2**

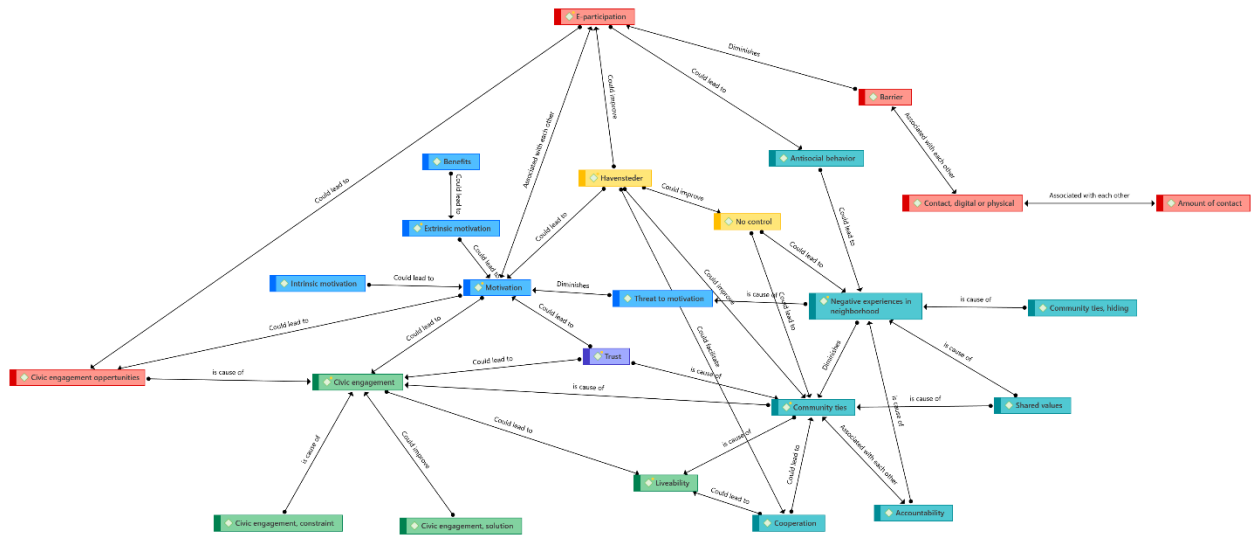
*Social ties and intrinsic motivation*

	<i>R</i> <sup>2</sup>	<i>B</i>	Significance
<i>x</i> -> <i>y</i>	0,01		
Constant		12,15	<0.001
Interaction		-0,02	0.468

# Appendix I

## Coding tree

**Figure H1**  
Coding tree



*Note.* This figure shows the coding tree, as obtained from AtlasTI.