

Mayoral network activities in the Netherlands

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Abstract

The following Bachelor Thesis focuses on the network activities of mayors in the Netherlands and the effectiveness of those activities. The following research question has been derived: **What factors influence the (effectiveness of) network activities of mayors in the Netherlands and to what level are their activities effective?** The aim of this study is to determine what factors have an influence on Dutch mayoral network activities and the effectiveness of those networks. The research design is of a cross-sectional design and is based on quantitative data derived from the POLLEADER II-survey, which was collected between 2014 and 2016. Moreover, the research encompasses two interviews with Dutch mayors. The research finds its relevance in that not a lot of research has been done into the network activities pursued by Dutch mayors. It finds that there are some factors, related to the challenges that mayors indicate for themselves, that have an influence on the level of network activities. Moreover, it seems that an increase in the level of those network activities has a positive influence on the perceived effectiveness. However, the research has been unable to find a negative relationship between dependency on other actors and effectiveness as the analysis shows that there is in fact a positive relationship between one type of dependency and effectiveness. Future research is necessary to clarify those particular relationships.

Keywords: Mayors, Dutch Mayors, External Networking, Effectiveness, Network Effectivity

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1. Introduction

One of the main roles of mayors in the Netherlands nowadays is move through the ‘network society’ of the 21st century. Job offers for mayors in the Netherlands, for example the job offers in Zaanstad (2016) and Ouder Amstel (2017), clearly mention that the new mayor should be externally focused, giving access to external (re)sources and spheres of influences. One of the reasons that municipalities start looking for externally oriented mayors is that Dutch local governments have received more responsibilities over the last years. Decentralization of tasks previously held by national and regional governments have led to more work for municipalities and their mayors. These tasks often involve keeping in contact with partners in both the public and private domain, with the mayor, as ‘first citizen’, at the forefront of networking with those partners. From a theoretical perspective, it appears that mayors themselves and their tasks have been researched a lot but that their networking activities are relatively unstudied. However, it seems that mayors have gotten more attention over the years, this can be partly attributed to the book written by Benjamin Barber in 2013 on the role of mayors in the globalizing world (Barber, 2013). It appears that intergovernmental networks and network effectivity did have their fair share of attention over the years, which will be outlined in more detail in the theory and literature chapter.

The trend of cooperation by mayors with a range of political-administrative actors and those with a social-community background (Karsten, Schaap, Hendriks, van Zuydam, & Leenknecht, 2014a) is clearly visible. For example, a report by the Tilburg University has been written for the Dutch government on the role and state of the Dutch mayor’s office in 2014. The networking activities by the mayors are seen by Tilburg University as a form of *meta-governance* (Karsten et al., 2014, p.70). This can be defined as “a way of enhancing coordinated governance in a fragmented political system based on a high degree of autonomy for a plurality of self-governing networks and institutions” (Sørensen, 2016, p.100). The report notes that mayors do not see their networks and networking as an independent activity, but rather as a part of their professional tasks (Karsten et al., 2014b, p.56), as it seems that in the Netherlands the mayors themselves have clearly defined tasks such as being responsible for maintaining public order in the municipality. Depending on the size of the municipality and the role of the aldermen, the mayor may also be responsible for more policy areas, like staff and organization and/or finances (Karsten et al., 2014b & NGB, 2018). However, there is also a less clearly defined part of the mayoral work in the Netherlands. For lots of municipalities, this creates for the mayor as well the role of a public relations figure; someone that represents the municipality on a local, regional or even national level. Apart from what was noted in the report by the Tilburg University, it might be interesting to see how effective the mayors themselves consider their networks and networking.

1.1. Research question

This thesis aims to answer the following research question: **“What factors influence the (effectiveness of) network activities of mayors in the Netherlands and to what level are their activities effective?”**

This explanatory research question focuses on the Dutch mayor as the unit of analysis. The dependent variable in this question is the (effectiveness of) network activities. The independent variables are the factors that influence how mayoral network activities are shaped, this research will analyse in what way those factors have an influence on the network activities.

The main research question will be answered, after the following six sub-questions have been answered:

- 1. What is known about factors that influence network activities of mayors and how effective these activities are?**
- 2. What network activities do mayors in the Netherlands pursue?**
- 3. What factors influence the network activities of mayors in the Netherlands?**
- 4. How effective are these network activities of mayors in the Netherlands?**
- 5. What factors influences the effectiveness of these network activities?**
- 6. How do the results from previous research on (factors that influence) network activities of mayors and how effective they are, correspond with the data found in this research?**

The sub-questions have been divided in three parts, with those being a theoretical part (question one), which will be answered by using existing literature. Secondly, an empirical part (questions two, three and four), that looks at the empirical part of network activities. These questions use the POLLEADER II-survey data, data generated by interviewing two Dutch mayors and data from the Tilburg University survey. Lastly, a combined part (question six), where the theoretical part and the practical part will be linked together, and serves as a step towards answering the main research question.

1.2. Scientific & societal relevance

1.2.1. Scientific relevance

That the specific part of mayoral networking is relatively unstudied makes a research into the networking activities scientific more relevant. The scientific relevance of research relates to the relevance of the results of the research to science (Geurts, 1999). This thesis is scientifically relevant, because it complements several theoretical aspects that are missing at this point in the existing literature on networking activities by mayors. This research will be building upon the book *Political Leaders and Changing Local Democracy*, and specifically on the 9th chapter by Denters, Steyvers, Klok and Cermak (2018). This chapter covers in a more general manner, with less explaining variables, the network

activities of mayors across Europe, where as this research is more specifically geared towards the situation in the Netherlands. In this thesis, an attempt is made to find an explanation by looking at the networking activities of mayors in the Netherlands and what factors influence those activities.

1.2.2. Societal relevance

Societal relevance relates to the importance of the thesis for society as a whole (Geurts, 1999, p.133). As mayors do not only play a role within the city hall, but also out in public, on regional, national and international level, it is also of societal relevance to understand the factors shaping mayors' networking activities. Moreover, this thesis looks at the networking activities of mayors as the head of public organizations in the middle of a public spotlight in an age where all activities are evaluated. This thesis can provide clarity about what factors influence the networking activities of mayors in the Netherlands. It can also be helpful to mayors in shaping their network activities and on what they could focus to be the most effective.

2. Theory

One of the interesting scholarly works for this research can be considered the book 'If Mayors Ruled the World – Dysfunctional Nations, Rising Cities', by Benjamin Barber (2013). Barber argues that cities, and the mayors that run them offer the best force of good governance. Cities are already home to half of the world population and primary incubator of cultural, social, and political innovations according to Barber (2013). Moreover, cities do not have the burden of being tasked with issues of borders and sovereignty that occupy national governments. Therefore, Barber thinks that mayors can and should play a key role in solving the big challenges of the 21st century (Barber, 2013). However, the mayors cannot do this on their own, which is why they need their networks, with a range of public and private partners. With the rise of *governance*, as a tool to describe patterns of collective decision-making and collective action in the public domain (Denters, 2011, p.313), at the end of the 20th century, it appears that those mayoral networks also rose in importance. These networks both operate within the city hall and municipal organisation, but also outside the city hall with a range of public and private partners. The rest of this chapter will look at the various theoretical aspects of mayoral networking, the three hypotheses will be presented and a causal model relating to those hypotheses will be included. Lastly, the first sub-question **“What is known about factors that influence network activities of mayors and how effective these activities are?”** is answered.

2.1. Networking

A frequently used definition of a network is the following: “a partnership between three or more autonomous organizations for achieving both collectively set goals and own goals that none of the organizations can achieve individually” (Provan & Kenis, 2007). From this definition the following can be taken: firstly, that actors in a network remain autonomous, there is no requirement to work together and every actor keeps their authority to take independent decisions. Secondly, there needs to be a mutual dependency between the actors, so that goals cannot be achieved independently but cooperation is necessary. With the influx of network collaboration, it seems that the focus is changing in a cooperation. Provan and Kenis (2008) emphasize that a cooperative relationship is only based on a structure that consists of one-to-one relationships between actors. Within a network it is precisely a 'combination' between participants and multidisciplinary interaction. Network activities are thus defined as the social relations between mutual dependent actors.

In their book 'A Manager's Guide to Choosing and Using Collaborative Networks' Milward and Provan (2006) describe three basic designs of networks. The first being a self-managing network, in which the organisations have equal positions. Decisions are taken jointly and the organizations are all connected to each other. This form is most effective in situations where only a few organizations are present and

there is a large agreement about how to approach goals and tasks. The second design is a network in which one of the organisations is in charge. This leading organization is connected to all other organizations, but the other organizations themselves are not necessarily connected to each other. This situation is most effective if the leading organization has the confidence of the other parties to decide. The last design has a separate organization that leads the network, where often a board of representatives of the other parties within the network. This is most effective when the network is large and is located in a complex environment.

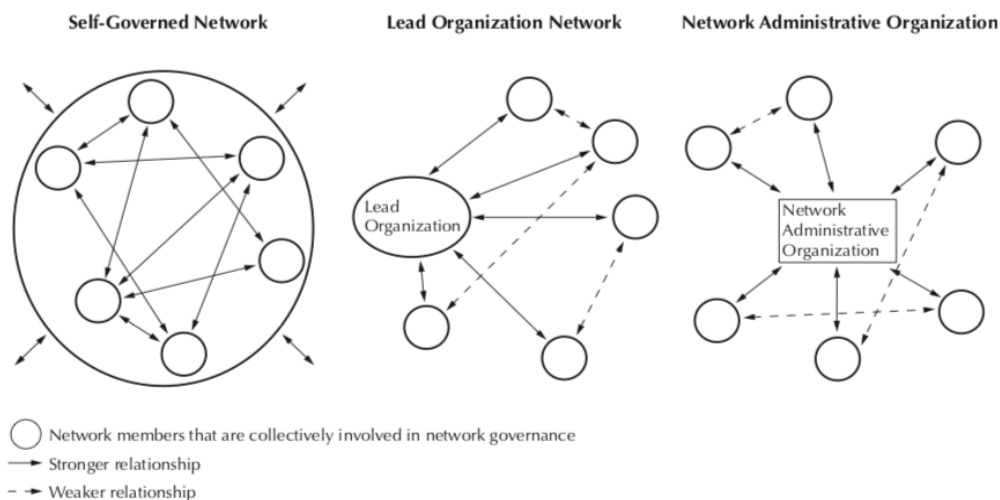


Figure 1: Three modes of Network Governance. Reprinted from *A Manager's Guide to Choosing and Using Collaborative Networks* (p.23), by Milward, H. B., & Provan, K. G..

All these three modes have their ties to mayors, as they have to employ an array of networking techniques to achieve their goals. It might be that the mayors are in a regional circle, like the 'Burgemeesterskring Achterhoek' or the 'Burgemeesterskring NO-Brabant' in which mayors from a small region discuss various issues. The second mode, a lead organization network can be visualized as the relation the mayor has with companies in the municipality. The mayor might have a relationship with them, while the companies themselves do not have or have weak relationships between them. The mayor might then create a platform or otherwise engage in an activity that stimulates cooperation between them. Lastly, the third mode, a network administrative organization relating to mayors, could be the recently in The Hague registered association of the Global Parliament of Mayors (GPM). This parliament follows the ideas proposed by Barber, who saw the establishment of a parliament as a logical and necessary step in the process of globalization. With the parliament, Barber wanted to institutionalize the already existing informal practices and the already existing cooperation between cities. The driving force in parliament is persuasiveness and consensus (Barber, 2013). Among the mayors that participate are those from Amsterdam, Rotterdam, The Hague, Utrecht and Zwolle. In the context of this research it is interesting to see if the mayors are focussing on the working of such a network mode itself or that they focus on making relationships stronger in such a mode. The interviews offer a great opportunity to delve into this to see if the mayors focus on the partners or on the network.

2.2. Managers & mayors

The networking activities of mayors are, in general, not extensively studied. A number of studies have however been done on mayoral leadership (e.g., Denters et al., 2018; Verheul & Schaap, 2010; Pressman, 1972). These studies also have links to networking activities, as they all also touch upon networking activities as part of the mayoral leadership. However, they did not touch upon the specific case of the Netherlands, but rather took a more general view on the topic. The chapter by Denters, Steyvers, Klok & Cermak (2018) is used as the theoretical foundation of this thesis. They have analysed the role of mayors across Europe in building and maintaining a network of actors on whom the mayors depend (p.274). The researchers found that overall activism of mayors in network management is relatively high, with mayors participating on the one hand by linking stakeholders and on the other through facilitative leadership. The researchers write that it seems that many of the mayors try to balance the different styles. Secondly, activism and style are rather equal per biggest challenge for the mayor according to the researchers (p. 292). Lastly, mayors consider themselves to be rather successful in the management of networks. There is however a difference between the priorities that the mayors have and how successful the network activities are perceived. The researchers give as example that priorities like social policy and safety are associated with more success than priorities like growth. One of the reasons might be that the latter has a larger dependency on the corporate sector (p. 293)

Other researchers also focussed on the subject of external networking of managers (Andrews, Boyne, Meier, O'Toole & Walker, 2011), where external networking can be considered networking with different partners that are not located within the organization itself. The conclusion that Andrews et al. (2011) drew was that external networking by managers improved the organizational performance. In relation to this research, this can be seen as the effectiveness of the networking activities by the mayors. The reason that there is a positive association has two main causes, the first being that networking opens new resources for managers (e.g. money & (political) support). Secondly, networking might protect the core organization from negative impacts from outside (e.g. budget cuts & lawsuits).

Like Karsten et al. (2014a) state, mayors use their networking activities as a way to achieve goals in other policy areas and do not see networking with partners as an independent activity. Klijn, Steijn & Edelenbos (2010, p.1065) distinguished two types of network (management) activities. The first being structuring the network, which includes building platforms for partners and stakeholders. The second type are the process management activities, which are aimed at managing collective decision-making. These can be horizontal, like mediation, or vertical, which includes use of formal powers. The networking with partners can be seen as a 'vehicle' to reach goals in other policy areas, more than a goal itself. In relation to this, the first hypothesis argues that the type of challenge mayors face influences the specific network activities they pursue.

These challenges are derived from the POLLEADER II-survey, a survey conducted across Europe, in which the mayors were asked to indicate the most important challenge for themselves. For Dutch mayors (n=122) there were six challenges that were named the most, being:

- Increasing attractiveness of the municipality (n=18)
- Development of social policies (n=22)
- Securing public safety, fighting crime and secure law and order (n=28)
- Addressing politico-administrative issues (n=35)
- To stimulate economic growth and employment (n=7)
- To improve the integration of ethnic, religious or cultural minorities (n=8)

It might be that contrasting challenges require different types of activities, for example with distinctive partners or in different settings. Seeing that the most clearly defined role of Dutch mayors is maintaining the public order, it can be expected that the related challenge, *securing public safety, fighting crime and secure law and order*, has an influence on the level of network activities mayors spent in that field. For the challenge of *addressing politico-administrative issues*, it might be that the mayor pursues more leadership-oriented network activities in a context of internal network dependency. What Denters et al. saw in their research, was that in the field of political reform the internal network dependency was more important than other network dependencies (Denters et al, 2018, p.286).

2.3. Hypotheses

The first hypothesis covers the challenges of mayors and the influence that has on the network activities they pursue. Mayors have a number of tasks. Some of these challenges are identified in the fourth question of POLLEADER II-survey. These tasks range from representing the city to the outside world to creating a vision for the city and guiding staff in day to day activities (Heinelt, Magnier, Cabria & Reynaert, 2018, p.458). An interesting hypothesis is that when a mayor deems the most important challenge associated with the position of mayor to be an ‘internal’ challenge, like guiding staff and resolving complaints with the municipal government, it has a negative influence on the overall level of network activities that are pursued by the mayor. The level of network activities, or network activism, will be measured through the mayors’ engagement in network activities. The variables that are used to confirm or falsify this hypothesis are derived from the POLLEADER II-survey. Explorative research will be done after the hypothesis is rejected, to see if there are other interesting relationships, this will be done without a theoretical expectation. Additionally, supporting information is gathered during the interviews.

H1: If mayors consider an ‘internal’ challenge for themselves to be the most important, the level of network activities is lower than when considering an ‘external’ challenge as most important.

An important aspect of policy is if it can be perceived as effective. This policy effectiveness is seen as the use of policy instruments, in such a way as to increase the chance to achieve the defined policy targets (Héritier, 2003). As the mayors hold public offices it is a vital part, especially in the age of social- and mass media where public offices are often under a magnifying glass, that networking activities are effective. The second hypothesis states that the higher the amount of network activities are pursued, the higher the effectiveness is perceived by the mayors themselves. Moreover, it can be the case that if the mayor pursues multiple network activities, there is a spillover of knowledge with a rise of effectiveness as consequence. This was also recognized by Andrews et al., who concluded that external networking by managers improved the organizational performance (2011). This hypothesis builds further upon the research done by Denters et al., who found that European mayors perceive themselves as being ‘rather successful in network management’ (Denters et al., 2018, p.293). This research will focus on the Dutch cases in this research, to see if their answers differ from the other European mayors. The effectiveness of network activities will be measured by how the mayors perceive their collaboration with partners. With very much successful meaning that it was perceived as effective and not at all successful is perceived not to be effective.

H2: The higher the level of network activities pursued by Dutch mayors, the higher the effectiveness of these activities as perceived by mayors themselves.

The last hypothesis also covers the perceived effectiveness of network activities, stating that mayors that have a higher dependency on other actors experience a lower effectiveness of their network activities. The dependency aspect in networking activities links up to the doctrines of New Public Governance (NPG) and New Public Management (NPM). Under the umbrella of these doctrines public-private partnerships have seen a steep increase in interest. Meier and O’Toole found that network management in public-private partnership is of great importance to the outcome of policies (2003, p.693). The suspected reason that the amount of dependency of mayors on external actors has an influence on the effectiveness of network activities can be found in working with a large number of different actors. The different challenges that mayors face each has its own set of actors on which the mayor is dependent, each with their different ways to approach them and stay in contact. These specific sets of actors that the mayor has a dependency on in the specific challenges, thus has a negative influence on the effectiveness of network activities.

H3: Mayors that have a higher dependency on other actors, experience a lower effectiveness of network activities they pursue.

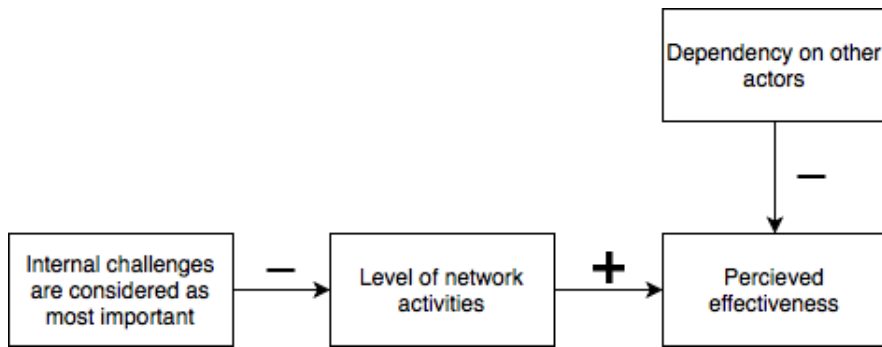


Figure 2: Causal model of the three hypotheses

To conclude this chapter and the first sub-question: **“What is known about factors that influence network activities of mayors and how effective these activities are?”** It can be concluded that a lot is already known about how networks are functioning and what the role of specific actors in those networks is. Milward and Provan (2006) did a lot of work into explaining the role of networks and how they take shape, detailing three modes of network governance. Moreover, Andrews et al. (2011) sought to explain the influence of external networking on the organizational performance by public managers. Karsten et al. (2014a) noted that networking by mayors is seen as a way to achieve goals and not necessarily as a separate task in the mayoral portfolio. With Denters et al. (2018) finding that mayors do see their own network activities as ‘rather successful’. Based on the findings in this chapter, the research will test three hypotheses for the Dutch situation of mayoral networking activities.

3. Research design

In this chapter of the thesis the focus is on the design of the research. This chapter discusses the following aspects: the type of research and available sources of data; the operationalization of the variables as discussed in the previous chapters and lastly an analysis of the validity & reliability.

3.1. Type of research and sources of data

This research is designed as a cross-sectional research design. The primary data source in this research is the POLLEADER II-survey, a secondary quantitative source. This survey has been sent to the mayors of municipalities with more than 10.000 inhabitants in 29 European countries between the end of 2014 and the end of 2016 (Heinelt et al., 2018, p.2). The survey was contextualized and transformed into different national versions, in the Netherlands the survey was distributed in a reduced and modified form (Heinelt, et al., 2018, p.7). For the Netherlands, 125 mayors answered the questions. The 125 mayors that answered the survey will form the sample for this research and their answers will form the data that will be used in the comparative part of the research. All the Dutch mayors (around 400) received the questionnaire, also the ones in municipalities with less than 10.000 inhabitants. The answers of those with less than 10.000 were however not included in the final survey results. This also means that apart from the municipalities with less than 10.000 inhabitants no special type of case selection technique has been done to select the cases. The data file for the POLLEADER II-survey has been made available by the thesis supervisor.

A second source of secondary data, again a quantitative data source, will be the survey for the report on the office of Dutch mayors by the Tilburg University for the Dutch government (Karsten et al., 2014b). As part of this report, the researchers sent out a survey to all the mayors in the Netherlands, with a response of 243 mayors. The survey consists of 42 questions about diverse aspects of the mayoral work. The survey incorporates a small number of questions that are relevant to this research, for example the number of hours per week that mayors dedicate to specific parts of their work, like networking activities. Secondly, the survey also features a question that is very similar to the ones in the POLLEADER II-survey: *“Can you indicate for each of the goals how important you think they are in your contact with citizens and civil society organizations?”* (Karsten et al., 2014b, p. 72). The mentioned goals relate to contacts with citizens and civil society organizations. Also interesting is that the researchers looked at the answers to this questions with the number of inhabitants per municipality and observed the difference. The results of the Tilburg University study will be used to support the results from the POLLEADER II-survey. The raw data from the Tilburg University study could not be obtained, so the conclusions the researchers have drawn will be used in relation to the results that are drawn from the POLLEADER II-survey.

In the POLLEADER II-survey, question four (4), asked to indicate the most important challenge for the mayor. For Dutch mayors (n=122) there were six challenges that were most often named, being:

- Increasing attractiveness of the municipality (n=18)
- Development of social policies (n=22)
- Securing public safety, fighting crime and secure law and order (n=28)
- Addressing politico-administrative issues (n=35)
- To stimulate economic growth and employment (n=7)
- To improve the integration of ethnic, religious or cultural minorities (n=8)

This question had three follow-up questions being questions five (5), six (6) and seven (7) of the survey. These three questions could all be answered on a five-point scale, in the table below it is indicated what will be measured through what question. More detailed information on these three questions can be found in the operationalization sub-chapter.

Table 1: Overview of survey questions that will be used to measure activity and effectiveness in the different surveys.

	POLLEADER II-survey
Measuring dependency on other actors	Question 5
Measuring network activity	Question 6
Measuring effectiveness of network activities	Question 7

3.2. Interviews

A potential threat to this type of comparative research is that analysing data from five-point scales, without room for subtlety, has the effect that the step between the certain points can be considered very large and that answers cannot be nuanced. This is why the research also incorporates interviews, which have more room for nuance, as an extra primary data source. The interviews have been held in a semi-structured fashion. This means that there are a number of questions that have been asked following a predetermined interview schedule, but that enough room has been given for sidesteps if necessary. Data that has been gathered from the interviews is how mayors are shaping their network activities; what factors influence how they pursue those network activities; if they consider their activities effective and what changes that effectiveness. These questions all complement the independent variables mentioned at the beginning of this chapter.

Arranging the interviews with Dutch mayors has been done through contacts on Twitter. If finding mayors did not work out, another member of the EPA-staff offered to put the research in contact with mayors in his network. However, two mayors have been found through Twitter, so this was not necessary. Finding the mayors through Twitter can be seen as a form of convenience sampling, as it is

a fast and easy way to reach the intended subjects. The mayors that are active on Twitter might also not be representative for the other mayors in the Netherlands. However, the mayors that have contact with the member of the EPA staff might also not be representative for the whole population. The subjects, being mayors, have been included if they were still mayors or have been in the past five (5) years. That only current mayors and those that have been mayor in the last five years are allowed to participate has been done to ensure that the (former) mayors have recent experiences with networking activities. The interviews with Dutch mayors have been held in the first weeks of writing the thesis. The interview guideline and transcribed interviews can be found in the appendix of this thesis.

The interviews have been processed confidentially, meaning all the information that might lead to the mayor has been deleted or redacted. However, to give an impression of who the interviewed mayors were some key information is given. Both are from the same political party, have been mayor for less than five years and are mayor of municipalities with less than 50.000 inhabitants. They can thus be considered quite similar in many aspects. However, the answers they gave did vary on a number of occasions, which will be visible in the analysis chapter.

3.3. Operationalization

3.3.1. Internal & external challenges

Internal challenges are defined as challenges that only feature internal actors, like the municipal council and the municipal civil service. External challenges are the ones that also feature external actors, like companies, other municipalities and knowledge institutions (Andrews et al., 2011). For the nine challenges that were posed to the mayors in the survey, the following six have been selected as the other three were only answered by one or two mayor(s). These three options, being the protection of natural environment, preservation of the local identity and improvement of communal infrastructure, will not be used in any analysis regarding the challenges of mayors.

Internal challenge:

- Addressing politico-administrative issues (n=35)

External challenges:

- Increasing attractiveness of the municipality (n=18)
- Development of social policies (n=22)
- Securing public safety, fighting crime and secure law and order (n=28)
- To stimulate economic growth and employment (n=7)
- To improve the integration of ethnic, religious or cultural minorities (n=8)

This variable functions as an independent variable in H1.

3.3.2. (Level of) network activities

The level of network activities, or network activism, will be measured through the mayor's engagement in network activities. It will be operationalized through question six of the survey. For this question the mayors were asked to indicate to what extent (1: "not at all" to 5: "very much") they engaged in five activities to bring together different actors and stimulate cooperation. These five are:

- a) Organizing a platform where key stakeholders are invited to set a joint agenda and consider collective action.
- b) Linking societal stakeholders with relevant (inter)governmental networks.
- c) Linking local networks with inter-municipal, regional and (inter)national networks.
- d) Acting as a mediator and facilitator for reaching agreements amongst stakeholders; on the basis of persuasion, building trust and providing information and incentives.
- e) Using formal powers, prestige and political influence of the mayor to impose decisions and get over gridlocks.

Partly following the approach by Denters et al. (2018, p.279), this research will determine the average level of mayoral network activities. It will be based on the mean scores for the five items with the measure ranging from 1 (minimum) to 5 (maximum), with the constructed scale ranging also from 1 to 5. In the cases for question six where an answer is missing, for example when a mayor has not filled out a specific item, the person mean substitution approach (PMS) will be applied. This entails that the average of the observed scores for each respondent is calculated and that average will be used for the item results that are missing for that mayor. This variable serves as a dependent variable in H1 and as an independent variable in H2.

3.3.3. Effectiveness of network activities

The effectiveness of network activities is defined as how effective network activities pursued by mayors are perceived by the mayors themselves. As the data will be gathered during a semi-structured interview, there are no clearly defined answer options. This might have as a consequence that the mayors that are interviewed give socially desirable answers, as they do not have a strict number of options to answer. However, it is expected that the mayors, as professionals, give unbiased answers. Moreover, the POLLEADER II-survey also provides the possibility to measure the effectiveness by measure of question seven (7). This question asked the mayors to what extent (1: "not at all" to 5: "very much") they considered the collaboration of partners with regards to the challenge (question 4) successful. In the cases for question seven where an answer misses, for example when a mayor has not filled out a specific item, the person mean substitution approach (PMS) will be applied. This entails that the average of the observed scores for each respondent is calculated and that average will be used for the item results that are missing for that mayor.

A new variable will be constructed as well for question seven. It will be based on the mean scores for the five items with the measure ranging from 1 (minimum) to 5 (maximum), with the constructed scale ranging also from 1 to 5. This variable functions as a dependent variable in H2 and H3. The five answer options are:

- Making agreements that partners stood by.
- Developing an innovative and effective solution for the problem.
- Creating genuine commitment amongst partners.
- Taking decisive and concerted action when needed.
- Achieving concrete results.

3.3.4. Dependency

Dependency is the extent to which mayors are dependent on other actors while participating in network activities. Question five of the survey asked the mayors to indicate to which extent (1: “no dependency” to 5: “highly dependent”) they depend on the cooperation and support of other actors. The actors mentioned are:

- | | |
|---|--|
| • The majority party / coalition in the council | • Voluntary organizations and associations |
| • The opposition in the council | • Individual citizens |
| • The municipal civil service | • Other municipalities in the region |
| • The local business community | • Regional government |
| • Knowledge institutions (e.g.) universities | • National government |
| • Professional organizations | • The EU and other supranational organizations |
| • Neighbourhood organizations | • The county government |

From these fourteen, four sub-indices have been constructed following the work by Denters et al. (2018, p.284) on a European scale. For this research, the option “the county government” has been omitted, as the Netherlands does not have county governments. The regional government, or provinces, have this function. In the cases for question five where an answer misses, for example when a mayor has not filled the dependency on a specific actor, the person mean substitution approach (PMS) will be applied. This entails that the average of the observed scores for each respondent is calculated and that average will be used for the item results that are missing for that mayor.

A factor analysis has been done to confirm that the four sub-indices correlate together. The results of the factor analysis can be found in appendix 1. The factor analysis shows that actually five factors can be distinguished and not four like the research by Denters et al. did (2018, p.284). The extra factor in

this is the municipal civil service, which does not fall into the same factor as the majority party and opposition in the council, as it scores higher for a fifth factor (0.751) than for the factor with the two aforementioned actors (0.365). However, when fixing the factors for four, the municipal civil service does fall into the same factor with a score of 0.638. As the score of the fifth factors is with 1.051, only very short above Kaiser's criterion of 1, and the municipal falls neatly in the factor with the other two actors if fixed for four factors, this research will fix for four factors. If fixed for four factors, the national government item does score quite low (0.337) for the factor with the other governments, like the other municipalities and EU government, compared to the score for the factor with business and knowledge organisations (0.615). However, as it is still a positive value, and the national government can be neatly compared to the other governments, it will be put together with the other governments and not with the professional organizations. For comparative reasons, a separate variable with the mean scores of all the dependencies, without the county government item, will be constructed as well.

The four constructed sub-indices therefore are:

- Internal dependencies
 - The majority party / coalition in the council
 - The opposition in the council
 - The municipal civil service
- Civic dependencies
 - Neighbourhood organizations
 - Voluntary organizations and associations
 - Individual citizens
- Corporate dependencies
 - The local business community
 - Knowledge institutions (e.g.) universities
 - Professional organizations
- External dependencies
 - Other municipalities in the region
 - Regional government
 - National government
 - The EU and other supranational organizations

This variable functions as an independent variable in H3.

3.4. Validity & reliability

The internal validity of this research can be linked to the three conditions of causality. These are the exclusion of third variables influencing any effect, a correlation between cause and effect and the precedence of cause before effect (Dooley, 2001). The influence that third variables might have, will be reduced and controlled for by including the control variable of the size of the municipality, for the relationships as described in the second and third hypotheses, as this might have an influence on the level of network activities and dependency on other actors. This research will control for the population size as it might be that this variable has an influence on the level of network activities the mayors of larger cities pursue compared to the mayors of smaller municipalities. As mayors in large cities might need to have contact with more organisations, citizens and stakeholders when compared to small municipalities. By controlling for this variable we can see if the population size of the municipalities has an influence on the level of network activities. It may be that controlling for one variable is not enough, however other variables that could be controlled for like the constitutional setting of a country or the institutional strength of the mayoral office are not valid to use as those will not vary within a country like the Netherlands. Lastly, the absence of the third condition of cause before effect cannot be ruled out absolutely as this research is not designed in a longitudinal style, with multiple measuring points over the years. Moreover, the mayors may have been externally networking, e.g. in the role of alderman, before assuming the office of mayor, with preceding ideas about their network activities.

The external validity can also be considered limited, as only the data from 125 Dutch mayors has been included in the dataset. On a total of around 400, a response rate of 31% cannot be seen as excellent. Moreover, the results of the mayors from municipalities with less than 10.000 inhabitants have been omitted, which also decreases the validity. However, the 125 mayors that returned the survey are quite evenly spread in terms of municipal size, which would suggest a sample that is a good representation of all the mayors in the Netherlands.

Table 2: Frequencies of inhabitants. Survey v. reality

# of inhabitants	Survey results	Reality
10.000 – 25.000	41 (33%)	130 (37%)
25.000 – 50.000	60 (48%)	141 (40%)
> 50.000	23 (19%)	80 (23%)

In general, it can be assumed that conducting interviews instead of surveys is less reliable, but has a higher validity. Questions and answers are more valid because unclear elements from the questions and answers can always be clarified by the mayor. In addition, interviews can yield more detailed illustrations with the help of supplementary questions. Moreover, interviews are more suitable for subtle nuances of perspectives and are more suitable for researching social processes. Questions can be asked ad hoc if an interesting judgment occurs, which is not possible in a survey. A disadvantage of the interview as a research method may be that it is difficult to guarantee a statistical representation of the total population of mayors with 2 mayors. Nevertheless, the interviews with mayors can provide a lot of insight into, at least, part of that population.

4. Analysis

The subsequent chapter deals with the data analysis. The structure is determined by the sub-questions and research question which are sought to be answered. This chapter will systematically answer the remaining four sub-questions, with help of the hypotheses, extra data analysis and the answers given by the mayors in the interviews. The first descriptive sub-question has been answered in the theoretical chapter, as its goal was to clarify what was already known about the factors that influence network activities of mayors and their effectiveness. It was concluded, that a lot was already known about networking itself, but not a lot yet about networking in the mayoral context. In order to answer the following sub-questions and the main research question, a data analysis with the statistical software SPSS will be performed on the survey-data.

4.1. Network activities

To answer the second sub-question “**What network activities do mayors in the Netherlands pursue?**” the frequencies of network activities will be analysed, together with the answers the mayors gave in the interviews. The following table displays the percentages of answers by mayors to the question “To what extent did you actively engage in the activities below to bring together different actors and stimulate their cooperation in addressing this problem?” (1: “not at all” to 5: “very much”), with the option to answer as described in the operationalization of the (level of) network activities.

Table 3: Frequencies of network activities in % (N = 124)

	Organizing a platform	Linking societal stakeholders	Linking local networks	Acting as a mediator and facilitator	Using formal powers to impose decisions
1: not at all	0.8	6.5	1.6	0	1.6
2:	7.3	11.3	15.3	4.0	4.8
3:	16.9	33.1	29.0	16.1	21.8
4:	41.1	34.7	39.5	57.3	50.0
5: very much	33.9	14.5	14.5	22.6	21.8
Mean score	4.0	3.38	3.49	3.98	3.85

From the results it appears that mayors are quite active in engaging with different actors and stimulating them, as a mean score of 3 depicts an average engagement. Especially the organization of platforms, acting as a mediator and using formal powers to impose decisions are quite often done. Whereas linking societal stakeholders and linking local networks are pursued less often, indicated by the lower mean of those two items. The reason that the two items on linking partners score so much lower, although they seem quite important for networking activities, might have been given by one of the mayors in the interviews.

Mayor A stated that for example that: “*linking partners is a fundamental activity in networking, a sort of condition sine qua non, meaning that without it, there is nothing.*” and: “*connecting organizations with stakeholders in the municipal organization is a kind of basic activity. The smart use of positions,*

but also networks, to break deadlocks between organizations is really more a strategic goal.” These two reactions by mayor A suggest that the activities of linking partners and organizations can be seen as a foundation for the rest of their work, as it comes with the job. It is therefore not always perceived as a distinct activity they pursue, which could explain why the mean scores of the items for linking stakeholders and local network are somewhat lower than the other three items.

Mayor B also sees that the amount of time or energy he spends on the different activities varies. Some activities require less time and energy than others, for example because the mayor does know all the actors involved and things run smooth.

“I found the five examples [see interview guideline] very recognizable, it is mainly about connecting people and connecting organizations. Actively promoting achieving agreements. So I notice that I network a lot, because of that a lot of people know and actually only have to be very active on a few occasions in order to achieve something. Usually it goes smoothly, so actively improving reaching agreements between organisations is something I do but much less than maintaining the relationship. Making use of the position to break deadlock between organizations happens very little.”

Looking at how much of their time the two mayors spent in total on the aforementioned network activities, this is quite lot of their time. Mayor A said the following on how much he spends on networking activities:

“If you want to actively achieve other goals, so you want to reach an agreement or break a deadlock, the distinction between the two is very important. That is why I say that 60 to 80% of my efforts are about staying in my position in the network and helping to maintain networks.”

Again, the importance of staying in position and maintaining networks as a network activity is emphasized here by the mayor. An interesting note mayor B made was that the amount of time he spends on network activities fluctuated during the year:

“If you define the role of the mayor broadly it’s perhaps 70% of my time. It is networking locally here, but also keeping up my networks in the region and yesterday I was for example in The Hague. It also fluctuates considerably, in times when the budget is being prepared it is less, but sometimes there are also many of those phases that you do a lot outside. September and October are those notorious months that you are invited everywhere and that is mainly from a network perspective.”

To answer the third sub-question: **“What factors influence the network activities of mayors in the Netherlands?”** the findings from the analysis that has been done on the first hypothesis will be used in combination with answers from the interview and extra data analysis. The first hypothesis states the

following: “If mayors consider an ‘internal’ challenge for themselves to be the most important, the level of network activities is lower than when considering an ‘external’ challenge as most important.” For this hypothesis the means of the answers given for the scale of overall network activity have been constructed and will be analysed based on the separation between ‘external’ and ‘internal’ challenges, as described in the operationalization. Based on this formulation of the hypothesis it is expected that the mayors who consider the ‘internal’ challenge (addressing politico-administrative issues) as most important challenge, pursue a lower level of network activities as opposed to those who consider an ‘external’ challenge as most important.

As indicated in by the means in table 4, mayors are on average all quite active in networking activities as the mean scores for the items are all above the average of 3 in the scale that ranges from 1 to 5. There are some differences however, in the field of social policy development the mean (3.40) is to quite an extent lower than the other external challenges, like the stimulation of economic growth (4.14). Between those two extreme cases, the other cases are spread between scores of 3.7 and 4.0.

The only ‘internal’ challenge of addressing politico-administrative issues, as can be seen in table 4, has a mean of 3.71, which is quite close to the average of the ‘external’ challenges. To check if the difference between the ‘external’ and ‘internal’ challenges is statistically significant an independent samples test has been performed. By computing the Hartley test for equal variance ($F = 1.018$), equal variances of the variables can be assumed.

The result of the independent samples test on the difference between the mean score of the ‘internal’ challenge and the combined mean score of the ‘external’ challenges is quite clear in the form of a high significance level ($p = 0,675$). This high score clearly shows that there is not a significant difference between the mayors that consider an ‘internal’ challenge for themselves to be the most important and those that consider ‘external’ challenge as most important, as the score is higher than a score of $p = 0.05$. The first hypothesis is therefore rejected.

Table 4: Means for level of network activities per challenge on a scale of 1-5 (N = 118)

	Mean	N =
Addressing politico-administrative issues	3.71	35
<u>Total of external challenges</u>	<u>3.76</u>	<u>83</u>
Increasing attractiveness of the municipality	3.72	18
Development of social policies	3.40	22
Securing public safety, fighting crime and secure law and order	3.96	28
To stimulate economic growth and employment	4.14	7
To improve the integration of ethnic, religious or cultural minorities	3.80	8

From the mean scores, it can be seen that the development of social policies has a much lower mean score, whereas the stimulation of economic growth has a much higher mean score. The distances between the average mean score of the other challenges (including the addressing politico-administrative issues), shows that first of these two challenges has a statistically significant difference

from the combined mean of the others, having a p-value of 0.002. Although the difference between the combined mean of the others and the mean of the score for the stimulation of economic growth is quite large, it cannot be considered significant. This is mostly due to the fact that there are only seven scores for that item, meaning the standard deviation is very large, resulting in a p-value of .204. That the challenge of social policy development is significantly different, whereas the addressing politico-administrative issues challenge is not significantly lower, could be explained together with the large distance of the stimulating economic growth challenge. The stimulation of economic growth and employment is for a mayor a task in which a lot of contact with partners is necessary. When the mayor wants to attract a firm or organization to the municipality, seeking contact and meeting with that organization or firm, and with other partners is of essence to the goals.

On the other hand, when looking at the challenge of social policy development, this is a challenge in which the mayors are not as invested as in the other mentioned challenges. In most Dutch municipalities, domains like the social domain, (affordable) housing, finances of the municipality and public transport are the responsibilities of one of the Aldermen. These have their network inside and outside of the municipality with relevant stakeholders, the mayors are invested in this but not as much as in their own part. However, this might differ per municipality, which became clear from the interviews.

Mayor A stated that in reaction on the question if he was more active on network activities within his own portfolio or not:

“I think I am active for the whole municipality and for all portfolios. As a mayor you are the figurehead and you can easily connect and open doors a little easier for all the other broad goals of the municipality.”

Whereas, Mayor B stated that on that same question that:

“Both, the focus is on my own portfolios such as security and economic cooperation here in the region. My role as first citizen, connecting networks within the community is also becoming increasingly important. I am also supportive to the others [in the executive board], it is ultimately also the [municipality] Inc. that I represent.”

It shows that although the two municipalities and their mayors are quite similar, their perception of where they are most active differs. Moreover, mayor B sees that the region his municipality is located in also has an influence on the network activities he has to pursue:

“Making use of the position to break deadlock between organizations happens very little. That is also a bit of a characteristic of our region, in other regions that is essentially different. This is also due to the manner of organizing, in the other region(s) it is much tighter organized.”

Another factor that influences how he shapes his network activities is how he shapes his network:

“I think that a lot of networking does not happen that deliberately and I try to be more aware. Looking at my previous job, there too it was much more about having the relationship ‘just in case.’ For those moments that you do not have something in your own capacity, that you know someone who can help you out. That you build that up a network very consciously, but it is much more often that elusive aspect of networks and you can also lose a lot in that. I also notice that people network to network.”

The mayor shapes his network, and network activities, so that there is always a relationship ‘just in case’, so that when he needs someone he knows someone. However, the mayor sees that some people, like other mayors, just network to network. By doing this, these people see it as a core activity and not as the fundamental requirement for other activities like Mayors A and B see it.

4.2. Effectiveness

To answer the fourth sub-question that poses the question **“How effective are these network activities of mayors in the Netherlands?”** the following part will make use of the answers given by the mayors in the interviews and the data from the POLLEADER II-survey. The figure below depicts the results deducted from the survey. It presents the computed mean score (on a scale of 1-5) as one variable computed of the five items the mayors could deem successful or not in the survey. The mean score of 3.9 with a standard deviation of 0.6, being skewed to the right, shows that more mayors are positive about the successfulness of their networking activities. This also resembles the answers the two mayors gave in the interview. Both Mayor A and mayor B were optimistic about the effectiveness of their network activities. Mayor A stated that *“I think it is very effective, but mostly because I put more effort in the network itself than in having a list of concrete goals list that would like to achieve.”* Mayor B said the following: *“effectiveness is difficult to measure, but I do notice that we have become a much more visible municipality in the region [since taking office].”*

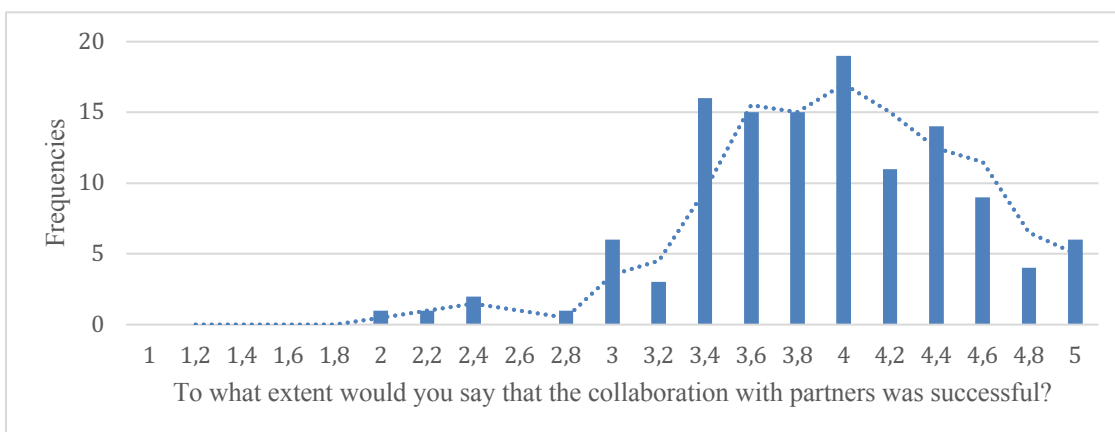


Figure 3: Effectiveness of network activities on a scale of 1-5, as perceived by mayors (N = 123)

To answer the fifth sub-question “**What factors influence the effectiveness of these network activities?**”, the two hypotheses H2 and H3 will first be checked, after which an answer will be given to question five.

The second hypothesis covers the relation between the level of network activities and the effectiveness of those activities as they are perceived by the Dutch mayors themselves: “*The higher the level of network activities pursued by Dutch mayors, the higher the effectiveness of these activities as perceived by mayors themselves.*” To measure this relationship a multi linear regression will be done in SPSS, in which there will be controlled for the population size of municipalities. This variable is the number of inhabitants, being divided into three classes: 0-24.999 inhabitants, 25.000-49.999 inhabitants, 50.000 and more inhabitants. In appendix 2 and 3 the results for the assumptions of (multi-)linear regression can be found. All the assumptions to do a multi-linear regression have been fulfilled, which gives reason to continue with the regression. Using the ranked number of inhabitants, with 1 being the municipality with the lowest number of inhabitants and 133 being the municipality with the highest number of inhabitants, gave very similar results compared to when using the classes of inhabitants.

From the table it is visible that the relation between the level of network activities and the effectiveness of those network activities has a statistically significant relationship. This relation, with an unstandardized coefficient B of .289, and a significance level of .001 indicates a small statistically significant relationship between the level of network activities and the effectiveness. The hypothesis that the effectiveness of network activities is positively influenced by the level of network activities that are pursued can therefore be accepted.

The third and last hypothesis examines the relation between the dependency mayors have on other actors and the perceived effectiveness of the network activities they pursue: “*Mayors that have a higher dependency on other actors, experience a lower effectiveness of network activities they pursue.*”

To measure this relationship a multiple linear regression will be done in SPSS, in which there will be, like in hypothesis 2, controlled for the population size of municipalities. The results can be considered a ‘mixed bag’, as there are three non-statistically significant relations and one that is significant.

First- and foremost, all the relations covered are positive relations meaning that when mayors have a higher dependency, they experience a higher effectiveness, which completely contradicts the third hypothesis. The one that has a statistically significant relationship is the dependency on internal partners (sig. = 0,005). As the statistically significant relationship mentioned is positive and not negative like the hypothesis stated, we reject our hypothesis that mayors who have a higher dependency on other actors experience a lower effectiveness of network activities they pursue.

It seems that contrary to the hypothesis a higher dependency on internal actors leads to the network activities as being perceived more effective. The relation between the internal dependencies and the effectiveness shows an unstandardized coefficient B of .239, and a significance level of .005, as can be seen in table 5. The coefficient levels for civic, corporate and external are quite low, indicating that there is no relation between the any of those three dependency variables and the effectiveness. Moreover, the significance levels for the dependencies taken together is neither significant ($p = 0.082$), as can be seen in table 6. The only reason that it is so low can be attributed to the internal dependency score. Therefore, the following can be stated on the relation between dependencies and effectiveness: the dependencies of internal actors have a statistically positive influence on the perceived effectiveness of network activities. Meaning that an increase in the dependencies on internal actors has a positive effect on the perceived effectiveness of the network activities.

Table 5: Multiple linear regression of dependencies & level of network activities x effectiveness of network activities, while controlling for population size (N=123)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.547	.558		2.771	.007
Population Size	.051	.077	.060	.657	.513
Level of network activities	.289	.087	.284	3.300	.001
Internal dependencies	.239	.083	.247	2.873	.005
Corporate dependencies	.003	.077	.003	.035	.972
Civic dependencies	.069	.064	.094	1.085	.280
External dependencies	.010	.075	.013	.129	.897

Table 6: Multiple linear regression of average dependency x effectiveness of network activities, while controlling for population size (N=123)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.862	.553		3.366	.001
Population Size	.074	.075	.087	.985	.327
Average of dependencies	.231	.132	.155	1.755	.082
Level of network activities	.293	.089	.289	3.309	.001

Looking further at the second hypothesis, on the relationship between the level of network activities and the effectiveness, there only appears to be a relatively small relationship. This positive relation between the level of network activities and the effectiveness is also underlined by Mayor B, who said the following:

“This (becoming a more visible municipality) is also due to a few positions that I have taken, for example at the VNG (the Association of Dutch Municipalities) department in our province. When you are more visible, you are awarded more and people listen more serious. So I think it

has an effect but I cannot quantify it. Public administration also has a big goodwill factor to it and if you are always the last one to do something in the network, do not have much input and hang back then you will simply be awarded less. Also using your own leadership to help a number of things forward is good for the network(s) you happen to be in, then you will be awarded more again next time.”

The response by Mayor B on being more effective when he is more visible is quite self-explanatory, as the mayor indicated that goodwill is a large factor in public administration. He indicates that when people do not see or hear him, he will not get anything in return. This links up with what the data from the survey shows, as that also showed that an increase in pursuing network activities leads to an increase in the effectiveness. Mayor B also noted the following on being goal-oriented:

“I am not networking so goal-oriented to always achieve one of the results, it really depends on the situation. So I try to maintain a lot of networks without knowing if I will achieve any of these goals and sometimes you have other goals.”

What the mayor says here is that his networking activities are not always immediately effective. There are network activities that he pursues that are not effective immediately, as they serve a different goal. He might also secure relationships with partners that do not appear to be effective at the moment, but might be very effective or helpful somewhere in the near or distant future. Mayor A has a related idea on what aspects related to network activities are important:

“I think it is also important to realize that cultivating a network is very important and that we should want to think somewhat less functional about networks. Because just maintaining a network is an important goal in itself. What you use it functionally for is as important as keeping the same network alive always requires a certain form of attention and also involvement and participation. And it eventually comes back to that your relevance in the network is the relevance that you have for others in that same network.”

Mayor A also indicates that your own relevance is important, as that is also the relevance you have for others in your network. When you don't bring anything relevant to the table, others might not bring something for you, decreasing the effectiveness of a meeting. Mayor B also stated the following on the other side of putting a lot of energy and time in network activities:

“I noticed that at a certain moment, I felt that my agenda was filled with too much networking and it did not really become more effective. You can also show yourself so much. In the regional networks I found that I put too much time and it did not become more effective [as I did more]. I concluded that, especially in my networks with the House of Representatives and with ministries, I did not put sufficient time. So there was an imbalance and I am now still repairing that.”

That the mayor felt he put too much time into regional networks and that it did not become more effective can be considered a ceiling effect. There was a point for the mayor where the extra work did not return anything extra and where he decided to stop putting more time into the regional networks.

4.3. Comparing research

For the sixth and final sub-question **How do the results from previous research on (factors that influence) network activities of mayors and how effective they are, correspond with the data found in this research?** the data found in relation to the previous sub-questions will be compared with results found by other researchers. Of special interest to compare is the research done by Denters et al. (2018) and Karsten et al. (2014a & 2014b). The first research has an international approach, whereas the second is like this research focussed on the Dutch situation. For the second sub-question (sub-question 2a) from this research, the first sub-question Denters et al. answered is very similar. They asked the following question: “What types of activities do mayors engage in as a part of their role in managing local issue network and how active are they in this respect?” (2018, p.282). Not only the question, but also the answers across European mayors are quite similar to those exclusively by the Dutch mayors, as across Europe mayors pursue to relatively high degree network activities. Their scores (on a scale from 0-100) range from 63 (Sweden) to 84 (Lithuania), with an average of 68. Moreover, the mayors spread their network activities evenly among network structuration activities and process management activities (ibid.). However, when specifically looking at the relation between the challenge that was deemed most important and the level of network activities the mayors pursued, it appears that the lower level of network activities associated with the development of the social domain is not represented all over Europe. Where mayors in the Netherlands pursue significantly lower levels of network activities, this is not resembled across Europe. The level of network activities for European mayors that chose the development of social policies as most important is with a score of 67 points (on a scale of 0 – 100) very close to the mean with a score of 68 points (ibid., p.283) Secondly, the histogram Denters et al. (2018, p. 289) created on the ‘overall perception of the mayors about their success in network management’ can be considered as a European wide version of the chart used in this research to answer sub-question 4. Both the charts in this research and in the one by Denters et al. show a skewness to the right, which suggests that the mayors perceive their network (management) activities as successful.

Moving to the research by Karsten et al. (2014b, p.42), it appears that for the mayors that responded to their survey, keeping up contacts and representation of the municipality is quite important. The mayors were asked the question how many hours they spend on average each week on eleven tasks, ranging from being the chair of the council and executive college to additional functions. Both the “Maintaining of contacts with civil society organizations and companies in the context of your role as mayor” and “representation of the municipality” tasks, are located at the top in terms of numbers of

hours spent. The maintaining of contacts has an average of 7.0 hours a week, whereas the representation of the municipality is done on average for 6.9 hours a week, respectively ranking third and fourth out of ten. Also, the task of 'Activities in the context of inter-municipal cooperation' is done on average for 6.0 hours a week, ranking sixth out of ten.

Moreover, mayors see the representation of their municipality as a very important task according to the results of the survey. On a scale from 'very important' to 'not important', 160 mayors (or 65,8%) see the representation as 'very important' and 83 mayors (or 34,2%) see it as 'important'. None of the mayors answered that they think it is 'not really important' or 'not important' (ibid., 2014b, p.44). This shows that mayors deem the representation of their municipalities as a vital part of their work and related to that, many mayors also see themselves as a 'connector'. Out of the 243 mayors that answered the questionnaire, 57 mayors (or 23,5%) said that the role of 'connector' was their most important, with another 68 mayors (or 28%) stating that 'representative of the municipality' is their most important. Being busy in network activities and working with other actors seems to be one of the key points that can be taken from the questionnaire by Karsten et al. (2014a, p.72). The researchers themselves recognize this is well, depicting the mayors as a *nodus*, which means being a node or junction where other actors meet each other.

For the researchers this became even clearer when they analysed the mayoral agenda's, as they encountered a multitude and variety of actors in most of the mayoral tasks. They also indicate that during the days they joined the mayors for a day that the social and political-administrative networks are very important. It enables the mayors to connect a range of actors and sometimes come to solutions faster.

5. Conclusion

The following chapter will discuss the main implications of this research. It will be comprised of two parts, the first being a conclusion of the main theoretical and practical implications and the main research question. The second part features a discussion, where the results from the conclusions will be interpreted and the limitations of the research will be discussed.

To recap the main research question, “*What factors influence the (effectiveness of) network activities of mayors in the Netherlands and to what level are their activities effective?*”, it can be concluded that a number of factors has an influence on the (effectiveness of) network activities. Factors that influence the network activities of mayors are the type of challenge the mayor has selected as his most important.

The first hypothesis has been rejected as the measured difference between the difference of ‘internal’ and ‘external’ challenges on the level of network activities was not significant, a reason for this can be that when considering the ‘internal’ challenge the mayor still needs to cooperate a lot with other stakeholders. The data analysis does however show that mayors who selected the development of social policies as most important challenge on their policy agenda to be significantly less invested in the level of network activities. The reason given in chapter 4.0 analysis is that development of social policies is in the Netherlands typically a case that is handled by one of the Aldermen, whereas other challenges like securing public safety are a case that is almost exclusively handled by mayors (Karsten, 2014b, p.60). Therefore, it can be assumed that mayors who select the development of social policies as most important challenge on their policy agenda do not pursue as much network activities themselves for that challenge as mayors who select more mayoral-related tasks such as securing public safety or addressing politico-administrative issues. Interesting is that when compared to Europe this does not seem to be the case as became clear in the previous chapter, as the European scores of the level of network activities are almost the same level as the mean score (Denters et al., 2018, p.283).

Another aspect that according to one of the mayors has an influence on the type of network activities the mayors pursue is the region the municipality is located in. One of the mayors namely indicated that the region his municipality is located in has an influence on one of the types of network activities, as the usage of the mayoral position to break deadlocks between organisations is something that very rarely happens. However, if located in another region in the Netherlands this might happen more, due to the manner or regional organisation. Moving to what influences the effectiveness of network activities, a multiple linear regression has been done with SPSS to test the second and third hypotheses. For the second hypothesis, it appears that an increase in the level of network activities has a significantly positive influence on the effectiveness of those activities.

Therefore, the second hypothesis can be confirmed. The reason given in the analysis chapter is that when mayors network more, they are more visible, by that have more goodwill, which in turn could have a positive influence on the effectiveness.

The visibility of a mayor for partners is seen as important by the mayors, as it delivers goodwill, which it is seen as a large factor in public administration. However, one of the mayors also noted that the effect has its limits. A ceiling effect, where something does not get more effective, can occur when a mayor tries to put too much influence on a certain aspect of their network activities.

The third hypothesis that covered the relation between dependencies on partners and the effectiveness of network activities has been rejected. It was discovered through the multiple linear regression that only the internal dependency had a significant relationship with the effectiveness, but this relationship was a positive one. The hypothesis stated that a negative relationship would occur, as a multitude of partners would decrease the effectiveness. However, the opposite seems to be true, as the internal dependency shows a positive relationship with the effectiveness of network activities. It is unclear why only the internal dependency shows a significant positive relation with the effectiveness of network activities. One option might be that complex and varied networks with a range of different actors might offer complimentary sources and partners. This would look at the effectiveness of dependency from the side that it complements what the mayor cannot do himself. This leaves room for future research, as this was not in the scope of this research.

Lastly, the effectiveness of the network activities. Here, the results from the two interviews were combined with data analysis of the POLLEADER II-survey with the results from the two interviews. It appears that these overlap, as both the results show that the mayors are overwhelmingly positive about the effectiveness of their network activities. Both the mayors in the interviews thought that their network activities were effective. Mayor A thought this as he is more oriented on the network itself and not as much oriented on specific goals he wants to achieve through that network. Mayor B sees that the effectivity of network activities in his municipality has increased over the years, mainly due to being more visible for other actors. The mayors that answered the POLLEADER II-survey were also positive, as the mean score was above the average, indicating that they were above average positive on the effectiveness of their network activities. That the mayors are positive about the effectiveness of their network activities in both the interviews and in the Dutch part of the POLLEADER II-survey also follows the positive attitude found by Denters et al. in their research (2018, p.289).

Discussing the impact of this study, weak and strong points can be identified. As only interviews with two mayors are incorporated, the results produced from those interviews can be considered as very limited. Therefore, the results of the interviews are only used to contribute to the results produced by the data analysis which made use of the POLLEADER II-survey data. This combination of quantitative

and qualitative data allows for a more nuanced view, while still holding conclusive views provided by a rich data set. However, an even richer data set would provide a better understanding of the factors that influence network activities pursued by Dutch mayors as the answers of a limited number of mayors are featured in this research. The research and survey done by Karsten et al. (2014) is in that respect already an improvement as it features the answers of more mayors. However, it will remain an ideal to get all of the mayors to fill in a large survey about their work, as they have other tasks to fulfil during a regular week.

A positive thing to note about the mayors in this research is that they are equally spread over the total amount of mayors in terms of municipal size and can thus on that respect being seen as representative. Moreover, this research is to date one of the few that specifically looks at the network activities of Dutch mayors. Other researchers have included Dutch mayors in a European setting or have included networking activities in a wider subject like the state of the mayoral office, almost none have specifically looked exclusively at the state of Dutch mayoral networking activities. Ideas for future research on this topic, even with the same data-set, are plentiful. Other within-country analyses like this research may shed a light on the mayoral network activities in other countries. Of special interest for such a follow-up are the bigger European countries or those with a variety of constitutional settings within their borders, like Germany.

To conclude, the role of ‘connector’ is one that best describes the Dutch mayor. They can be seen everywhere working with stakeholders and partners, which is mandatory in the (social) networked society of today. By their network activities the mayor is of value to all of us living in a municipality: *“The importance you have (as a mayor) is also the relevance that you have for others. In the past, you had authority due to your hierarchical position and I now increasingly feel to what extent you can help others creates your position.”*

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Appendices

Appendix 1: Factor analysis to create sub-indices of partners

Table 7: Factor analysis

Rotated Component Matrix	1	2	3	4
The majority party / coalition in the council	-.050	.090	.017	.836
The opposition in the council	.095	.036	-.075	.730
The municipal civil service	.087	-.126	.033	.638
The local business community	-.048	.809	.150	.008
Knowledge institutions	-.036	.797	-.117	-.031
Professional organizations	.099	.559	.226	-.034
Neighbourhood organizations	.909	-.073	-.091	.091
Voluntary organizations and associations	.857	.038	-.076	.056
Individual citizens	.773	-.060	.051	.026
Other municipalities in the region	.062	.304	.830	-.028
Regional government	.049	.183	.822	-.130
National government	-.194	.615	.337	.058
The EU and other supranational organizations	-.189	-.018	.675	.104

Appendix 2: Linear regression assumptions

The subsequent part focuses on the assumptions of linear regression. Four assumptions will be checked:

- Normally distributed errors
- Constant error variance
- Linear relationship
- Independence of errors

Normally distributed errors

The P-P plot, with effectiveness as dependent variable, shows that the errors of the relationship are approximately normally distributed. There are only a few small deviations, but these remain quite small.

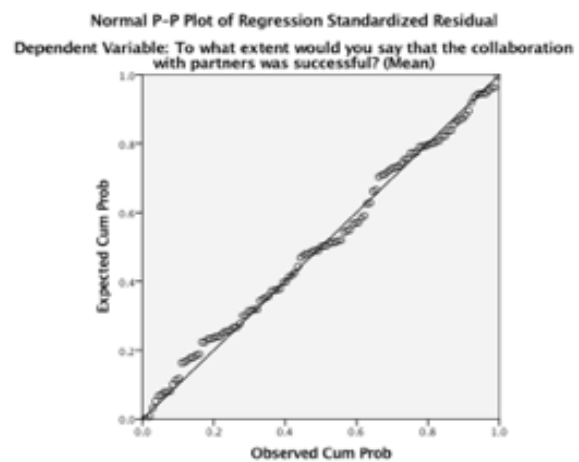


Figure 4: P-P plot of regression standardized residual

Constant error variance

The figure for constant error variance including the standardized residuals and standardized predictor values, shows that the data is scattered randomly across the plot and that there is not a clear pattern to discern. This means that the assumption of constant error variance is fulfilled.

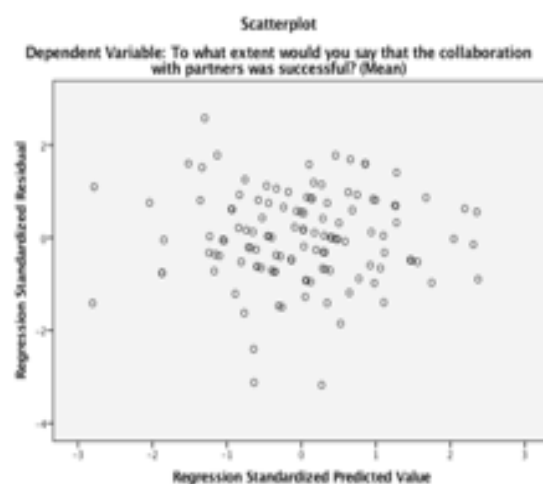


Figure 5: Scatterplot for constant error variance

Linearity assumption

The following partial plots show that in all the relations, only a few outliers are detected. However, as there are around 123 cases, each with an equal weight, these do not influence the total too much. Therefore, the assumption of linearity is met.

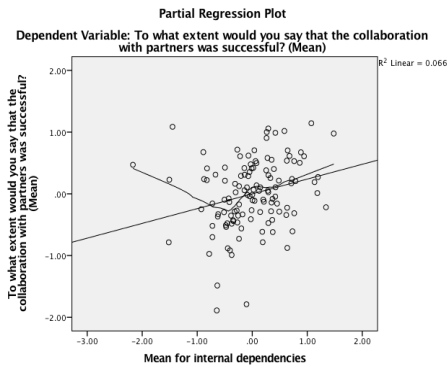


Figure 6: Partial plot

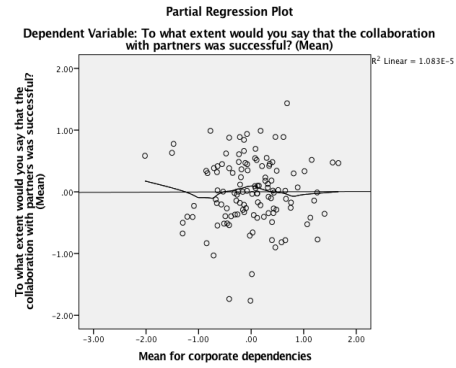


Figure 7: Partial plot

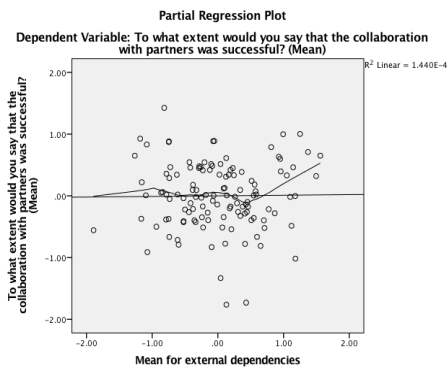


Figure 8: Partial plot

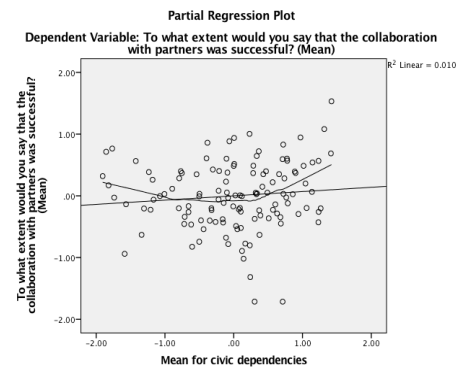


Figure 9: Partial plot

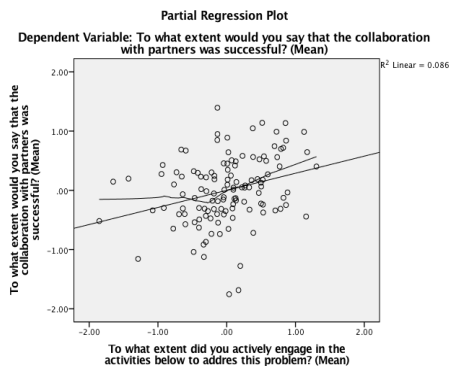


Figure 10: Partial plot

Independence of errors

To check the assumption of independence of errors, the Durbin-Watson statistic is used to test the assumption that our residuals are independent. This statistic can vary from 0 to 4, with a value of 2 being ideal and values above 3 and below 1 are cause for concern. However, the score of 2.195, as shown in the table below is no reason to be concerned.

Table 8: Durbin-Watson test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.424a	.180	.137	.55547	2.195

Appendix 3: Multicollinearity test

The subsequent table includes the VIF (Variance-inflation-factors) for the multiple regression analysis. Establishing that all the values are close to 1, there is no multicollinearity to be expected.

Table 9: multicollinearity-test

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1.547	.558		2.771	.007		
Population Size	.051	.077	.060	.657	.513	.849	1.178
Level of network activities	.289	.087	.284	3.300	.001	.954	1.048
Internal dependencies	.239	.083	.247	2.873	.005	.959	1.043
Corporate dependencies	.003	.077	.003	.035	.972	.830	1.205
Civic dependencies	.069	.064	.096	1.085	.280	.899	1.112
External dependencies	.010	.075	.013	.129	.897	.754	1.325

Appendix 4: Interview guideline

- introductie -

- Het interview zelf zal maximaal 30 minuten duren
- Het interview zal semigestructureerd verlopen, de vragen dienen als leidraad in het gesprek, waar indien nodig op sommige punten doorgevraagd kan worden.
- Het interview zal na afloop getranscribeerd worden en voor controle met u worden gedeeld.
- Het interview zal anoniem worden verwerkt, namen van personen, organisaties & plaatsen worden geanonimiseerd.

In de POLLEADER II-enquête, welke ik voor de kwantitatieve data gebruik, worden de volgende vijf vormen van netwerkactiviteiten onderscheiden, deze vijf dienen steeds als de definitie voor netwerkactiviteiten bij de vragen. Naar andere vormen van netwerkactiviteiten kan indien nodig gevraagd worden. Met organisaties worden, tenzij specifiek aangegeven, niet-gemeentelijke organisaties bedoeld.

- Het organiseren van een platform waarin organisaties met elkaar kunnen samenwerken
- Het actief bevorderen van het bereiken van overeenstemming tussen organisaties
- Het verbinden van organisaties met betrokkenen in de gemeentelijke organisatie
- Het koppelen van lokale organisaties met regionale en (inter)nationale organisaties
- Gebruik maken van uw positie om impasses tussen organisaties te doorbreken

- Vragen -

1. Hoe veel tijd en energie stopt u in de netwerkactiviteiten zoals die hierboven gedefinieerd zijn?
 - Gezamenlijk & per vorm
2. Bent u actiever op onderwerpen binnen uw eigen portefeuille?
3. In hoeverre hangt de manier waarop u een netwerkactiviteit vormgeeft voor u af van het onderwerp?
4. Hoe effectief acht u de netwerkactiviteiten die u uitvoert? Waardoor komt dat?
5. Heeft de vorm van of de hoeveelheid netwerkactiviteiten (zoals die hierboven gedefinieerd zijn) die u organiseert of bijwoont invloed op de effectiviteit van netwerkactiviteiten?
6. Zijn er vormen van netwerkactiviteiten, zoals hierboven gedefinieerd of andere vormen, die u als meer effectief beschouwd? Zo ja, welke? Zo nee, waarom niet?

- afsluiting -