CHALLENGES IN THE WORK OF NEIGHBOURHOOD MANAGERS

A study into the causes and consequences of role stress experienced by neighbourhood managers

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Preface

There it is! My master's thesis, my final study project that marks the end of my time as a student. When I started with the Master Programme Management of Governance Networks, I was sceptic about what you could learn in a one-year master's programme. Now that I have come this far, I realize that I was wrong. I have learned a lot over the past one and a half year. What I liked the most about the Master Programme was the actuality of the topics we discussed during the curriculum. Current societal problems are indeed quite complex; it is difficult to determine what the problem is and which solution fits best. Moreover, it can be witnessed that governments more and more working together with other societal actors, that citizens are taking the initiative themselves and that there are difficulties with managing these processes.

The topics that were addressed during the Master Programme really inspired me and helped me to find out what I would like to do after my studies. Of the various cases we discussed during the lectures, it was the cases relating to subjects in the physical domain that I became highly interested in. I decided to bring the learned theory into practice and to expand my knowledge on these subjects by doing an internship at Berenschot. I really enjoyed gaining practical experience in the field of the physical domain and I got convinced I wanted to start working in this sector after finishing my studies. In the end things went a bit different as I was offered a job at Berenschot before I finished my studies. I did not take the easiest way – might be typical me – by starting to work while finishing my thesis. However, I'm very proud that given these circumstances I have managed to make it to the result here in front of you.

Of course, I could not have done this without the help of certain people. First of all, I would like to thank the respondents who filled in my questionnaire and gave me a glimpse of their work situation. Many thanks to Ingmar van Meerkerk. I appreciate his enthusiasm, his advices and willingness to think along, and his willingness to supervise me beyond the regular thesis period. I want to thank my colleagues from Berenschot who gave me the confidence to start with the traineeship while finishing my studies. Lastly, I truly want to thank my family and friends for their support during the past view months. Mom, dad, thanks for the listening ear, the confidence and the services in 'Hotel De Bears' as we joke about it. Thanks sis for always being there. And thanks to my roommates for the support and encouragement all those times I went upstairs to my room to work on my thesis.

I'm grateful for the interesting past one and a half year and for where it has already taken me. It only remains for me to wish you a lot of reading pleasure.

Aletta van der Werff
Utrecht, 27th of May 2019

Summary

The local level is becoming an increasingly important arena for policy- and decision-making. This is due to the impact current societal challenges – such as the decentralizations in the social domain and the forthcoming introduction of the Environmental and Planning Act (Omgevingswet) – have on the direct living environment of citizens. The government is less and less able to tackle these complex challenges itself. In addition, citizens are increasingly organizing themselves in order to participate in decisions by which they are affected. In response to these developments, governments are increasingly relying on interactive forms of governance. In interactive governance, citizens, private enterprises, societal organizations and other actors are involved in the process of policy making on complex problems in an early stage (Edelenbos & Van Meerkerk, 2016). This manifests itself amongst others in neighbourhood-based working, an approach used by municipalities to address issues in an integral way and to reduce the gap between citizens and local authorities by engaging and cooperating with citizens and other local actors (De Boer & Lugtmeijer, 2009).

Specific municipal officials are appointed whose work is aimed at facilitating neighbourhood-based working. These municipal officials are the object of research in this study, referred to as neighbourhood managers. The task neighbourhood managers have is to connect the municipality within which they are working and actors in the neighbourhood. Neighbourhood managers are the point of contact for residents. They represent the viewpoint of residents within the municipality and they try to adjust policy processes based on the desires of the neighbourhood (Peeters, Van der Steen & Van Twist, 2010.). At the same time, neighbourhood managers can serve as antennae in the neighbourhood for the municipality. They signal issues that would otherwise remain underexposed (ibid.).

Neighbourhood managers thus span the boundary between the municipality and the direct living environment of citizens. In spanning this boundary, they try to realize a better fit between the internal organization and its environment (Tushman & Scanlan, 1981; Van Meerkerk & Edelenbos, 2014; Van Meerkerk & Edelenbos, 2016; Williams, 2002). However, spanning the boundary between the municipality and the neighbourhood can be difficult and may lead to challenges for the neighbourhood manager. These challenges result from the different and sometimes even conflicting expectations held towards the neighbourhood manager by actors within the municipality and in the neighbourhood. For a neighbourhood manager, these different expectations can lead to role stress.

Role stress can be experienced when a person is confronted with multiple expectations that he or she experiences as unclear, inconsistent and incompatible (Kahn, Wolfe, Quinn, Snoek & Rosenthal, 1964; Rizzo, House & Lirtzman, 1970). Two key aspects of role stress are role conflict and role ambiguity. Role conflict is about the incompatibility between expectations in such a way that compliance with all expectations is difficult (Kahn et al., 1964). Role ambiguity is about a lack of and/or uncertainty regarding information and expectations (Rizzo et al., 1970). This study looks at the extent to which neighbourhood managers experience role stress resulting from spanning the boundary between the municipality within which they are working and actors in the neighbourhood. Moreover, the causes and consequences of experiencing role stress have been examined. To this end, organizational, environmental and individual determinants that may be of influence on the level of role stress are studied. In addition, the effect of role stress on both job satisfaction and boundary spanning performance is examined.

Following from the above, the research question of this study is formulated as follows: *"What is the level of role stress experienced by neighbourhood managers as boundary spanning persons, how can this be explained by organizational, environmental and individual determinants and what is the impact on their job satisfaction and boundary spanning performance?".*

The first step towards answering the research question was to study and describe the available literature and to formulate hypotheses. The first body of literature described in this study is on the rise of governance networks. This literature is used to outline the context that creates the need for the boundary spanning activities of neighbourhood managers. Secondly, literature on boundary spanners, boundary spanning behaviour and role stress is described. From the literature on role stress, several determinants are derived that may affect the level of role stress. The organizational determinants that are studied are *autonomy*, *feedback*, *initiation of structure*, *leader consideration*, *co-worker support*, *team external focus* and *participation*. Two environmental determinants are examined, being *environmental dynamism* and *environmental complexity*. Lastly, attention is paid to the individual determinants *locus of control*, *need for clarity* and *experience*. The consequences of role stress are also studied. Two job outcomes are considered in this respect, the first being *job satisfaction* and the second *boundary spanning performance*. Based on this literature, a total of 36 hypotheses are formulated.

The hypotheses are tested by means of a survey distributed among a total of 401 neighbourhood managers. Of the contacted neighbourhood managers, 236 neighbourhood managers filled in the questionnaire. This corresponds to a response rate of 58.9%. As not all respondents completed the questionnaire entirely, some cases had to be removed. In total, 181 useful cases remained.

Various regression analyses are performed in order to examine (1) the direct relationship between the determinants and role stress, (2) the direct relationship between role stress and the job outcomes and (3) the moderating effect of several determinants on the relationship between role stress and both job satisfaction and boundary spanning performance.

The results of this study first provide information about the extent to which neighbourhood managers experience role stress. The analyses have shown that neighbourhood managers know relatively well what is expected of them. The level of role ambiguity they experience therefore seems to be moderate. Neighbourhood managers indicated on average that they neither perceive incompatible expectations nor these expectations are not conflicting at al. This finding indicates that they experience role conflict to some extent.

In addition, this study examined determinants which may influence the level of role stress and the consequences of role stress for job satisfaction and boundary spanning performance. With regard to the consequences of role stress, role ambiguity appeared to be of greater importance for explaining job satisfaction and boundary spanning performance than role conflict. Role ambiguity was found to have a negative influence on both job satisfaction and boundary spanning performance. What this finding indicates, is that clarity on role expectations is important for neighbourhood managers to perceive their job as pleasant and to perform well.

For role conflict, no effect on both job outcomes was found. This may be due to the fact that conflict is inherent in a boundary spanners' job. As it is simply there, it may not have such a strong impact on the neighbourhood managers' job satisfaction. With regard to performance, neighbourhood managers seem to be able to learn how to deal with the conflict inherent in their job. This enables them to nevertheless perform well (Behrman & Perreault, 1984).

With regard to the determinants, it was found that role ambiguity is mainly explained by organizational determinants. The findings indicate that the level of role ambiguity among neighbourhood managers decreases when they are given autonomy, feedback and the possibility to participate in decision-making. This is a useful finding given the negative impact of role ambiguity on job satisfaction and boundary spanning performance. Higher levels of autonomy, feedback and participation provide neighbourhood managers with information about their performance, which enables them to know what is expected of them. In this respect, they experience role ambiguity to a lesser extent. This will have a positive influence on both job outcomes.

Role conflict seems to be mainly explained by environmental determinants. Interestingly, it was found in this study that not so much changes in the *number* of actors, initiatives and networks in the neighbourhood are of influence on the level of role conflict. An effect was found for the type of environmental dynamism that involves changes in the *expectations* of actors in the neighbourhood regarding municipal services and the activities of the neighbourhood manager. Only when environmental dynamism is of direct influence on the neighbourhood manager and his or her work activities, this results in a higher level of role conflict.

The individual determinants hardly explain role ambiguity and role conflict. Only experience in function appeared to be a predictor variable for role ambiguity and neighbourhood managers with an internal locus of control – i.e. neighbourhood managers who believe that they are largely in control of events that affect them – are found to experience less role overload. The absence of further significant effects is, however, not surprising as findings from previous research into the effects of individual determinants are mixed. With regard to the moderating effect of several determinants on the relationship between role stress and job outcomes, not many effects have been found as well. The most remarkable finding is the moderating effect of co-worker support on the relation between role conflict and job satisfaction. This finding indicates that neighbourhood managers who perceive co-workers support are still likely to be satisfied with their job under conditions of conflicting expectations. In this way, co-worker support provides neighbourhood manager with resources to adapt to role conflict (Stamper & Johlke, 2003).

In conclusion, in line with previous research this study shows that organizational determinants have less influence on role conflict than on role ambiguity. This is an interesting finding given the negative impact of role ambiguity on job satisfaction and boundary spanning performance. With regard to the environmental determinants, it was found that only when environmental dynamism has a direct influence on the neighbourhood manager and his or her work activities, this influences the level of role stress the neighbourhood manager experiences. The individual determinants hardly explained role conflict and role stress. With regard to the moderating effects, the most interesting finding is the moderating effect of co-worker support on the relation between role conflict and job satisfaction.

The findings provide some useful insights for advice towards neighbourhood managers and their organizations. Neighbourhood managers should first of all be provided with sufficient autonomy, feedback and participation in their work. They should be given the opportunity to take their own initiative and to make decisions independently. Moreover, it is important that sufficient time is available for providing feedback and that neighbourhood managers are

involved in relevant meetings and decision-making processes. Providing sufficient autonomy, feedback and participation will decrease the level of role ambiguity among neighbourhood managers, which in turn benefits their job satisfaction and boundary spanning performance. In addition, it is important to ensure that neighbourhood managers are supported by their co-workers, as this reduces the negative effects of role conflict on job satisfaction. In this respect an environment should be created in which employees are willing to support each other. Following these recommendations will result in neighbourhood managers experiencing less stress in their work. Accordingly, they will enjoy their work more and are better able to perform well on their job.

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I Introduction

1.1 Introduction to the research topic

The decentralizations in the social domain, the forthcoming introduction of the Environmental and Planning Act (Omgevingswet), and the challenge to take houses off the gas. Three examples among a multitude of developments that are currently taking place in the Netherlands. These developments are taking place in and are of influence on the direct living environment of citizens. Neighbourhoods are therefore increasingly becoming the arena in which developments unfold. Various actors active at the local level – such as police, social workers and corporations – are working on these current developments from their own expertise. The challenge now is for the right people to find each other and for the challenges that lie ahead to be properly and integrally addressed. A process in which municipalities have an important role as facilitators.

In order to align the activities of actors, municipalities make use of a neighbourhood- or area based approach. This approach is not new, however, its starting point has changed over the years. The first wave of neighbourhood-based working emerged after the Second World War. The conviction existed that stimulating community life at the neighbourhood level could reverse negative aspects of cities, such as fragmentation and anonymization (De Boer & Lugtmeijer, 2009). A second wave of attention for the neighbourhood was derived from the urban renewal of the 1970s. Large-scale improvement of neighbourhoods was required, with the needs of citizens as the starting point. To this end, citizens were increasingly involved in the policy process, from responding to public policy to being given a role in policy- and decision-making (ibid.).

Nowadays we speak of the third wave of neighbourhood-based working (WRR, 2005). This current wave arose in the 1990s and is aimed at improving the liveability in neighbourhoods (De Boer & Lugtmeijer, 2009; Van der Lans, 2014). Throughout the different waves, the focus of the neighbourhood-based approach has shifted more and more from housing to residents. An integral approach between social, economic and physical challenges is currently pursued (WRR, 2005). Moreover, the current approach is aimed at cooperation with a multiplicity of actors and reducing the gap between citizens and local authorities (De Boer & Lugtmeijer, 2009). Focus is no longer only on the active involvement of citizens, but also on encouraging personal responsibility and self-reliance of citizens (Van der Lans, 2014; WRR, 2005). Interestingly, this third wave of neighbourhood-based working is not only initiated top-down by the government, but is also actively promoted by citizens and societal actors. Citizens have become more empowered, independent and assertive. They no longer take governmental decisions for granted

and increasingly start to organize themselves (Edelenbos & Van Meerkerk, 2016; Gofen, 2015; Van der Steen, Hajer, Scherpenisse, Van Gerwen & Kruitwagen, 2014).

As a result of the current wave of neighbourhood-based working and the related involvement of a multiplicity of actors at the local level, it is literally getting busy in the neighbourhood. Questions arise on how to jointly organize an integral approach that aims to aligning policy and implementation with what is actually happening in the living environment of citizens. How should, for example, the sectoral orientation and budgets of the municipality be dealt with? How should municipal departments that seem to speak a different language be linked? And what should interaction with citizens look like? To this end, specific municipal officials are appointed whose work is aimed at facilitating neighbourhood-based working. These municipal officials are the object of research in this study, referred to as neighbourhood managers.

The task neighbourhood managers have is to connect the municipality within which they are working – referred to as the world of the municipality – and actors in the neighbourhood – referred to as the world of the neighbourhood. Neighbourhood managers can therefore be seen as boundary spanning persons, which are employees who work at the boundary of their organization and try to realize a better fit between the internal organization and its environment (Tushman & Scanlan, 1981; Van Meerkerk & Edelenbos, 2014; Van Meerkerk & Edelenbos, 2016; Williams, 2002). Neighbourhood managers talk to residents, municipal services, educational institutions, the police, welfare organizations, housing corporations and other actors in trying to organize cooperation amongst them and to jointly tackle neighbourhood-specific issue (Peeters et al., 2010). Neighbourhood managers are the point of contact for residents. They represent the viewpoint of the residents within the municipality and they try to adjust policy processes based on the desires of the neighbourhood (ibid.). At the same time, neighbourhood managers can serve as antennae in the neighbourhood for the municipality. They signal issues that would otherwise remain underexposed. In this way, neighbourhood managers deepen the knowledge of the municipality which enables the municipality to better respond to what is going on in society (ibid.).

Spanning the boundary between the world of the municipality and the world of the neighbourhood can, however, be difficult because of the different and sometime even conflicting expectations held towards the neighbourhood manager by both worlds. These conflicting expectations may exist due to the different logics according to which both worlds are structured. In this study, consideration is given to the way in which neighbourhood managers span the boundary between the world of the municipality and the world of the neighbourhood. In

particular, it is examined to what extent neighbourhood managers experience role stress due to different expectations held towards the neighbourhood manager by the municipality and the neighbourhood, what factors are of influence on this and how role stress affects the boundary spanning performance of neighbourhood managers.

1.2 Problem definition

As explained above, neighbourhood managers can be considered as an intermediary between the municipality and actors in the neighbourhood. In connecting both worlds, however, neighbourhood managers may be confronted with different expectations arising from the vertically organized municipality and horizontally organized practices in the neighbourhood (Van der Steen et al., 2014). As such, neighbourhood managers may be confronted with standardized rules and procedures to be followed by the municipality (Hughes, 2003), while the neighbourhood asks for the possibility to respond to the needs of citizens in a context dependent way. In addition, neighbourhood managers may face the dilemma of problems that ask for an integral approach while the municipality is still mainly structured in a sectoral way (Peeters et al., 2010).

The conflicting expectations a neighbourhood manager faces in connecting the world of the municipality and the world of the neighbourhood can place a heavy burden on the neighbourhood manager. In scientific literature, the term role stress is used in regard to employees who experience conflicting and ambiguous expectations and demands in their job (Ford, Walker & Churchill, 1975; Kahn et al., 1964; Rizzo et al., 1970; Singh, 1993; Stamper & Johlke, 2003). Role stress is particularly likely to occur among employees in a boundary role position, because they are prone to experiencing different expectations. This also applies to neighbourhood managers. Neighbourhood managers are expected to behave differently in different contexts. Behaviour that is appropriate within one world may be inappropriate or even be disapproved in the other (Peeters et al., 2010). However, a neighbourhood manager sometimes has to behave within one world according to the logic of the other world. In this light, a neighbourhood manager is expected to experience conflicting expectations and uncertainty about what exactly is expected of him or her.

It is the question whether neighbourhood managers are able to deal with the different demands of both the municipality and actors in the neighbourhood. Several factors can be of influence on this. As such, individual differences can cause one person to experience more role stress than another. Moreover, organizational and environmental characteristics can also play a role (Singh, 1993; Sohi, 1996; Teas, 1983; Walker, Churchill & Ford, 1975). By examining the influence of

these factors, it is possible to uncover what factors may help to control the amount of role stress a neighbourhood manager experiences. This is particularly important in the light of the consequences of role stress for the functioning of neighbourhood managers in the organization. As such, several studies have found a negative relation between role stress and job satisfaction (Behrman & Perreault, 1984; Jackson & Schuler, 1985; Kahn et al., 1964; Singh, 1993). Moreover, role stress may be of influence on the boundary spanning performance of neighbourhood managers. This is due to the fact that high levels of uncertainty and unclarity lead to ineffective and insufficient performance (Behrman & Perreault, 1984; Jackson & Schuler, 1985; Singh, 1993). These different aspects of role stress and its consequences will be examined in this study.

1.3 Research goal and research questions

In this study management literature on role stress is applied to public administration literature on boundary spanners who try to connect the governmental organization and its environment. More specifically, the research objects are neighbourhood managers who are spanning the boundary between the municipality and actors in the neighbourhood. The goal of this study is to determine whether neighbourhood managers experience role stress, what factors are of influence on this and how the level of role stress affects their boundary spanning performance. Accordingly, the research question of this study is:

"What is the level of role stress experienced by neighbourhood managers as boundary spanning persons, how can this be explained by organizational, environmental and individual determinants and what is the impact on their job satisfaction and boundary spanning performance?".

In order to come to an answer to this research question, several sub-questions are formulated:

- What is a boundary spanner and what does a boundary spanner do?
- What is the level of role stress experienced by neighbourhood managers, who act as boundary spanners between the neighbourhood and the municipality?
- To what extent do organizational, environmental and individual determinants have a direct influence on the level of role stress that neighbourhood managers experience?
- To what extent does the level of role stress that neighbourhood managers experience has a direct influence on their job satisfaction and boundary spanning performance?
- To what extent do organizational and individual determinants moderate the relationship between the level of role stress that neighbourhood managers experience and both job satisfaction and boundary spanning performance?

To come to an answer to the research question and the sub-questions, first literature on the rise of governance networks is used to outline the context that creates the need for the boundary spanning behaviour of neighbourhood managers. The second body of literature in this study is on boundary spanners, boundary spanning behaviour and role stress.

1.4 Academic and societal relevance

1.4.1 Academic relevance

Policy problems are increasingly complex. They are boundary crossing of nature and can no longer be fully understood and solved by the government only. Other actors need to be involved in order to provide the required resources and problem-solving capacity to deal with policy problems, a development often referred to as the shift from government to governance (see Klijn & Koppenjan, 2016; Milward & Provan, 2000; Peters & Pierre, 1998; Rhodes, 1996).

The boundary crossing nature of current policy problems, with which a multiplicity of actors deals in governance networks, asks for connective capacity (Van Meerkerk & Edelenbos, 2014). This connective capacity is provided by so called boundary spanning persons, organizational members who try to realize a better fit between their organization and its environment (Tushman & Scanlan, 1981; Van Meerkerk & Edelenbos, 2014; Van Meerkerk & Edelenbos, 2016; Williams, 2002). Research on boundary spanners has shown that their connective capacity contributes to the realization of good network performance (Van Meerkerk & Edelenbos, 2014). This is because the boundary spanners' performance is of importance to the goal achievement of both the own organization and the environment (Ford et al., 1975). While boundary spanners are important for realizing good network performance, they are likely to be confronted with conflicting and ambiguous role requirements in their job. They have to unite contradictory expectations and demands of the own organization and the environment (ibid.). In the context of this study, neighbourhood managers have to connect the different expectations of the municipality and actors in the neighbourhood, as a result of which neighbourhood managers may experience role stress.

Role stress is an already widely examined topic in marketing and sales literature (see Chebat & Kollias, 2000; Ford et al., 1975; Hartline & Ferrell, 1996; Kahn et al., 1964; Lysonski, Singer & Wilemon, 1988; Rizzo et al., 1970; Singh, 1993; Stamper & Johlke, 2003). Research has for example been carried out on sources of role stress among sales persons (Singh, 1993; Walker et al., 1975) and the effects of role stress (Behrman & Perreault, 1984; Lysonski et al., 1988; Singh, 1993; Walker, Churchill & Ford, 1977). However, little is known about role stress, its causes and its consequences among boundary spanning persons in the public sector. Therefore, this study

aims to add new insights to public administration literature by applying insights of marketing and sales literature. By connecting marketing and sales literature on role stress to public administration literature on boundary spanning, this study attempts to determine whether neighbourhood managers experience role stress resulting from conflicting expectations between the municipality and the neighbourhood. Moreover, it is examined what considerations neighbourhood managers make in this respect and what this means for their boundary spanning performance. Insights gained on determinants of role stress can be used in advice towards neighbourhood managers and their organizations. The insights may help to control conflicting and ambiguous role requirements as well as their negative consequences.

1.4.2 Societal relevance

Current developments are more and more taking place in and are of influence on the direct living environment of citizens. A multiplicity of actors is working on these current developments from their own expertise. In order to address issues in an integral and coherent way, it is important to ensure cooperation between these actors. In addition, there is a need to seek coordination between activities that take place with the municipality and activities carried out by actors in the neighbourhood. Neighbourhood managers are seen as crucial in making the connection between the municipality and actors in the neighbourhood, because they work at the boundary of the municipality and can be seen as intermediary between both worlds.

Considering the importance of neighbourhood managers in realizing the connection between the municipality and what is going on in the direct living environment of citizens, it is important to gain a better understanding of the way in which neighbourhood managers deal with both municipal actors and actors in the neighbourhood, as well as the difficulties they face in this respect. By examining whether neighbourhood managers experience role stress and how this affects their boundary spanning performance, this study provides governmental organizations with knowledge and insight into possible challenges neighbourhood manager face in their work. Moreover, this study aims to provide neighbourhood managers and their organizations with tools to control ambiguous and conflicting role requirements. When the role stress experienced by neighbourhood managers is reduced, this will positively influence their boundary spanning performance and hence the achievement of organizational and environmental goals (Behrman & Perreault, 1984; Ford et al., 1975; Jackson & Schuler, 1985).

1.5 Structure of the paper

In the next chapter the theoretical concepts of this study will be discusses. The first body of literature is on the rise of governance networks and the need for boundary spanning (2.1). The

literature used in this subsection is intended to deepen the context of this study. The second body of literature is on boundary spanning, boundary spanning activities and role stress (2.2). Subsection 2.2 also deals with the organizational, environmental and individual determinants of role stress and its consequences. Various hypotheses follow from this literature. In chapter 3 the conceptual framework is discussed. The conceptual model is illustrated here (3.1) and the main concepts that result from the theoretical framework are operationalized (3.2). The methodology of this study is described in subsection 3.3. In chapter 4 the findings of the analyses performed in this study are presented. The descriptive statistics are presented (4.1), the correlations are examined (4.2) and the results from the hypothesis tests are described (4.3). In this latter subsection some sub-conclusions are given with regard to the results found. Chapter 5 then contains the conclusion of this study. The central research question is answered and a description and explanation for the results found is provided (5.1). In this chapter also a critical reflection on this study is given. The broader implications of this study and some methodological implications are discussed (5.2.1 and 5.2.2). Also recommendations for future research and for practice are given (5.2.3 and 5.2.4). Lastly, the consulted literature and some appendixes can be found.

II Theoretical framework

2.1 The rise of governance networks and the need for boundary spanning

2.1.1 The changing policy- and decision-making context

Over the past decades, the policy- and decision-making context has been subject to change. A first driver for this changing context is the fact that societal problems have become increasingly complex (Van Meerkerk, 2014). According to Peters and Pierre (2016) complex problems are "problems with no single cause, no clear solution and with non-linear relationships among the variables involved" (p. 51). The complexity of current societal problems stems first of all from the fact that knowledge about these problems is limited and that they are boundary crossing of nature (Klijn, 2016; Williams, 2012). Problems do no longer fit exclusively within the boundaries of the established institutional arrangements and can no longer be fully understood and solved from one policy area only (Hajer, 2003). Where the government used to be the major actor in dealing with public policy problems, traditional governmental institutions are now facing difficulties with finding effective solutions for societal problems (Klijn & Koppenjan, 2016; Peters & Pierre, 1998). They lack the resources and problem-solving capacity required to tackle societal problems themselves. Interaction with other policy areas and societal actors is needed in order to perform governance tasks and to achieve public objectives (Klijn, 2012; Klijn & Koppenjan, 2016; Williams, 2010). Secondly, current societal problems are increasingly complex because of a lack of consensus about the problem definition and its solution (Klijn, 2016). This in turn is the result of the involvement of multiple actors – each with their own perceptions, interests and strategies – in the policy- and decision-making process (Klijn, Edelenbos & Steijn, 2010; Klijn & Koppenjan, 2016). An objectively best solution to complex policy problems is for this reason hard to find, as "complexity is in the eye of the beholder" (Morçöl, 2002, p. 3).

A second driver for the changing policy- and decision-making context has to do with the fact that citizens' participation in traditional forms of political engagement is subject to change (Van Meerkerk, 2014). In contemporary society citizens are better educated, they enjoy higher socio-economic status and they receive more political information through mass media (Dalton, 1984; Dalton, 2008). Because of citizens' cognitive mobilization, they are more assertive and less prone to authority. According to Edelenbos and Van Meerkerk (2016) "citizens no longer identify themselves with political and governmental establishment belonging to models of representative democracy" (p. 1). Citizens want to participate more directly in decisions by which they are affected and therefore citizens are becoming more and more politically active in new ways. Citizens start to organize themselves in order to deal with political issues that matter to them (Dalton, 2008; Edelenbos & Van Meerkerk, 2016; Torfing, 2012). Both the increasing

complexity of current societal problems and the decline of citizens' participation in traditional forms of political engagement put pressure on traditional forms of government (Van Meerkerk, 2014). As a result a development towards interactive forms of governance is evident.

2.1.2 Towards interactive forms of governance

Traditional governmental institutions are structured according to the principles of bureaucracy and political control. Bureaucracy is "the idea of a distinct, professional public service, recruited and appointed by merit, politically neutral, which would remain in office throughout changes in government" (Hughes, 2003, p. 20). In order to achieve the idea of bureaucracy, bureaucratic organizations are characterized by standardization and specialized organizational divisions. In addition, the idea of political control emphasizes hierarchical relationships "in which there is a supervision of the lower offices by the higher ones" (Hughes, 2003, p. 21).

For a long period of time, the principles of bureaucracy and political control have been effective in addressing public policy problems. However, these principles are now challenged by the boundary crossing nature of complex societal problems (Van Meerkerk, 2014). Complex societal problems often cut across traditional jurisdictions of organizations, administrative levels and the existing demarcations between public, private and societal domains (Klijn, 2016; Klijn & Koppenjan, 2016; Van Meerkerk, 2014). Organizations which are divided in highly specialized divisions face difficulties with responding to such boundary crossing problems. Specialized divisions have each developed their own values, norms and languages, adjusted to the demands of the work within the subunit (Tushman & Scanlan, 1981). Although this specialization increases effectivity and efficiency within divisions, it creates obstacles to communication and cooperation across boundaries. In addition, interventions in one subunit may provoke a chain of unexpected and unpredictable reactions (Gerrits, 2012; Wagenaar, 2007; Van Meerkerk, 2014). They can therefore have major consequences for other divisions, making problem solving within a single division highly unproductive.

In response to the shortcomings of traditional governmental institutions in dealing with complex societal problems, governments are more and more relying on interactive forms of governance (Edelenbos & Van Meerkerk, 2016; Van Meerkerk, 2014). This trend is present in Western countries in general, however, for this study there is focused on The Netherlands. In interactive governance, citizens, private enterprises, societal organizations and other actors are involved in the process of policy making on complex policy problems in an early stage (Edelenbos & Van Meerkerk, 2016). The involvement of various actors in interactive governance leads to the emergence of so-called governance networks, which can be defined as "more or less

stable patterns of social relations between mutually dependent actors, which cluster around a policy problem, a policy programme, and/or a set of resources and which emerge, are sustained, and are changed through a series of interactions" (Klijn & Koppenjan, 2016, p. 11). Such interactive forms of governance can be initiated either by the government or by other societal actors. Within interactive governance initiated by the government – so called government induced cooperation's – the government mobilizes actors and decides "when, which and how people get involved" (Edelenbos & Van Meerkerk, 2016, p. 2). Interactive forms of governance can also be arranged bottom-up. In this respect, interactive forms of governance originate from the self-organizing capacities of societal actors, such as citizens or social entrepreneurs. In these citizen induced forms of interactive governance, the government has a less prominent role. As Edelenbos and Van Meerkerk (2016) put it, "in these self-organizations, societal actors take the initiative and aim to develop ideas and projects on their own, without (much) interference form governmental and political institutions" (p. 3).

The involvement of citizens, private enterprises, societal organizations and other actors in interactive governance is expected to be of great value, as it can enhance the effectiveness, efficiency and legitimacy of decision making and policy implementation (Edelenbos & Van Meerkerk, 2016). Interactive forms of governance are expected to durably solve complex societal problems by the ability to realign dispersed resources. By the involvement of multiple actors, interactive forms of governance networks mobilize additional resources and knowledge. More integrated and elaborated responses to societal problems can therefore be reached (Edelenbos & Van Meerkerk, 2016; Klijn, 2016). Secondly, interactive governance is seen as a means to overcome lost identity in contemporary society and to create new democratic spaces. As explained above, citizen no longer strongly identify with traditional governmental and political institutions. By the direct involvement of citizens in policy- and decision-making, interactive governance provides new democratic spaces in which the political identities of citizens can be developed (Edelenbos & Van Meerkerk, 2016). Lastly, by interactive governance an attempt is made to establish new connections between government and society. Interactive governance is seen as a means to develop mutual understanding among governments and citizens, in order to enhance the responsiveness of the government (ibid.).

2.1.3 The need for boundary spanning

The changing relationship between government, market and society ask for a different approach from the government. In this respect, the role of governmental actors who are in close contact with society is becoming increasingly important. The role of these governmental actors has previously been discussed by Lipsky (2010) in regard to policy implementation. Lipsky (2010)

refers to these governmental actors as street-level bureaucrats, which are "public service workers who interact directly with citizens in the course of their jobs and who have substantial discretion in the execution of their work" (Lipsky, 2010, p. 3). The role of these street-level bureaucrats is of importance as public policy, devised within the limits of functional imperatives, may not suit the situation it is intended for. It is due to the interaction of street-level bureaucrats with citizens, in which public policy really takes shape (Hartman & Tops, 2005; Lipsky, 2010).

As problems are increasingly complex and citizens are more and more involved in policy- and decision-making, the role of street-level bureaucrats becoming even more important. Street-level bureaucrats should not only implement public policy in line with what is happening in the living environment of citizens. Nowadays developments from society must also be brought back into the municipal organization. To this end, municipalities make use of a neighbourhood-based approach. Neighbourhood-based working is used in order to provide services locally and coherently (De Boer & Lugtmeijer, 2009). An integral approach is sought between social, economic and physical challenges in which actors work together to realize policy objectives (WRR, 2005). Street-level employees are expected to establish the connection between what is going on in the direct living environment of citizens on the one hand and the policy-making process within the municipality on the other hand. In other words, there is called upon street-level bureaucrats to provide connective management. Connective management is about connecting stakeholders with different preferences, perceptions and resources to the processes that takes place in governance networks (Edelenbos, Van Buren & Klijn, 2013; Klijn & Koppenjan, 2016).

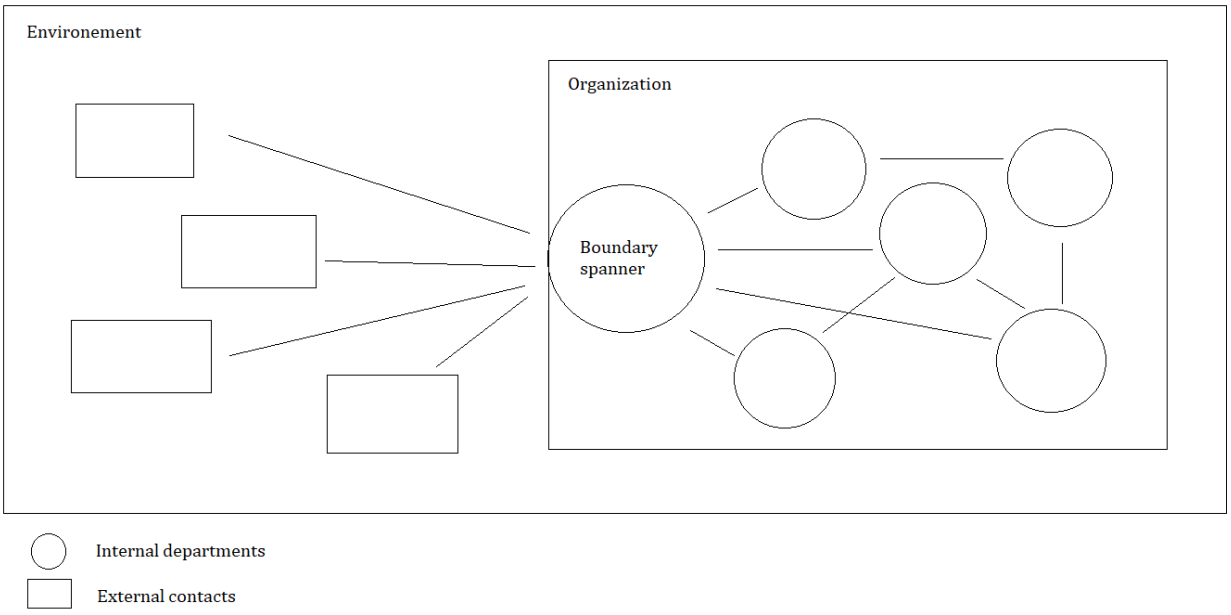
The street-level bureaucrats that are focused on in this study are neighbourhood managers. For neighbourhood managers connective management has to be performed in aligning the municipality within which they are working – referred to as the world of the municipality – and actors in the neighbourhood – referred to as the world of the neighbourhood. In other words, neighbourhood managers have to span the boundary between both worlds. The scientific term for actors who are able to effectively span the boundary between separated and specialized divisions, is boundary spanning person or boundary spanner (Tushman & Scanlan, 1981; Van Meerkerk & Edelenbos, 2014; Van Meerkerk & Edelenbos, 2016; Williams, 2002).

2.2 Boundary spanning and role stress

2.2.1 Boundary spanning and boundary spanning activities

The concept of boundary spanning has its origin in organizational literature (Van Meerkerk & Edelenbos, 2014; Van Meerkerk & Edelenbos, 2016). Boundary spanning refers to the communication and interaction activities of organizational members who work at the boundary of their organization. These organizational members are in constant communication both with different departments within their own organization and with actors outside the organization. Boundary spanners try to link the preferences, interests and developments of the organization with the environment in order to realize a better fit (Van Meerkerk & Edelenbos, 2014). To be able to represent both the environment within the organization and the organization in the environment, boundary spanners need to have strong internal linkages as well as strong external linkages (Tushman & Scanlan, 1981; Van Meerkerk & Edelenbos, 2014; Williams, 2010). Figure 1 shows the position of a boundary spanner in the organization.

Figure 1 Position of a boundary spanner in the organization



In order to effectively connect organizations, people and processes and to manage the interface between the organization and its environment, boundary spanners conduct four main activities: (1) connecting or linking different people and processes at both sides of the boundary; (2) selecting relevant information on both sides of the boundary; (3) translating this information to the other side of the boundary; and (4) creating and establishing new or innovative cooperative arrangements between community, government and/or professional organizations (Tushman & Scanlan, 1981; Van Meerkerk & Edelenbos, 2014; Van Meerkerk & Edelenbos, 2016). Linking people and processes across organizational boundaries requires that relations between actors

are built and maintained (Williams, 2002). A good and sustainable relationship leads to a more constructive dialogue between actors and to more trust between actors. When actors trust each other, they become more willing to share information needed to arrive at more elaborated problem definitions and problem solutions for complex societal problems (Klijn, et al., 2010; Williams, 2002). In order to select relevant information on one side of the boundary and to transfer it to the other side, a boundary spanner needs to understand the different norms, values and languages of all actors. According to Tushman and Scanlan (1981), "boundaries can be spanned effectively only by individuals who understand the coding schemes are attuned to the contextual information on both sides of the boundary" (p. 291-292). Boundary spanners capable of doing so can bring two worlds together which initially functioned according to different procedures, routines and principles (Van Meerkerk & Edelenbos, 2016). Lastly, boundary spanning is about creating cooperative arrangements aimed at tackling societal problems together (ibid.).

According to Williams (2002), the personality of the boundary spanner largely determines its competency. Various competences are highlighted which a boundary spanner should possess in order to successfully perform its boundary spanning activities (Williams, 2002; Williams, 2012). A boundary spanner should first of all be a reticulist, meaning that the boundary spanner is experienced in uniting people and processes (Williams, 2012). In this respect, it is important to gather information, to negotiate on the exchange of resources and to help actors implement their objectives. A reticulist has an extensive network and bears understanding of new connections which are about to start. This enables the reticulist to bring the right people together at the right time (ibid.). Secondly, boundary spanner should be good at communicating and listening. A boundary spanner should possess the skills to express oneself in a way that can be understood by all actors. Moreover, a boundary spanner should be able to clearly communicate the standpoints of one actor to the others (Williams, 2002; Williams, 2012). In addition to good communicating skills, a boundary spanner must also be able to listen well and has to be empathic. A boundary spanner must understand and be open to the standpoints of others (Van Meerkerk & Edelenbos, 2016). According to Williams (2002) a boundary spanner should possess otherness, "the ability to engage with others and deploy effective relational and interpersonal competencies" (p. 110). The communicating and listening skills of the boundary spanner help to discover commonalities and to build and maintain interpersonal relations (Williams, 2012). Two more boundary spanning competences are coordination and entrepreneurship. A significant part of the work of a boundary spanner consists of planning and coordinating of collaboration processes. A boundary spanner should be able to organize across boundaries (Williams, 2012). Lastly, the entrepreneurial competence is about coming up with new, creative and innovative

ideas in order to tackle complex societal problems (Williams, 2002; Williams, 2012). Traditional approaches for dealing with policy problems are no longer applicable to today's problems. Therefore, boundary spanners should be the catalysts of change. They need to think out of the box and take risks in order to come up with new ways forward (ibid.).

An important remark from previous research that is relevant to this study is that the ability of a boundary spanner to perform boundary spanning activities may depend on the boundary spanners' own institutional background. According to Van Meerkerk and Edelenbos (2014), actors who work in more hierarchical and bureaucratic organization are less flexible than private and societal actors. Moreover, the high level of fragmentation in governmental organizations is also problematic for boundary spanners (ibid.). Applied to the context of this study, it could be difficult for a neighbourhood manager as boundary spanning person to meet the demands of the environment. When a neighbourhood manager has strong external links, but this person is not able to translate the information to the fragmented internal world, the neighbourhood manager is unable to perform its boundary spanning activities satisfactorily (Tushman & Scanlan, 1981; Van Meerkerk & Edelenbos, 2014). When neighbourhood managers cannot meet the expectations of both the internal organization and the external world, this can cause role stress (Kahn et al., 1964; Rizzo et al, 1970; Singh, 1993).

2.2.2 Neighbourhood managers as boundary spanning persons

As already mentioned, neighbourhood managers can be considered as boundary spanning persons. The worlds neighbourhood managers are in constant communication with and between which they try to realize a better fit, are the world of the municipality and the world of the neighbourhood. Each of these worlds is structured according to different institutional principles. Originally, the world of the municipality is characterized by vertical, hierarchical relations whereas the world of the neighbourhood is characterized by a network structure. In aligning both worlds, neighbourhood managers are thus confronted with different and often conflicting expectations and demands. The way in which networks differ from hierarchies is shown in the table below.

Table 1 Characteristics of hierarchical systems and networks

Hierarchy	Network
Uniformity	Variety
Unilateral dependencies	Mutual dependencies
Openness to hierarchical signals	Closedness to hierarchical signals
Stability, predictability	Dynamic, unpredictability

Source: De Bruijn & Ten Heuvelhof, 2008; De Bruijn, Ten Heuvelhof & In 't Veld, 2010.

In essence, governmental organizations – like municipalities in which neighbourhood managers are working – are structured according to the principle of hierarchical control. Hierarchical control is about focus on verifiability by means of applying rules and making performance measurable (Hartman & Tops, 2005; Hood, 1991). There is a leading actor at the top of the organization who steers its subordinates. This top-down steering is possible because hierarchies are supposed to have a certain uniformity. Moreover, unilateral dependencies are assumed, in which subordinates are open and receptive to instructions from their superiors (De Bruijn & Ten Heuvelhof, 2008; De Bruijn, Ten Heuvelhof & In 't Veld, 2010; Hughes, 2003). Tasks performed by subordinates are always strictly defined, leading to compartmentalization of the organization (Peeters et al., 2010). Emphasis is also placed upon standardized rules and procedures. Finally, a hierarchy can be characterized by stability. Power relations are fixed and incentives for action only come from above (De Bruijn & Ten Heuvelhof, 2008; Peeters et al., 2010).

In comparison to the idea of uniformity within hierarchies, networks are characterized by variety. Networks are formed by multiple actors all with different interests, strategies and perceptions (De Bruijn & Ten Heuvelhof, 2008; Klijn & Koppenjan, 2016). These actors are dependent on each other in order to achieve their objectives and relate to one another in a horizontal way. Actors in networks are often characterized by closeness, because they are not necessarily susceptible to external interventions (De Bruijn & Ten Heuvelhof, 2008; De Bruijn et al., 2010). Lastly, the dynamic character of networks manifests itself by the fact that the number of actors involved in the network changes over time. Moreover, networks are dynamic and unpredictable because of changes caused by new information, different strategies and different viewpoints (De Bruijn & Ten Heuvelhof, 2008; De Bruijn et al., 2010; Klijn & Koppenjan, 2016).

Obviously, these descriptions of characteristics of both hierarchies and networks should be nuanced. For example, governmental organizations are certainly sensitive to challenges that come from society. Therefore, stakeholders are increasingly consulted and involved in policy making. In addition, the strict separation of tasks is increasingly reduced in order to be able to work in an integral way (Peeters et al., 2010). However, this does not alter the fact that the world of the municipality is structured according to fundamentally different institutional principles compared to the world of the neighbourhood. As a result, there may be a tension between the expectations towards the neighbourhood manger by the municipality on the one hand and actors in the neighbourhood on the other hand. For the neighbourhood manager this can lead role stress, as is explained in the subsection 2.2.3.

2.2.3 Role stress in boundary spanning positions

A lot of research has been done by marketing and sales scholars on role stress among sales and marketing professionals who operate at the boundary of their organization (see Chebat & Kollias, 2000; Ford et al., 1975; Hartline & Ferrell, 1996; Kahn et al., 1964; Lysonski et al., 1988; Rizzo et al., 1970; Singh, 1993; Stamper & Johlke, 2003). In order to be able to discuss the concept of role stress, first there will be elaborated on the concept 'role'. A role can be defined as "a set of expectations about behaviour for a position in a social structure" (Rizzo et al., 1970, p. 155). Expectations define what a focal person[1] should or should not do in his or her job. These expectations are constructed by the focal person's role set, referring to the people to whom the focal person is related in its job. The role set of the focal person may include direct colleagues as well as people who relate to the focal person in other ways, such as family and close friends (Kahn et al., 1964). All members of the focal person's role set want the focal person to comply with their expectations and objectives. Therefore, they try to influence the focal person's behaviour. Due to this pressure, the process of role definition takes place by means of role taking on the one hand. Role taking involves that the focal person complies with the expectations of the role set (Perrone, Zaheer & McEvily, 2003; Walker et al., 1975). On the other hand, the process of role definition occurs by role making. This is about the way in which a focal person perceives role expectations and tries to adjust these expectations in such a way that they become acceptable for both the role set and for the focal person him- or herself (ibid.). These role perceptions will ultimately lead to the actual role behaviour. Based on the behaviour the focal person performs, the members of the focal person's role set may adjust their expectations towards the focal person. Accordingly, an ongoing process takes place between a focal person and its role set in shaping a role (Kahn et al., 1964).

Role stress can be experienced when a focal person is confronted with multiple expectations that he or she experiences as unclear, inconsistent and incompatible (Kahn et al., 1964; Rizzo et al., 1970). Employees who are particularly prone to experience role stress are employees who work at the boundary of their organization, as intermediates between the organization and its environment (Ford et al., 1975; Kahn et al., 1964; Rizzo et al., 1970; Singh, 1993; Stamper & Johlke, 2003). As shown in the previous subsection, boundary spanning employees are in constant communication between two worlds. Their position in the organization inherently implies that they are exposed to a multiplicity of expectations. Not only organizational members and people who relate to the boundary spanner in other ways, but also several actors in the external environment impose expectations on the boundary spanner. This applies to the neighbourhood managers in this study alike, as they act as an intermediary between the world

[1] The focal person is the person whose role is under consideration (Kahn et al., 1964).

of the municipality and the world of the neighbourhood. For example, expectations towards neighbourhood managers can come from co-workers, the municipal supervisor, external organizations, citizens, a neighbourhood manager's friends and family. Focussing on the complete role set of the neighbourhood manager would, however, be outside the scope of this study. Therefore, this study will focus on the relation of neighbourhood managers to co-workers, the supervisor and actors in the neighbourhood. This seems to be appropriate since this study is focused on the interface between the world of the municipality and the world of the neighbourhood and the position of the neighbourhood manager within this interface. The expectations that co-workers, the supervisor and actors in the neighbourhood have towards neighbourhood managers may differ from each other and therefore it is likely that different behaviour is expected from the different worlds in which the neighbourhood manager works. Behaviour that is appropriate within one world may be inappropriate or even be disapproved in the other (Peeters et al., 2010). Yet a neighbourhood manager sometimes has to behave within one world according to the logic of the other. This puts the neighbourhood manager in a difficult position, which increases the chance of experiencing role stress (Lysonski & Johnson, 1983; Singh, 1993; Walker et al., 1975).

Two key aspects of role stress are role conflict and role ambiguity. Before elaborating on both aspects of role stress, a distinction between the objective and subjective component of role conflict and role ambiguity has to be made. Where the objective component is about a condition in the environment, the subjective component is about the state of a person (Kahn et al., 1964). This study will focus on the subjective component of role conflict and role ambiguity, meaning that it is about the level of role conflict and role ambiguity that is experienced by neighbourhood managers. It is inherent to such a subjective component that it differs per person due to a difference in personal characteristics. For example, one has more need for certainty than the other and also boundary spanners' competencies as described by Williams (2002; 2012) differ per person. Some individual characteristics that are expected to have an influence on the level of role conflict and role ambiguity are described in section 2.2.4.2.

Role conflict

Role conflict is about incompatible role expectations towards the focal person. Kahn, Wolfe, Quinn, Snoek & Rosenthal (1964) define role conflict as "the simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult compliance with the other" (p. 19). The perception of a boundary spanner that he or she is unable to satisfy all member of the role set can result in a psychological conflict for the boundary spanner (Walker et al., 1975). The definition of role conflict is, however, limited to *inter-sender conflict*.

By Kahn et al. (1964) four more types of role conflict are distinguished. Where inter-sender conflict is about the incompatibility between expectations of different members of the role set, *intra-sender conflict* results from different expectations held by one single member of the role set (Kahn et al., 1964; Rizzo et al., 1970). *Inter-role conflict* is in line with inter-sender conflict, as this type of role conflict is about conflicting pressures from different organizations or memberships in which a focal person is involved (ibid). Two more types of role conflict as defined by Kahn et al. (1964) are *role overload* and *person-role conflict*. The former refers to compatible expectations within a too short time frame and/or with a lack of required resources and materials in order to fulfil job requirements (ibid.). Lastly, *person-role conflict* occurs when role requirements clash with moral values and believes of the focal person (Kahn et al., 1964; Rizzo et al., 1970). In this study the extent to which neighbourhood managers experience inter-sender conflict and inter-role conflict is further examined. The focus is on these two types of role conflict as this study is about neighbourhood manager and their intermediary position between the municipality and the neighbourhood. In this position the neighbourhood manager needs to have both strong internal linkages and strong external linkages. Of particular interest is the role conflict a neighbourhood manager experiences as result of incompatible expectations of different organizational members and from incompatibilities between the world of the municipality on the one hand and the world of the neighbourhood on the other hand. Also role overload will be considered, because the position of a neighbourhood manager in the organization makes him or her susceptible to a multiplicity of expectations. A lack of time and resources to meet all these expectations is likely to be present in this respect.

Role ambiguity

In addition to role conflict, also the concept of role ambiguity is a key aspect of role stress. Role ambiguity is about the presence or absence of information. Each organizational member needs to have certain information in order to be able to effectively and satisfactorily fulfil its role expectations. Four types of information are particularly important in relation to ambiguity. These four types involve information about (1) the scope of responsibilities, referring to the range of one's job duties; (2) role behaviour, which is about to the behaviour necessary to fulfil expectations associated with a role; (3) role evaluations, which refers to criteria by which one's performance is evaluated; and (4) role consequences, being information about consequences of fulfilling or not fulfilling role expectations (Beauchamp, Brays, Eys & Carron, 2002; Kahn et al., 1964; Singh & Rhoads, 1991). A lack of information regarding role expectations leads to uncertainty for an employee. As a result, the employee may experience role ambiguity. Role ambiguity can therefore be understood as the "lack of the necessary information available to a given organizational position" (Rizzo et al., 1970, p. 151). Because of the fact that this study

focuses on the relation of neighbourhood managers with co-workers, the supervisor and actors in the neighbourhood, this study will look at the extent to which the various types of ambiguity originate from these three sources.

In the following, various determinants of role stress are explained that may help neighbourhood managers as boundary spanning persons to deal with role stress. In addition, the influence of role stress on job outcomes is examined.

2.2.4 Determinants of role stress

The extent to which an individual experiences role stress varies per person. Several factors have an influence on this. First of all, individual characteristics make one person more sensitive to experiencing role stress than others. In addition, organizational and environmental characteristics play a role as well. For instance, a work setting in which support is lacking and a constantly changing environment can increase the level of role stress (Singh, 1993; Sohi, 1996; Teas, 1983). Despite the fact that organizational, environmental and individual characteristics can increase the level of role stress, certain determinants can also help boundary spanners cope with role stress (Singh, 1993; Teas, 1983; Walker et al., 1975). These determinants will be discussed hereafter, starting with the organizational determinants, followed by several environmental and individual determinants.

2.2.4.1 Organizational determinants

Several studies have been conducted into the influence of organizational variables on the level of role stress among employees in various contexts (e.g. House & Rizzo, 1972; Rizzo et al., 1970; Singh, 1993; Teas, 1983; Walker et al, 1975). Research on the influence of these organization determinants is grounded in the path-goal theory of leadership (House, 1971) and in the job characteristic model of Hackman and Oldham (1976). From these theories the determinants autonomy, feedback, initiation of structure, consideration and feedback are derived.

Autonomy

A first organizational determinant that appears to influence role stress is autonomy. Autonomy is defined as "the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out" (Hackman & Oldham, 1976, p. 258). Perrone, Zaheer and McEvily (2003) have examined the relation between autonomy and role stress among purchasing managers and supplier representatives in the electronic industry. They found that the trust counterparts have in boundary spanners increases when the boundary spanner has a greater level of discretion in

its work. This discretion allows boundary spanners to better meet the expectations of the environment, or in the case of this study, the expectations of the neighbourhood. In particular, a negative relationship between autonomy and role ambiguity was found by Singh (1993) in his study on the organizational determinants of role ambiguity among sales and marketing professionals. The reason that roles with more autonomy involve less role ambiguity is that "autonomy helps boundary spanners cope with the ambiguity surrounding their role and thus they perceive less ambiguity than they would in comparable roles that lack autonomy" (Singh, 1993, p. 14). The finding is supported by the meta-analysis of Jackson and Schuler (1981), which shows that overall correlation between autonomy and role ambiguity is -.39. As such, a negative relation between autonomy and role ambiguity is expected in this study.

Also for role conflict, a negative relation with autonomy is hypothesized. It is assumed that potentially conflicting situations between the organization (i.e. the world of the municipality) and the environment (i.e. the world of the neighbourhood) can be avoided when boundary spanners are better able to meet the demands of the environment due to the autonomy in their role (Perrone et al., 2003; Walker et al., 1975). Empirical support for this hypothesis is lacking, however. Therefore, in this study it is expected that autonomy does not have an influence on the level of role conflict.

H1: *The more autonomy is given, the less role ambiguity a neighbourhood manager experiences.*

H2: *Autonomy does not directly affect the level of role conflict a neighbourhood manager experiences.*

Feedback

Another organizational determinant for role stress is feedback. Hackman and Oldham (1976) define feedback as "the degree to which carrying out the work activities required by the job results in the individual obtaining direct and clear information about the effectiveness of his or her performance" (p. 258). Feedback is given through communication and can be seen as a learning mechanism (Singh, 1993). The more frequent a boundary spanner is in contact with co-workers and the supervisor, the more feedback the boundary spanner receives on how he or she is performing. In this way, the boundary spanner is more likely to understand what is expected of him of her (Walker et al., 1975). As found by Walker, Churchill and Ford (1975) in their study on the relationship between organizational variables and industrial salesperson's level of role conflict and role ambiguity, an increased understanding leads to a decrease in the level of role ambiguity. This finding has been confirmed by the research of Teas, Wacker and Hughes (1979)

and Teas (1983). Therefore, in this study a negative relation between feedback and role ambiguity is expected.

Less evidence is available for the existence of a significant relationship between feedback and role conflict. It could be expected that feedback is not only provided by the supervisor and co-workers, but also by the boundary spanner towards the supervisor and co-workers. The boundary spanner can provide co-workers and the supervisor with information about the expectations that are placed upon the boundary spanner by the environment. Accordingly, the co-workers and supervisor can align their expectations towards the boundary spanner with the demands of the environment, which may reduce the level of role conflict for the boundary spanner (Walker et al., 1975). However, results show only weak negative relations (Jackson & Schuler, 1981) or no significant relation at all (Teas, 1983; Walker et al., 1975). Therefore, no relationship between feedback and role conflict is expected in this study.

H3: *The more feedback on job performance is provided by co-workers and the supervisor, the less role ambiguity a neighbourhood manager experiences.*

H4: *Feedback on job performance provided by co-workers and the supervisor does not directly affect the level role conflict of a neighbourhood manager experiences.*

Initiation of structure

A third organizational determinant is initiation of structure. House (1971) refers to initiation of structure as "the degree to which the leader initiates psychological structure for subordinates by doing such things as assigning particular tasks, specifying procedures to be followed, clarifying his expectations of subordinates, and scheduling work to be done" (p. 321). For role ambiguity, previous research has found a negative relation with initiation of structure (House & Rizzo, 1972; Walker et al., 1975). The rationale here is that a strictly structured role ensures that "at least the expectations of [the boundary spanners'] supervisor and other members of management will be made explicit, and any behaviour that is inconsistent with those expectations will quickly be brought to [the boundary spanners'] attention" (Walker et al., 1975, p. 34). Strictly structured roles thus provide information about what is expected of a boundary spanner and will therefore help to reduce the level of role ambiguity. In this way, neighbourhood managers in this study are expected to experience less role ambiguity when their role is more strictly structured.

Mixed findings exist regarding the direction of the relationship between initiation of structure and role conflict. By House and Rizzo (1972) a negative relation between initiation of structure and role conflict was found among employees who were only working with counterparts inside the own organization. In their study on industrial salesman who have to deal

with counterparts outside the own organization, Walker et al. (1975) assumed a positive relation between initiation of structure and role conflict. The researchers expected that the stricter a boundary spanner is supervised (i.e. the more strictly a role is structured), the less flexible the boundary spanner is to adjust its behaviour according to the demands of the environment. Therefore, the boundary spanner is expected to experience conflict between organizational and environmental role expectations. Although the relationship proved to be non-significant in the study of Walker et al. (1975), probably due to the use of an overly general measure (Teas, 1983), supportive findings for the positive assumption were found by Teas (1983). As the neighbourhood managers in this study have to deal with counterparts that occupy positions outside the own organization (i.e. actors in the neighbourhood), in line with the hypothesis of Walker et al. (1975), a positive relation is expected in this study between initiation of structure and role conflict.

H5: *The stricter a role is structured, the less role ambiguity a neighbourhood manager experiences.*

H6: *The stricter a role is structured, the more role conflict a neighbourhood manager experiences.*

Social support: leader consideration and co-worker support

Another determinant which may be of influence on the level of role ambiguity and role conflict is social support. Social support is broadly defined as "the availability of helping relationships and the quality of those relationships" (Leavy, 1983, p.5). By House (in Leavy, 1983) four kinds of social support are identified: (1) *emotional support* which consists of being caring, loving, empathetic and trustworthy; (2) *instrumental support* which involves behaviour that directly helps the person that is facing difficult tasks; (3) *informational support* which means providing information and teaching skills that helps an employee in dealing with role stress; and (4) *appraisal support* by which feedback is provided in order to help an employee evaluate the own performance.

In this study, two particular sources of social support are considered, which are leader consideration and co-worker support. Leader consideration refers to "the degree to which the leader creates a supportive environment of psychological support, warmth, friendliness, and helpfulness" (House, 1971, p. 321). As leader consideration is about socio-emotional matters (Singh, 1993), it concerns the emotional form support provided by the supervisor. Co-worker support refers to the assistance co-workers provide to each other by encouraging each other and

by sharing knowledge and expertise (Joiner, 2007). It thus concerns instrumental and informational aspects of social support as explained above

The supportive work climate that is facilitated by the supervisor and co-workers is found to reduce uncertainty and conflict (Singh, 1993; Stamper & Johlke, 2003; Teas, 1983; Viswesvaran, Sanchez & Fisher, 1999). The rationale is that in organizations with a supportive climate, the supervisor is more willing to reduce unnecessary work complications such as conflicting job requirements. Moreover, in such organizations work norms and expectations are made more explicit in order to enable boundary spanners to do their work effectively (Stamper & Johlke, 2003). This is due to the fact that support increases job related communication, what helps to clarify expectations (Schaubroeck, Cotton & Jennings, 1989). Social support from the supervisor and co-workers thus decreases the level of role ambiguity and role conflict by providing a more positive work environment (Singh, 1993; Stamper & Johlke, 2003; Viswesvaran et al., 1999). As such, a negative relation is expected between both leader consideration and social support, and the level of role ambiguity and role conflict among neighbourhood managers.

H7: *The more leader consideration and co-worker support is provided, the less role ambiguity a neighbourhood manager experiences.*

H8: *The more leader consideration and co-worker support is provided, the less role conflict a neighbourhood manager experiences.*

Team external focus

In addition to leader consideration and co-worker support, the dynamics on the team level are of importance for boundary spanners as well. Marrone, Tesluk and Carson (2007) found that the more co-workers acknowledge externally oriented activities as important, the more they value boundary spanning behaviour. Accordingly, boundary spanning activities will be incorporated in the team strategy, activities will be monitored and boundary spanning behaviour will be actively encouraged. Moreover, when there is consensus among co-workers on the importance of boundary spanning, co-workers are more likely to send strong and clear role expectations towards boundary spanning actors (ibid.). According to the researchers, "the greater the clarity and strength of 'sent role expectations', the less likely role messages will be misunderstood or distorted" (Marrone, Tesluk & Carson, 2007, p. 1427). Therefore, consensus on the external focus of the team will make it easier for team members to engage in boundary spanning behaviour (ibid).

However, although this team external focus results in a more positive approach towards boundary spanning behaviour, it does not automatically reduce the level of role ambiguity and

role conflict for the boundary spanner. Individual role stress will only be reduced when teams as a whole engage in external activities (ibid). As the neighbourhood managers in this study are among the only ones in their team who perform external activities, they are expected to perceive all the burdens of the external orientation. Following Lysonski, Singer and Wilemon (1988), it is expected that the boundary spanning activities of neighbourhood managers cause role conflict, but that they do not directly affect role ambiguity.

H9: Team external focus does not directly affect the level of role ambiguity of a neighbourhood manager experiences.

H10: The higher the level of external focus among co-workers, the more role conflict a neighbourhood manager experiences.

Participation

A final organizational determinant for role stress as described in the literature is participation. Participation is defined as "the degree to which the [boundary spanner] is able to influence organizational decisions about the job" (Teas, 1981, p. 211). This construct goes beyond 'influence over standards', as Walker et al. (1975) define participation. Besides influence over standards, participation as defined by Teas (1983) also includes other factors such as influence over training programs and reporting methods.

Previous research has found a significant negative relationship between participation and role ambiguity (Teas, 1983; Walker et al., 1975). It was assumed that when boundary spanners participate in both the process of determining performance standards by which they will be judged and in other organizational decisions, they become more familiar with these decisions. Accordingly, there will be less uncertainty about what is expected of a boundary spanner (ibid.). In this respect, the level of role ambiguity among neighbourhood managers is expected to decrease.

Also a significant negative effect of participation on role conflict was found, although less strong compared to the found effect for role ambiguity (Teas, 1983; Jackson, 1983). In this case, when a boundary spanner participates in making certain decisions, the boundary spanner can ensure that the expectations of the environment become reflected in the organization's policies. This will decrease the conflict between environmental demands and organizational standards (Jackson, 1983; Walker et al., 1975). Hence, when neighbourhood managers are able to influence certain organizational decisions, their level of role conflict is expected to decrease.

H11: The more influence on organizational decisions, the less role ambiguity a neighbourhood manager experiences.

H12: The more influence on organizational decisions, the less role conflict a neighbourhood manager experiences.

2.2.4.2 Environmental determinants

As the contingency theory assumes, environmental determinants are also of influence on how well neighbourhood manager are able to perform boundary spanning activities. Two environmental determinants which are expected to be of influence on the level of role stress, and as such indirectly on job satisfaction and boundary spanning performance, are dynamism and complexity.

Environmental dynamism

Environmental dynamism refers to the extent to which factors in the external environment of boundary spanners are in continual processes of change (Duncan, 1972). Examples of environmental dynamism given in the literature are changes in technology, in preferences and in competition (Sohi, 1996; Van Meerkerk & Edelenbos, 2018). In the case of the neighbourhood, environmental dynamism can be about changing content, changing viewpoints, changing preferences and change in the actors involved (De Bruijn & Ten Heuvelhof, 2008; De Bruijn et al., 2010; Klijn & Koppenjan, 2016).

Empirical research on the relationship between environmental determinants and role stress is very limited. An exception is the study of Sohi (1996) on the effects of environmental dynamism and environmental heterogeneity on salespeople in manufacturing industries. The researcher found a significant positive effect of environmental dynamism on role ambiguity and role conflict. It was assumed that the more dynamic the environment is the more boundary spanners have to come up with new, creative and innovative solutions to the situation they face. As Sohi (1996) states, "Even though the requirement for innovative solutions is inherent in a [boundary spanners'] job, its need increases when [boundary spanners] operate in a dynamic environment" (p. 53). For situations that require innovativeness, however, no guiding principles or standard procedures are present. Boundary spanners can therefore be uncertain about what is expected of them and how they should behave (Walker et al., 1975). Moreover, the more dynamic the context is, the more the expectations which exist in the environment are subject to change. In such a case, it may become unclear for the boundary spanner what is expected of him or her. Therefore, in this study it is expected that neighbourhood managers experience more role ambiguity under conditions of high environmental dynamism.

In order to develop and carry out innovative solutions, boundary spanners need a certain level of flexibility and autonomy in their job. However, flexibility often conflicts with standard

rules and procedures that have to be followed in an organization (Walker et al., 1975). In this way, it becomes difficult for boundary spanners to meet the requirements of the environment. It line with this reasoning, it is expected that neighbourhood managers in this study experiences more role conflict when the environment is highly dynamic.

H13: The higher the degree of environmental dynamism, the more role ambiguity a neighbourhood manager experiences.

H14: The higher the degree of environmental dynamism, the more role conflict a neighbourhood manager experiences.

Environmental complexity

Another environmental determinant for role stress is environmental complexity. Environmental complexity refers to both the number of elements in the environment and to the heterogeneity or dissimilarity among these elements (Duncan, 1972). The greater the number of elements with which one has to deal and the more these elements are perceived to be different from each other, the higher the degree of complexity.

The research of Sohi (1996) has shown that environmental complexity does not have a significant influence on role ambiguity. Even though the environment consists of various and dissimilar elements, boundary spanners do not seem to be uncertain about what is expected of them. An explanation for the lack of a relation between environmental complexity and role ambiguity could be that environmental complexity is more predictable compared to environmental dynamism. Boundary spanners are able to learn what is expected of the complex environment and hence develop coping mechanisms (ibid.). Regardless of how divers the environment is, as long as it remains stable, it will be clear to boundary spanners how they are expected to behave. It is therefore expected that the level of role ambiguity among neighbourhood managers in this study will not be influenced by the degree of environmental complexity.

For role conflict, a positive relation with environmental complexity was found (Sohi, 1996). This finding is in line with the expected influence of the amount of integration required by the boundary spanner on role conflict, as assumed by Pruden (1969) and Miles (1976). Integration is about "the extent to which the [boundary spanner] must find jointly satisfying solutions to often divergent expectations of company and customer" (Behrman & Perreault, 1984, p. 12). The more complex the environment is, the more effort it takes to find solutions that are suitable to all involved actors. In such a situation, a boundary spanner will experience more conflicting expectations and hence more role conflict.

H15: Environmental complexity is not of influence on the level of role ambiguity of a neighbourhood manager experiences.

H16: The higher the degree of environmental complexity, the more role conflict a neighbourhood manager experiences.

2.2.4.3 Individual determinants

A final set of determinants that may influence the level of role stress, are individual determinants. These determinants cannot be influence by external factors, but are personal traits. The individual determinants that are discussed here are locus of control, need for clarity and experience.

Locus of control

Locus of control refers to the extent to which people perceive they can control events that affect their lives (Rotter, 1966). A distinction is made between internal and external locus of control. People with an internal locus of control – so called internals – believe that they are largely in control of events that affect them. They attribute events and outcomes to their own behaviour and actions (Rotter, 1966; Spector, 1982; Teas, 1981). For example, when an internal performs poorly on a test, this person will blame the result to his or her own lack of preparation. In comparison, people with an external locus of control – so called externals – believe that events are beyond their control. Externals blame outside forces such as chance, luck, fate and the power of other people for what happens to them (ibid.).

This study assumes work locus of control (Spector, 1982) instead of general locus of control (Rotter, 1966). The reason is that this study is focused on the work environment of neighbourhood managers rather than on other, general aspects of their lives. Using a general construct in order to measure a domain specific variable is found to show limited results (Spector, 1982; Wang, Bowling & Eschleman, 2010). A domain specific construct is therefore more appropriate given the context of this study. Work locus of control is about the extent to which one believes he or she can control work outcomes (Spector, 1988). The distinction between internals and externals lasts in case of work locus of control.

As shown in previous research (Anderson, 1977; Singh & Roads, 1991; Spector, 1982), internals are less likely to experience less role ambiguity and role conflict compared to externals. Internals believe they have greater control over situations and therefore tend to assume that they can influence these situations. As Spector (1982) states, “not only do internals perceive greater control, [...] they may actually seek situations in which control is possible” (p. 483). Their

sense of personal control makes internals appear to be more actively looking for information and more focused on reducing or eliminating stressors (Ng, Sorensen & Eby, 2006). Internals will seek actively for cues that help them to know what to do, thereby reducing their level of role ambiguity. Moreover, they will rely upon self-generated role definitions when expectations are unclear or conflicting with each other (Jackson & Schuler, 1985). Although relation between locus of control and both role ambiguity and role conflict was not that strong in previous research, the neighbourhood managers in this study with an internal focus of locus of control are expected to experience less role ambiguity and role conflict compared to externals.

H17: Neighbourhood managers with an internal locus of control experience less role ambiguity compared to neighbourhood managers with an external locus of control.

H18: Neighbourhood managers with an internal locus of control experience less role conflict compared to neighbourhood managers with an external locus of control.

Need for clarity

A second individual determinant for role stress is need for clarity. Need for clarity is about the individual capacity to cope with job related ambiguity (Behrman, Bigoness & Perreault, 1981). Having a high need-for-clarity means that an individual feels the need to know what is expected of him of her and how he or she should behave on the job (Kohli, 1989). Mixed results for the relationship between need for clarity and role stress exist (Lyson, 1971; Miles & Petty, 1975). It could be expected that an individual with a high need-for-clarity experiences more role ambiguity under conditions of unclear or lacking information compared to individuals with a low need-for-clarity. As with role ambiguity, role conflict can also be a source of uncertainty for employees. Individuals with a high need-for-clarity have difficulty dealing with this uncertainty and are therefore more likely to experience role conflict than individuals with a low need-for-clarity. Despite the mixed results of precious research, neighbourhood managers with a high need-for-clarity are expected to experience role ambiguity and role conflict due to the uncertainty in their boundary spanning position.

H19: Neighbourhood managers with a high need-for-clarity experience more role ambiguity compared to neighbourhood managers with a low need-for-clarity.

H20: Neighbourhood managers with a high need-for-clarity experience more role conflict compared to neighbourhood managers with a low need-for-clarity.

Experience

The final individual determinant which is expected to be of influence on the level of role stress is experience. An individual becomes more experienced the longer he or she is working in an

organization. The longer the company tenure of a boundary spanner, the more the boundary spanners' understanding of role expectations increases. Accordingly, the level of role ambiguity will decrease the more experienced a boundary spanner is (Perrone et al., 2003; Walker et al., 1975). In addition, a boundary spanners' knowledge on how to steer its role when confronted with conflicting expectations increases as he or she is working in an organization for a longer period of time (ibid.). It should be noted, however, that the relation for role ambiguity is found to be stronger than the relation for conflict (Jackson & Schuler, 1985). In this study, a negative influence of experience on the level of role ambiguity and role conflict among neighbourhood managers is expected.

H21: The more experienced, the less role ambiguity a neighbourhood manager experiences.

H22: The more experienced, the less role conflict a neighbourhood manager experiences.

2.2.5 Role stress and job related outcomes

The relationship between role stress and job outcomes has been studied extensively. In this context, several job outcomes are examined, such as job tension, turnover intensions, anxiety, psychological wellbeing, job satisfaction and job performance. As this study is mainly interested in job related attitudes and strains and less in health outcomes, focus is on job satisfaction and performance.

Job satisfaction

Previous research has shown that both role ambiguity and role conflict have a dysfunctional impact on job satisfaction (e.g. Behrman et al., 1981; Behrman & Perreault, 1984; Churchill, Ford & Walker, 1976; Jackson & Schuler, 1985; Kahn et al., 1964; Lysonski et al., 1988; Rizzo et al., 1970; Singh, 1993). In these studies it was expected that when a boundary spanner perceives that expectations are conflicting or a boundary spanner is uncertain about how he or she should perform or will be evaluated, the boundary spanner will be pessimistic about the chances to satisfy the demands of its role set. This will reduce the boundary spanner's job satisfaction (Churchill et al., 1976; Singh, 1993; Walker et al., 1977). In addition, job satisfaction is likely to be reduced by the fact that feelings of personal accomplishment are hardly achieved due to uncertainty about how a boundary spanner is expected to behave (Walker et al., 1977). In this way, neighbourhood managers who experience considerable role conflict and role ambiguity are expected to be less satisfied with their job.

H23: The more role ambiguity a neighbourhood manager experiences, the less satisfied he or she is about the job.

H24: The more role conflict a neighbourhood manager experiences, the less satisfied he or she is about the job.

Performance

Direct negative effects of role ambiguity and role conflict on performance are found in previous research as well, although the results for role conflict are mixed (Behrman & Perreault, 1984; Jackson & Schuler, 1985; Lysonski et al., 1988; Lysonski & Woodside, 1989). For role ambiguity it is assumed that a lack of information on how to do well on a job will lead to ineffective and insufficient performance (Behrman & Perreault, 1984; Jackson & Schuler, 1985; Singh, 1993). Whether this direct negative relation is found, however, seem to depend on whether a multifaceted construct for role ambiguity is used (Singh, 1993). A negative relation with performance can also be expected for role conflict, as it is impossible to do everything as expected under conditions of role conflict (Jackson & Schuler, 1985). However, sometimes a positive relation is found, either significant or non-significant. This has to do with the fact that boundary spanners learn to deal with conflicting expectations in their job, which enables them to nevertheless perform well (Behrman & Perreault, 1984).

A particular type of performance is considered in this study, which is boundary spanning performance. This type of performance concerns the extent to which neighbourhood managers are successful in carrying out boundary spanning activities. The activities involved are the connecting, selecting, translating and creating activities of boundary spanners as set out in section 2.2.1. In order to be able to successfully carry out boundary spanning activities – i.e. to obtain information from the outside world and disseminate this information to the inside world and vice versa – neighbourhood managers need to be in constant communication with both actors within their own organization and actors in the environment. To this end, neighbourhood managers need to have both strong internal and external linkages (Tushman & Scanlan, 1981). Neighbourhood managers to whom this applies can be considered as competent boundary spanners. Both role ambiguity and role conflict are expected to have a negative impact on the boundary spanning performance of neighbourhood managers with strong internal and external linkages.

H25: The more role ambiguity a neighbourhood manager experiences, the lower his or her boundary spanning performance.

H26: The more role conflict a neighbourhood manager experiences, the lower his or her boundary spanning performance.

2.2.6 Moderating role of organizational and individual determinants

In addition to research into the direct relationships between variables, as described above, research has also been conducted into the testing of potential moderating effects of organizational and individual determinants on the relationship between role stress and job outcomes (Behrman et al., 1981; Ganster, Fusilier & Mayes, 1986; O'driscoll & Beehr, 2000; Stamper & Johlke, 2003; Tetrick & LaRocco, 1987). Although the results are not equally consistent in all cases, it is considered worthwhile to test some of the assumed moderating effects in this study. The effects that will be examined are social support, participation, locus of control, need for clarity and experience.

Social support

The moderating hypothesis for social support suggests that social support reduces the negative effects of role stress on various job outcomes (LaRocco, House & French, 1980; Stamper & Johlke, 2003; Viswesvaran et al., 1999). According to this hypothesis, social support provides boundary spanners with the resources needed to adapt to role stress and its consequences. However, empirical findings for the moderating effect of social support are mixed. The effect seems to depend on the aspects of role stress, the type of job outcome and the sources of support (Ganster et al., 1986; Sullivan & Bhagat, 1992). As such, LaRocco, House and French (1980) found a stronger buffering effect for co-worker support than for support from the supervisor or one's non-work context. Moreover, the moderating effect of social support seems to be different for the effect of role ambiguity and role conflict on both job satisfaction and performance (Stamper & Johlke, 2003; Viswesvaran et al., 1999). Abdel-Halim (1982) found a moderating effect of social support on the relation between both role ambiguity and role conflict with job satisfaction, whereas Stamper & Johlke (2003) only found this effect for role ambiguity. In addition, Stamper & Johlke (2003) expected social support to moderate the relationship of both role ambiguity and role conflict with performance, but only for role conflict a significant effect in the opposite direction was found.

H27: *Social support decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.*

H28: *Social support decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.*

Participation

Research into the moderating effect of participation on the relationship between role stress and job outcomes was performed by Schuler (1977). The researcher hypothesized that participation would lead to more job satisfaction and performance under conditions of high role ambiguity

and role conflict. This is because employees who participate in decision-making are expected to receive more information and feedback, what will help them to deal with conflicting and ambiguous situations. However, only for satisfaction a significant moderating effect of participation was found. An explanation for the absence of a significant effect for performance was given in terms of an ability-adaptability phenomenon (Schuler, 1975; Schuler, 1977). According to this phenomenon, "employees at the higher levels of the organization [where participation mainly takes place,] have the ability to cope with or adapt to role conflict and ambiguity although it is still dissatisfying" (Schuler, 1977, p. 164).

H29: Participation decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.

H30: Participation decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.

Locus of control

The moderator hypothesis for locus of control states that the negative relation between role ambiguity and role conflict and job outcomes such as job satisfaction and performance is weaker for internals compared to externals (Jackson & Schuler, 1985). According to Parkes (1994) this has to do with the fact that "internal locus of control is associated with greater use of active, problem-focused strategies" (p. 117). Individuals with an internal locus of control are thus expected to be better able to deal with the consequences of role ambiguity and role conflict, and will therefore experience higher levels of job satisfaction and job performance. However, as Jackson & Schuler (1985) state, "the moderator hypothesis prevalent, but the evidence for the moderator hypothesis is less supportive" (p. 35).

H31: Locus of control decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.

H32: Locus of control decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.

Need for clarity

The potentially moderating effect of need for clarity is mainly examined on the relationship between role ambiguity and job outcomes. It is expected that individuals with a high need for clarity are more prone to experience negative job outcomes under conditions of high ambiguity than individuals with a low need for clarity (Behrman et al., 1981; Miles & Petty, 1975; O'driscoll & Beehr, 2000). This has to do with the fact that individual with a high need for clarity have more difficulty dealing with unclear situations and its consequences. O'driscoll and Beehr

(2002) hypothesized a buffering effect of need for clarity on the relationship between role conflict and the level of job satisfaction and performance as well, as role conflict can be a source of uncertainty for employees. Results of the effect of role stressors on job satisfaction and performance are mixed however.

H33: Need for clarity decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.

H34: Need for clarity decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.

Experience

Experience has the potential to moderate the relationship between role stress and job outcomes as well. In this context, experience or job tenure can be regarded as an indicator for ability (Jackson & Schuler, 1985). It is expected that boundary spanners with a high ability are better capable of effectively dealing with conflict and ambiguity. This is because these individuals have learned what is expected of them and how to deal best with conflicting situations (Churchill et al., 1976; Schuler, 1975). Longer job tenure is thus expected to buffer the negative effects of role ambiguity and role conflict on job satisfaction and performance. However, more support for the moderating effect of experience on the relation between role stress and job satisfaction is found than for performance (Jackson & Schuler, 1985).

H35: Experience decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.

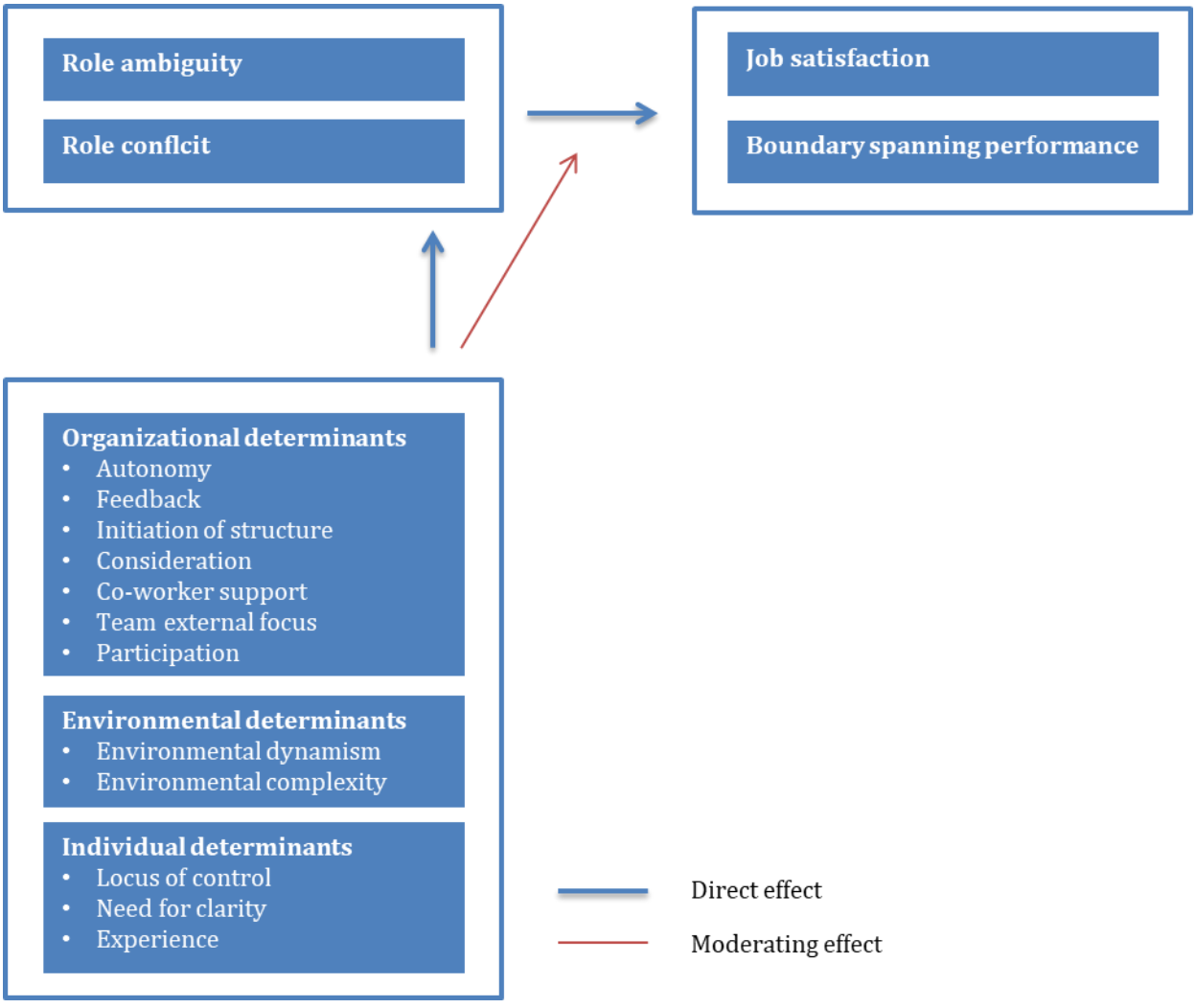
H36: Experience decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.

III Conceptual framework

3.1 Conceptual model

The discussion of theory on boundary spanning, role stress, its determinants and job outcomes in the previous chapter results in the following conceptual model. The various concepts in the model will be operationalized in the next section.

Figure 2 Conceptual model



3.2 Operationalization

3.2.1 Determinants of role stress

Organizational determinants

The determinants of role stress are the independent variables in this study. The seven organizational determinants that are discussed in this study are autonomy, feedback, initiation of structure, consideration co-worker support, team external focus and participation. These

determinants have been measured by multiple-item scales that are available in the literature. All items for measuring the organizational determinants were measured on a five-point Likert scale, which ranged from "totally disagree" to "totally agree".

Autonomy is defined as "the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out" (Hackman & Oldham, 1976, p. 258). The construct was measured by four items on a five-point Likert scale. The items were adopted from Teas (1981; Teas, 1983) and have previously been used by Singh (1993). The estimated reliability of the scale was .84, indicating a sufficiently reliable scale (Bryman, 2012).

Feedback also stems from the work of Hackman and Oldham (1976) and is defined as "the degree to which carrying out the work activities required by the job results in the individual obtaining direct and clear information about the effectiveness of his or her performance" (p. 258). The items for measuring feedback have previously been used by Singh (1993) and are supplemented in this study with one item of the scale of Teas (1981; 1983). A total of five items was used, which were measured on a five-point Likert scale ranging from "totally disagree" to "totally agree". The estimated reliability for the scale was .88 and therefore reliable.

For measuring *initiation of structure,* the items adopted from Teas (1981; 1983) were used. These items were supplemented with five items drawn from Stock and Hoyer (2002) in order to guarantee the reliability of the scale. The final construct consisted of ten times and measures "the degree to which the leader initiates psychological structure for subordinates" (House, 1971, p. 321). The items were measured on a five-point Likert scale which ranged from "totally disagree" to "totally agree". The estimated reliability of the scale was .87, indicating acceptable reliability of the measure.

Leader consideration stems from the work of House (1971) and is defined as "the degree to which the leader creates a supportive environment of psychological support, warmth, friendliness, and helpfulness" (p. 321). The construct was measured with five items adapted from Teas (1981; 1983) by Singh (1993) on a five-point Likert scale. The estimated reliability measure was .89.

Co-worker support is about the feedback and helping behaviour with which co-workers support the boundary spanner (Zhou & George, 2001). A total of four items drawn from the work of Zhou and George (2001) was used in order to measure co-workers support. The estimated reliability for the scale was .73 and therefore just sufficiently reliable.

Team external focus is defined as "reflecting [co-workers] collective perceptions about the relevance and value of boundary spanning as a critical team function" (Marrone et al., 2007, p. 1426). Three items adopted from Marrone et al. (2007) have been used in this study. The

items were measured on a five-point Likert scale ranging from "totally disagree" to "totally agree". The scale used has demonstrated a relatively high reliability measure of .91.

Participation is about the extent to which the neighbourhood manager is allowed to participate in organizational decisions. A four item scale is used, adopted from Hackman and Oldham (1976) by Teas (1981; 1983). The items were measured on a five-point Likert scale. The estimated reliability of the construct was .82, and therefore sufficiently valid.

Environmental determinants

Two environmental determinants are discussed in this study, being environmental dynamism and environmental complexity. *Environmental dynamism* is about the frequency of changes in the external environment (Sohi, 1996). *Environmental complexity* is operationalized as the extent to which elements in the environment differ from each other (ibid.). For both variables items are developed based on the scale of Sohi (1996), which was adopted from Achrol and Stern (1988). A personal interpretation that fits the context of this study is given to the items used by Sohi (1996). Environmental dynamism is measured with twelve items on a five-point Likert scale. The estimated reliability was .80. Environmental complexity is measured with six items on a five-point Likert scale. For this scale the estimated reliability was .77.

Individual determinants

The individual determinants addressed in this study, are locus of control, need for clarity and experience. The variable *locus of control* stems from the work of Rotter (1966) and is about the extent to which people believe they can control events that happen in their lives. Over the years, however, the notion arose that there was a need for domain specific locus of control constructs. A work locus of control scale was developed by Spector (1988), which measures the control people believe they have over situations at their work. Items from this latter scale are used in this study. The estimated reliability of the construct was .75/.85. A low score on this scale indicates an internal locus of control.

For measuring *need for clarity* the scale of Lyons is used (1971). The scale consists of four items and measures the extent to which a neighbourhood manager feels the need to know what is expected of him or her on the job. The items are measured on a five-point Likert scale which ranges from "totally agree" to "totally disagree". The estimated reliability measure of the construct was .82.

Experience was measured by asking neighbourhood managers about their time working with the current organization as well as for their time working in the current function. When someone has only recently started working as a neighbourhood manager, but has been working within the organization for some time already, then this may influence the extent to which the

neighbourhood manger is able to deal with different role expectations. The neighbourhood manager may already understand role expectations. Therefore, questions are asked about both tenure in the organization and tenure in the current function.

3.2.2 Role stress

Role stress is the main variable in this study. This study will look at which determinants influence the level of role stress and how role stress influences certain job outcomes. Role stress occurs when an employee faces multiple expectations that he or she experiences as unclear, inconsistent and incompatible. Two key aspects of role stress are role ambiguity and role conflict. By Rizzo, House and Lirtzman (1970) role ambiguity is defined as the "lack of the necessary information available to a given organizational position" (p. 151). In particular, role ambiguity is about information regarding role expectations. Role conflict is defined as "the simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult compliance with the other" (Kahn et al., 1964, p. 19). An often used measure for role ambiguity and role conflict stems from Rizzo et al. (1970). The scales have been criticized for the fact that the items for role ambiguity and role conflict would only be artefactual constructs and that they measure too much the same. However, several validation studies have shown that the items load on two factors (e.g. House, Schuler & Levanoni, 1983; Tracy & Johnson, 1981). Based on their extensive uses, their factorial independence and previous evidence of their reliability, the scales of Rizzo et al. (1970) have been used in this study. Role ambiguity is measured with six items of the original scale. The construct has shown to be reliable at the alpha level of .78/.86. Role conflict is measured with eight items on a five-point Likert scale. Reliability measures for the construct have shown to be between .81 and .83, indicating a sufficient reliability.

3.2.3 Job outcomes

Job satisfaction

Job satisfaction is one of the two job outcomes in this study. Job satisfaction is measured with five items adapted from Babin and Boles (1998) and Stock and Hoyer (2002), whom base themselves on the work of Brayfield and Rothe (1951). The scale measures the extent to which a neighbourhood manager is satisfied with his or her working situation on a five-point Likert scale ranging from "totally agree" to "totally disagree". The estimated reliability measure of the construct was .80/.97.

Boundary spanning performance

The other job outcome in this study is *boundary spanning performance*. Boundary spanning performance concerns the extent to which neighbourhood managers are successful in carrying out boundary spanning activities. In this study, boundary spanning performance is measured in two different ways. First of all, performance is measured by looking at certain boundary spanning activities that neighbourhood managers are expected to perform. The operationalization of boundary spanning activities derives from the work of Klijn, Edelenbos and Steijn (2010) and Van Meerkerk and Edelenbos (2014). Five different boundary spanning activities are distinguished, which focus on the connecting, translating and mobilising activities of boundary spanners as described in the theoretical framework. Boundary spanning performance is then measured by asking neighbourhood managers to the extent to which they succeed in carrying out these activities. The construct has previously shown a reliability measure of .84/.76.

As boundary spanning performance is of importance for the realization of good network activities (Van Meerkerk & Edelenbos, 2014), it was decided in this study to measure boundary spanning performance also in a different way. In addition to looking at activities for measuring boundary spanning performance, this study also looked at the frequency of contact neighbourhood managers have with certain actors within the municipality and in the neighbourhood. When carrying out their activities, boundary spanners are in constant communication with both different departments in the own organization and actors in the environment (Tushman & Scanlan, 1981; Van Meerkerk & Edelenbos, 2014). Frequency of contact was therefore expected to be an indicator for boundary spanning performance since, in order to successfully carry out boundary spanning activities, neighbourhood managers need to have frequent contact with both internal and external actors. The variable is measured by asking respondents about their frequency of contact with actor on a scale that ranges from "never", "a few times a year", "monthly", "weekly" to "daily".

3.3 Methodology

3.3.1 Research method and research design

The goal of this study is to determine whether neighbourhood managers experience role stress, what factors are of influence on this and how the level of role stress affects their boundary spanning performance. The research question that is central is: *"What is the level of role stress experienced by neighbourhood managers as boundary spanning persons, how can this be explained by organizational, environmental and individual determinants and what is the impact on their job satisfaction and boundary spanning performance?".*

Based on the goal of this study, a quantitative research approach is used. In quantitative research the aim is not to just describe a phenomenon, but also to explain why things are the way they are. The causes and consequences of a phenomenon are sought for (Bryman, 2012), as is the case in this study. Not the underlying meanings, experiences and nuances of role stress among neighbourhood managers are central in this study, but focus is on the question how the level of role stress is influenced by several organizational, environmental and individual determinants, and what the effect of role stress is on job outcomes. Moreover, in line with the quantitative research approach, this study is not aimed at generating new theories but on testing existing theories in a specific context (ibid.). For this study, theories from management and sales literature on the causes and consequences of role stress are applied to the work field of neighbourhood managers. The study eventually aims to make claims that can be generalized for a large population. An in-depth focus on a single case, as is usually the case in a qualitative research approach, would therefore limit this study. A broader view on the existing relations is sought, for which a quantitative research approach is the most suitable.

The quantitative research design used to answer the research question of this study is the cross-sectional design. The rationale behind this design is to collect quantifiable data on more than one case and at a single point in time, from which patterns of association can be examined (Bryman, 2012). In cross-sectional research, data on the current situation is collected instead of intervention is taking place in an existing situation (Baarda et al., 2014, p. 68). By using the cross-sectional research design insight was gained into the level of role stress among a large group of neighbourhood managers. Moreover, an understanding was obtained of the manner in which neighbourhood managers assess several organizational, environmental and individual characteristics as well as their satisfaction with their job and their boundary spanning performance. In turn, the cross-sectional design made it possible to find out whether a relation between the different factors of the conceptual model existed (ibid.). The data has been obtained by making use of a survey (Appendix A).

3.3.2 Research objects

In order to perform a cross-sectional survey research, multiple cases need to be selected (Bryman, 2012). The actors who are the object of research in this study are neighbourhood managers of various municipalities in the Netherlands. In recent years – and in particular, since the call for a participation society by King Willem Alexander in his 'State of the throne' of September 2013 (NOS, 2013) – the position of the neighbourhood manager has become increasingly important. Neighbourhood managers are employees within municipalities who operate at the boundary of their organization. On the one hand, neighbourhood managers

represent the neighbourhood in the municipal organization. By being present in the neighbourhood, neighbourhood managers know what is at stake in the neighbourhood and they are able to deliver the signals from the neighbourhood at the right place in the municipal organization. Neighbourhood managers are thus the point of contact for citizens and the eyes and ears in the neighbourhood for the municipality (Peeters et al., 2010). On the other hand, neighbourhood managers also represent the municipality in the neighbourhood by carrying out the plans and policies of the municipality in the neighbourhood. Although different names are used for the function of the neighbourhood manager (e.g. area manager, neighbourhood coordinator and neighbourhood director), there is chosen to only use the term neighbourhood manager in this study in order to avoid confusion.

3.3.3 Data collection

In this study, the choice was made to collect the empirical data by means of a survey. In order to collect this data, the population for the study had to be identified. A problem here is that an exhaustive overview of neighbourhood managers in the Netherlands does not exist. It is therefore difficult to say exactly how many neighbourhood managers there are active in the Netherlands, in other words, how large the population is. For this reason, it was decided not to use the total number of neighbourhood managers as the population, but the number of municipalities in the Netherlands. A sample from the total number of municipalities was selected, of which the neighbourhood managers were contacted.

At the beginning of 2018, the total number of municipalities in the Netherlands was 380 (CBS, 2018a). Because contacting all neighbourhood managers from this total population would be impractical, a sample of the total number of municipalities was selected. The sample has been selected by means of probability sampling. This type of sampling assumes that each unit in the population is selected randomly, in such a way that each unit has an equal chance of being selected (Baarda et al., 2014; Bryman, 2012). A specific type of probability sampling is used, which is stratified random sampling. This type of sampling involves that the population is classified according to a criterion and that a sample is selected from each of the resulting groups (ibid.). The criteria used in this study is the number of inhabitants in each the municipality. To this end, the municipalities are divided into the groups (1) 100.000 inhabitants or more, (2) 100.000 to 50.000 inhabitants and (3) 50.000 inhabitants or less. Data on the number of inhabitants in each municipality as of January 1st, 2018 has been obtained from CBS StatLine (CBS, 2018b). As the table below shows, the three groups comprise 31, 49 and 300 municipalities respectively.

Table 2 Sampling of municipalities

Population of the municipality	Number of municipalities	Selected number of municipalities	Number of neighbourhood managers contacted
< 100.000 inhabitants	31 municipalities	19 municipalities	257 NM
100.000 – 50.000 inhabitants	49 municipalities	19 municipalities	94 NM
> 50.000 inhabitants	300 municipalities	19 municipalities	50 NM
Total	380 municipalities 100 % of total	57 municipalities 15 % of total	401 neighbourhood managers

In this study, it was decided to work with a sample of 15% of the total number of municipalities in the Netherlands. This corresponds with a total sample size of 57 municipalities, as is shown in table 9. However, the sample is disproportionately distributed across the three groups of municipalities. For each group 19 municipalities are selected. The reason for this is that this was the only way to ensure that sufficient neighbourhood managers would be contacted, because there are more neighbourhood managers working in the larger municipalities. There is reflected on the implications of a disproportional sample in subsection 3.3.5.

The sample of 57 municipalities was obtained by using the RANDOM-function in Excel. This function linked the municipalities in each of the three groups to a random number. Next, these random numbers have been ordered from low to high. The first nineteen numbers for each group were selected. For the selected municipalities, the contact details of the neighbourhood managers who work in these municipalities were collected. This was done by searching on the website of these municipalities for the term neighbourhood manager (or an equivalent term used in practice for this function, such as area manager, neighbourhood coordinator and neighbourhood director). In most cases, the name and e-mail address of the neighbourhood managers were available on these websites. In case the contact details were not available on the website of the municipality, these details had to be found by searching on Google for the neighbourhood manager in a certain municipality. The contact details were then obtained from public information on external sites or in online documents. Of the 57 selected municipalities, a total of 401 neighbourhood managers was approach (table 2).

Of the 401 neighbourhood managers that were approached, 236 neighbourhood managers filled in the questionnaire (either entirely or partly). This number corresponds to a response rate of 58.9%. The distribution of the responses among the three groups of municipalities is shown in table 10. What becomes clear form this table is that most of the respondents are working in

municipalities with 100.000 inhabitants or more. This result is not that surprising, as proportionally more neighbourhood managers in this group of municipalities were approached.

Table 3 Response rate

Population of the municipality	Response rate
< 100.000 inhabitants	58,7% of 236 responses
100.000 – 50.000 inhabitants	24,9% of 236 responses
> 50.000 inhabitants	16,4% of 236 responses

3.3.4 Data analysis

Assessing the data

In this study, the statistical analysis of the collected data was carried out by making use of the programme *IBM SPSS Statistics 23*. The first step in the data analysis consisted of assessing the data set. It became clear that not all of the 236 respondents completed the questionnaire entirely. The use of the partial responses of these respondents in the analyses could give a distorted picture of the results. As role stress is the main topic in this study, it has therefore been decided to only maintain the data of respondents who filled in the questionnaire up to and including the questions about role stress (i.e. till question 48, Appendix A). This resulted in a total of 55 cases being removed, leaving 181 useful cases.

Subsequently, some questions had to be recoded in order to make sure that all the questions for a given dimension were asked in the same direction. This concerned the questions Q49, Q51, Q53, Q86, Q105, Q106, Q109 and Q111 (Appendix A). In addition, the questions on role ambiguity have been recoded as it would be easier to interpret the results when a high score corresponds to a high degree of role ambiguity (Appendix A).

Construction of the scales

In order to be able to construct scales of the different items in the questionnaire, factor- and reliability analyses have been performed. The analyses have been performed for the dimensions role ambiguity (9 items), role conflict (11 items), autonomy (4 items), feedback (5 items), initiation of structure (7 items), consideration (5 items), co-worker support (4 items), team external focus (3 items), participation (4 items), environmental dynamism (12 items), environmental complexity (6 items), locus of control (8 items), need for clarity (4 items), job satisfaction (5 items) and boundary spanning performance. This latter dimension was surveyed in two different ways. First, respondents were asked to indicate their performance of boundary spanning activities (5 items). Next, respondents were asked about their frequency of contact with different parties within both the municipality and the neighbourhood (16 items). As the

dimension experience was measured by means of two separate questions, these are not included in the factor- and reliability analyses. The same applies to the control variables.

The extraction method used for the factor analyses in this study was principal component analysis (PCA), with varimax as the used rotation method. In order to evaluate whether the items were suitable for running PCA, the Kaiser-Meyer-Olkin (KMO) criterion and the Bartlett's Test of Sphericity have been assessed. In all cases, the KMO value was above .5 and the Barlett's Test was significant (Sig < .05), indicating that the data were suitable for factor analysis (Allen & Bennett, 2012). To decide whether the different items could be identified as a factor, the Kaiser's recommendation of eigenvalues over 1 is used (Field, 2009). After performing the factor analyses, the groups of items (i.e. factors) that were identified were subjected to a reliability analysis. The factors should have a Chronbach's alpha of .70 or higher for the scale to be considered internally consistent (Bryman, 2012; Field, 2009). The measurement level of a constructed scale can be considered as interval/ratio (ibid.). An overview of the factor loadings and alpha levels can be found in Appendix B.

Role ambiguity

Factor analysis has shown that the different items for role ambiguity load on one factor, explaining 43.99% of the variance in the data. The alpha level of the items was $\alpha = .834$, indicating a reliable scale. Based on this finding, the items for role ambiguity were constructed to a single scale (RoleAmb).

Role conflict

Factor analysis for the items for role conflict indicated that the items load on three factors. In total, these factors accounted for 53.95% of the variance. One of the factors corresponds to the theoretical concept of role overload (Q38, Q39, Q40) and one of the factors to the theoretical concept of intersender conflict (Q42, Q43, Q44). The final factor, consisting of Q41, Q45, Q46, Q47 and Q48, does not correspond to one particular form of role conflict as described in the theory. Given the intention of this study to mainly focus attention on role overload and intersender conflict, it was decided not to include this factor in any further analyses. A reliability analysis was performed on the first two factors that emerged from the items for role conflict. The analysis for role overload showed an alpha level of $\alpha = .684$, which is just below the critical value of $\alpha = .70$. However, as the corrected item-to-total correlations are all above .40 and the Composite Reliability (CR) is .826, it was decided to construct the scale after all (RoleCon_overload). The reliability analysis for intersender conflict supported the creation of the scale as the alpha level was $\alpha = .736$ (RoleCon_intersender).

Autonomy

The items measuring autonomy loaded on one factor and explained 72.58% of the variance in the data. The items seemed to form a reliable scale, as the alpha level for the items is α = .870. A scale for the items was constructed (Autonomy).

Feedback

The items for feedback also turned out to rely on one factor, which explained 54.87% of the variance. The Chronbach's alpha for the 5 items was α = .790. Although this is an adequate level, an examination of the item-total statistics indicated that the alpha level would increase to α = .810 if Q76 was removed. This item asked to what extent respondents agreed with the statement "I know how well I am performing on my job" (Q76). This item has probably been interpreted differently by the respondents compared to the other items, which are about knowing how well you are performing on the job and receiving enough information on your performance. Consequently, this item has been dropped from the scale (Feedback), which also increased the total variance explained by the factor to 64.09%.

Initiation of structure

Factor analysis of the items for initiation of structure showed that the items load on two factors. In total, the factors explained 58.79% of the variance. Three items (Q79, Q80 and Q83) loaded after rotation on both factors. The reliability analysis showed an alpha level of α = .772 for the 7 items of initiation of structure. However, this level increased to α = .787 if item Q78 was removed. This item asked to what extent respondents agreed with the statement "My supervisor asks that the workers follow standard rules and regulations" (Q78). As the other questions for initiation of structure are more about monitoring goal achievement and work performance, it is possible that the item mentioned does not measures completely the same as the other items. After dropping item Q78, the factor analysis showed that the remaining 6 items loaded on one factor, explaining 48.66% of the variance in the data. A single scale including the items Q77, Q79, Q80, Q81, Q82 and Q83 was constructed (Structure).

Leader consideration

Factor analysis has shown that the items for consideration load on one factor, explaining 60.01% of the variance in the data. The alpha level of the items was α = .826, indicating a reliable scale. The Chronbach's alpha would, however, increase to α = .841 if item Q87 was removed. This item asked respondents to what extent they agreed with the statement "My supervisor treats all the workers as his or her equal" (Q87). The descriptive statistics show that, on average, respondents do less agree with this statement than with the other items for consideration. Apparently this

item fits less well with experiencing emotional support. Dropping the item resulted in an increase in the variance explained by the factor to 68.35%. A scale including the items Q84, Q85, Q86 and Q88 has been constructed (Consideration).

Co-worker support

Factor analysis showed that the items for co-worker support loaded on one factor. The factor explained 67.91% of the variance in the data. The alpha level of the items was α = .839, indicating a reliable scale. Based on this finding, the items for co-worker support were constructed into a single scale (CoWo).

Team external focus

Factor analysis showed that the items for team external focus loaded on one factor, explaining 83.66% of the variance in the data. The Chronbach's alpha for the 3 items was α = .901, indicating a high internal consistency. The reliability analysis thus supports the formation of the scale for team external focus (TeamEF).

Participation

The items for participation also load on one factor and explain 80.08% of the variance in the data. The Chronbach's alpha for the 4 items was α = .912. This alpha level would even increase to α = .916 if item Q99 was removed. However, as the alpha level for the 4 items is already quite high and there are no theoretical grounds for removing item Q99, it was decided to construct a scale with the original 4 items (Participation).

Environmental dynamism

Factor analysis of the items for environmental dynamism showed that the items load on four factors. These factors together explained 66.26% of the variance in the data. As several items loaded on multiple factors, it was decided to run the factor analysis again by separating the items on dynamism in general (Q49-Q53) from the items on dynamism regarding specific subjects (Q54-Q60). The first group of items now loaded on one factor and explained 48.48% of the variance. The Chronbach's alpha of the 5 items was α = .784 and therefore sufficiently reliable to be constructed as a scale (EnvDyn_algemeen). The items on dynamism regarding specific subjects loaded this time on two factors. A distinction in these factors can be made between dynamism regarding subjects related to the municipality and subjects related to the neighbourhood. As such, the items Q55, Q56 and Q57 as well as the items Q58, Q59 and Q60 have been tested for internal consistency. The Chronbach's alpha of the first factors was α = .614. However, as the corrected item-to-total correlations all exceed the critical level of .40 and the

Composite Reliability (CR) is .796, it was decided to construct the scale (EnvDyn_gemeente). The final factor showed an alpha level of α = .796. As this level is sufficiently reliable, the scale was composed (EnvDyn_wijk).

Environmental complexity

The items for environmental complexity loaded on one factor, which explains 52.97% of the variance in the data. The Chronbach's alpha for the items was α = .814 and would increase to α = .819 if item Q62 was removed. However, it was decided not to remove the item in order to ensure that the scales for environmental dynamism and environmental complexity contain the same type of questions. A scale including the original 6 items was constructed (EnvCompl).

Locus of control

Factor analysis showed that the items for locus of control load on three factors, together explaining 60.01% of the variance in the data. Two of the factors consisted of only two items, which means that no scale of at least three items could be constructed. It was therefore decided to not further consider these items. The third factor, consisting of the items Q107, Q108, Q110 and Q112, is about the extent to which respondents agree that luck is a determining factor in work situations. For the factor a Chronbach's alpha of α = .650 was found, which is insufficiently reliable. Examination of the item-total statistics indicated that the alpha level would increase to α = .706 if item Q112 was removed. This item asked respondents to what extent they agree to the statement "The main difference between people who make a lot of money and people who make a little money is luck" (Q112). As making money is a personal issue, people may have expressed themselves less clearly. The item has been removed and a scale consisting of the remaining three items was constructed (LoC).

Need for clarity

Factor analysis for the items for need for clarity showed that the items load on one factor. This factor explained 58.99% of the variance in the data. The reliability analysis for need for clarity supported the creation of the scale, as the alpha level was α = .761 (NfC).

Experience

Experience was measured by means of two separate questions, in which respondents were asked both the number of years they had worked in the organization and in their current position. As the distance between years is identical and experience has an absolute zero, the level of measurement is ratio (Bryman, 2012).

Job satisfaction

The items for job satisfaction also load on one factor, explaining 57.31% of the variance. The Chronbach's alpha for the 5 items was α = .750. Although this is an adequate level, an examination of the item-total statistics indicated that the alpha level would increase to α = .770 if Q102 was removed. This item asked the extent to which respondents agreed with the statement "There are no fundamental things I dislike about my job" (Q102). As the item contains a double denial, the item may have been ambiguous to respondents. Consequently, the item was dropped from the scale. A final scale including the remaining 4 items was constructed (JobSat).

Boundary spanning performance

Factor analysis showed that the items for both types of boundary spanning performance (activities, 5 items; frequency of contact, 16 items) load on more than one factor, with several items loading on different factors. As it would be difficult to use both constructs as dependent variable when they have fallen apart into separate factors, it was decided to deal with these constructs in a different way. As explained in the theoretical framework, boundary spanners with both strong internal and external linkages are expected to be able to successfully carry out boundary spanning (Tushman & Scanlan, 1981). For this reason, this study looked at neighbourhood managers with a high score on both internal and external activities and contacts. To this end, the constructs for boundary spanning performance were transformed into binary variables. As such, it became possible to make a distinction between neighbourhood managers who successfully carried out boundary spanning activities – i.e. competent neighbourhood managers as boundary spanning persons – and neighbourhood managers who showed less sufficient performance.

For performance of boundary spanning activities, the following procedure was used. The answers given by the respondents to the items Q7, Q8, Q9, Q10 and Q11 were scored '0' when the initial answer was "never", "sometimes" or "regular". The answers were scored '1' when the initial answer was "frequently" or "always". Respondents who scored a '1' on all 5 items got a final score of '1', meaning that they can be considered as a competent boundary spanner. This applies to 70 of the 181 respondents (38.7%). All other respondents received a '0'.

For frequency of contact a similar procedure was used. The answers given by the respondents to the items Q12 till Q27 were scored '0' when the initial answer was "never" or "a few times a year". The answers were scored '1' when the initial answer was "monthly", "weekly" or "daily". The reason for giving these three categories a '1' was that it was assumed that having weekly or daily contact with all actors in the municipality and in the neighbourhood would be very

frequent and even unrealistic, as neighbourhood managers also have other things to do. Therefore, monthly contact was also scored '1'. However, as it turned out that none of the respondents scored a '1' on all 16 items, a slightly different approach was chosen here. First, a distinction was made between frequency of contact with internal, municipal parties (items Q12 to Q17) and frequency of contact with external parties in the neighbourhood (items Q18 to Q27). The number of '1''s for both internal contact and external contact were added together. In order to determine for how many of the total number of internal and external contact possibilities neighbourhood managers should score a '1' in order to receive a final score of '1', the frequency tables for the items Q12 to Q27 were examined. It turned out that respondents on average had daily, weekly or monthly contact with about ⅔ of the cases for both internal and external contact. Accordingly, it was decided that respondents should have a '1' for ⅔ (i.e. 66%) of the items Q12 to Q17 and also a '1' for ⅔ of the items Q18 to Q27 in order to receive a final score of '1'. So respondents who had contact on a daily, weekly or monthly basis with 4 or more internal, municipal parties (about 66% of the 6 items Q12 to Q17) and 6 or more external parties in the neighbourhood (about 66% of the 10 items Q18 to Q27), received a final score of '1'. These respondents could be considered as competent boundary spanners. Based on this procedure, 63 out of 181 respondents (about 35%) were regarded as competent boundary spanner.

Control variables

In this study, four control variables were included. These variables are age, gender, educational level and municipality size. As explained above, these variables are measured with a single question and therefore not included in the factor- and reliability analyses. Age was measured by asking respondents for their age in years. As for experience, the level of measurement can be considered as ratio (Bryman, 2012). Gender had two categories, man and woman. This variable can be considered as a dichotomous variable and has a nominal level of measurement (ibid.). Educational level was measured by six categories from which respondents could choose their highest level of education obtained. The measure for municipality size existed of the categories (1) 100.000 inhabitants or more, (2) 100.000 to 50.000 inhabitants and (3) 50.000 inhabitants or less. The measurement level of such variables, for which categories can be ordered but the distance between categories is not equal, is ordinal. However, as the level of measurement had to be at least interval/ratio for the tests performed in this study (ibid.), both educational level and municipality size were recoded into dichotomous variables. For educational lever, almost all of the respondents had either HBO or WO as their highest educational level obtained and therefore HBO was coded '0' and WO '1'. For municipality size it was decided to make a distinction between small/medium sized municipalities on the one hand and large municipalities on the other hand. To this end, the first and second category were together coded

'0' and the third category was coded '1'. The dichotomous variables had a nominal measurement level.

Testing assumptions

Before there could be proceeded to the actual testing of the relationships between the different variables as described in the conceptual model, first several assumptions had to be tested. This concerns the assumptions of outliers, normality, linearity, homoscedasticity and multicollinearity. In order to assess the assumptions of outliers and normality, the normal Q-Q plot and boxplot of each variable were looked at. The normal Q-Q plots indicated that most of the variables were about normally distributed. However, in the normal Q-Q plots for autonomy, participation and team external focus some deviating points were visible. Accordingly, the boxplots showed that extreme scores were present for these variables. For autonomy and participation, these extreme scores were changed into a score of 3 times the standard deviations above/below the mean of the respectively autonomy and participation, as suggested by Field (2009). For team external focus it was decided not to change the extreme values. Examination of the data for this variable has shown that the variation in the data is limited. When many people score average, then the other scores quickly become outliers. However, as the data only ranges from 1 to 5 an outlier will never be a truly extreme score. For this reason, the extreme values have not been changed. The boxplots of the other variables also show some outliers, but due to the limited range of the data as explained above, these mild deviations from normality are not considered to be of concern. It has therefore been decided not to adjust these values.

Next, the normal probability (P-P) plots of standardized residuals as well as the scatterplots of standardized residuals against standardized predicted values were inspected in order to test the assumptions of linearity, homoscedasticity and normality. The plots indicated that the conditions were met. In all cases, the points clustered about tightly along the diagonal line, indicating that the residuals were normally distributed. Moreover, the absence of a clear pattern in the spread of points indicated that the assumptions of linearity and homoscedasticity were met (Allen & Bennett, 2012).

Lastly, the assumption of multicollinearity was tested. Multicollinearity occurs when two or more independent variables are highly correlated. In such a case, it is difficult to determine which variable contributes to the variance explained by a regression model (Field, 2009). Multicollinearity was examined by looking at the Tolerance and VIF (variance inflation factor) statistics. There is multicollinearity when the Tolerance value is < 0.1 and the VIF value is > 10

(Allen & Bennett, 2012). This was not the case for any of the regression analyses, indicating the absence of multicollinearity.

Methods of analysis

After testing the assumptions, the relationships between the different variables as described in the conceptual model were tested. Two types of analysis were carried out in this study. Firstly, the correlations between the variables included in this study were tested. Next, several regression analyses were performed.

Correlation

In this study, first of all the correlations between the different variables were examined. This was done by making use of a Pearson correlation. A Pearson correlation can be performed when the above mentioned assumptions are met and when the measurement level of the included variables is interval or ratio (Gravetter & Wallnau, 2009). The latter was the case for all of the variables except gender, educational level, municipality size and both boundary spanning performance based on activities and boundary spanning performance based on frequency of contact. These four variables are binary variables. Although the measurement level of these variables is nominal, they can be included in the Pearson correlation. This is a special version of the Pearson correlation, known as the point-biserial correlation (ibid).

Regression analysis

In order to test the linear relationship between the predictor or independent variables and the criterion or dependent variable, there was made use of regression analysis. As several independent variables were testes at a time, there was made use of multiple regression analysis (Gravetter & Wallnau, 2009). There are three main types of multiple regression analysis: standard, hierarchical and stepwise multiple regression (Allen & Bennett, 2012). In this study there was made use of hierarchical multiple regression, as this allowed the researcher to decide which predictors were added to which step. As such, the main predictor variables were added to the equation on step 1. On step 2, the control variables (age, gender, educational level and municipality size) were added in order to test their influence on the model. The level of measurement for the predictor variables in a regression analysis has to be interval/ratio (Gravetter & Wallnau, 2009), which was the case for most of the variables. Only gender and educational level were dichotomous variables, however, these can be included in a regression analysis as well (ibid.).

As both boundary spanning performance based on activities and boundary spanning performance based on frequency of contact constitute a binary dependent variable, binary logistic regression analyses were performed in order to test the relationship between these two variables and the various independent variables. Binary logistic regression is a particular type of multiple regression, predicting category membership instead of a score as is the case for multiple regression (Howitt & Cramer, 2014). For these regression analyses as well, the model was first tested with the main predictor variables. Then the model was tested including the control variables.

3.3.5 Quality of the research

Reliability

According to Bryman (2012), "reliability refers to the consistency of a measure of a concept" (p. 169). Two important factors in considering the reliability of a measure are the stability of a measure and its internal reliability. Stability is about the extent to which a measure is stable over time. It entails that a retest of a measure to the same group should allow little difference compared to previously obtained results (Bryman, 2012). In order to ensure the stability of this research, every step is described in detail. In particular, the data collection and data analysis are reported very carefully in order to ensure the repeatability of this study as much as possible.

Next, internal reliability is about the consistency of the used indicators for a scale. For this purpose, there is often made use of the Chronbach's alpha test for internal reliability. The test measures the extent to which composite items measure the same concept, varying between 0 and 1. The internal reliability in this study is ensured because the reliability measures of the different scales used are all above the alpha level of $\alpha = .70$.

Internal validity

Internal validity refers to whether the independent variables in a study are actually responsible for the variation in the dependent variables (Bryman, 2012). Due to the fact that a cross-sectional research design is used in this, something can be said about the extent to which the different variables are related to one another. However, statements about the causality between variables are hard to make based on cross-sectional data. The reason for this is that all the data is obtained at the same time, which makes it difficult to conclude that one variable causes the other (Bryman, 2012). Based on common sense and theoretical reasoning inferences on causal relations can be made. However, there is a risk that these inferences will be wrong. Therefore, the internal validity of this study is not fully guaranteed.

External validity

External validity concerns the extent to which the results of a study can be generalized and applied to other contexts (Bryman, 2012). This criterion can be met by selecting a representative sample from the total population. However, as already explained in subsection 3.3.3 this study is based on a disproportional sample. The same number of units has been selected from each group of municipalities, while the three groups do not represent an equal share of the total population. As a result of this disproportional sample, the viewpoint of neighbourhood managers in larger municipalities may be somewhat dominant. This should be taken into account when examining the results. On the other hand, the chosen method meant that as many neighbourhood managers as possible could be contacted. This in turn benefits the external validity.

One more element of influence on the external validity of this study is the use of self-reported measures. Neighbourhood managers are asked to report the extent to which they themselves experience role stress, its causes and consequences. As a result, some extent of subjectivity is inherent in the study. The results can therefore not be considered as foregone and objective facts.

Measurement validity

A third type of validity that is taken into account in this study, is measurement or construct validity. According to Bryman (2012), measurement validity "is to do with the question of whether a measure that is devised of a concept really does reflect the concept that it is supposed to be denoting" (p. 47). In order to ensure the measurement validity of this study, the survey used has first been tested as a pilot with a neighbourhood manager of the municipality of Utrecht. The questions were checked for their comprehensibility and recognizability. The questionnaire was only distributed to neighbourhood managers after the results of the pilot were processed.

IV Findings

4.1 Descriptive statistics

Table 4 shows the descriptive statistics for the variables surveyed. A total of 236 respondents participated in the survey, of which the data of 181 respondents was used in further analyses. Of these 181 respondents, approximately as many were male (49.2%) as female (50.8%). The average age of the respondents is 40.2 years old, with a standard deviation of 10.1 years. On average, the highest level of educational achieved by most of the respondents is higher professional education (HBO) (M = 0.44; SD = .664). Most of the respondents work in municipalities with 100.000 inhabitants or more (M = 0.60; SD = .492).

From the descriptive statistics it becomes clear that, on average, the respondents nearly disagreed with the questions for role ambiguity (M = 2.24, SD = .487; Appendix A, Q29-Q37). This indicates that respondents are relatively certain about what is expected of them and what their responsibilities are. The amount of role ambiguity experienced by neighbourhood managers thus seems to be moderate. The questions regarding role conflict (Appendix A, Q38-Q48) are answered approximately 'neutral' on average (Role overload: M = 3.11, SD = .766; Intersender conflict: M = 3.07, SD = .690). Respondents do not seem to experience extremely high levels of conflict in their role, neither do they experience no role conflict at all. Therefore, respondents seem to experience role conflict to some extent.

With regard to the organizational, environmental and individual determinants, a higher score on a variable indicates that this variable is present to a large extent. As such, on average respondents indicated that they experience sufficient autonomy in their work (M = 4.26, SD = .521). Also consideration, team external focus and participation are experienced to a relatively high extent (respectively M = 4.05, SD = .619; M = 4.00, SD = .598; M = 3.83, SD = .705). Neighbourhood managers seem to feel to a slightly lesser extent that they receive sufficient co-worker support and feedback (respectively M = 3.67; SD = .616; M = 3.57, SD = .662). Moreover, they do not experience that the supervisor initiates a very strict structure (M = 2.81, SD = .576).

Interesting when it comes to the environmental determinants, is that neighbourhood managers perceive that the number of actors, initiatives and networks in the neighbourhood is relatively subject to change. On average, respondents nearly agreed with the questions on general dynamism (M = 3.78, SD = .505). For municipal dynamism and dynamism in the interests of actors in the neighbourhood, neighbourhood managers answered approximately 'neutral' on average (respectively M = 3.22, SD = .645; M = 2.80, SD = .685) on average. This indicates that, although the number of actors, initiatives and networks in the neighbourhood itself is changing,

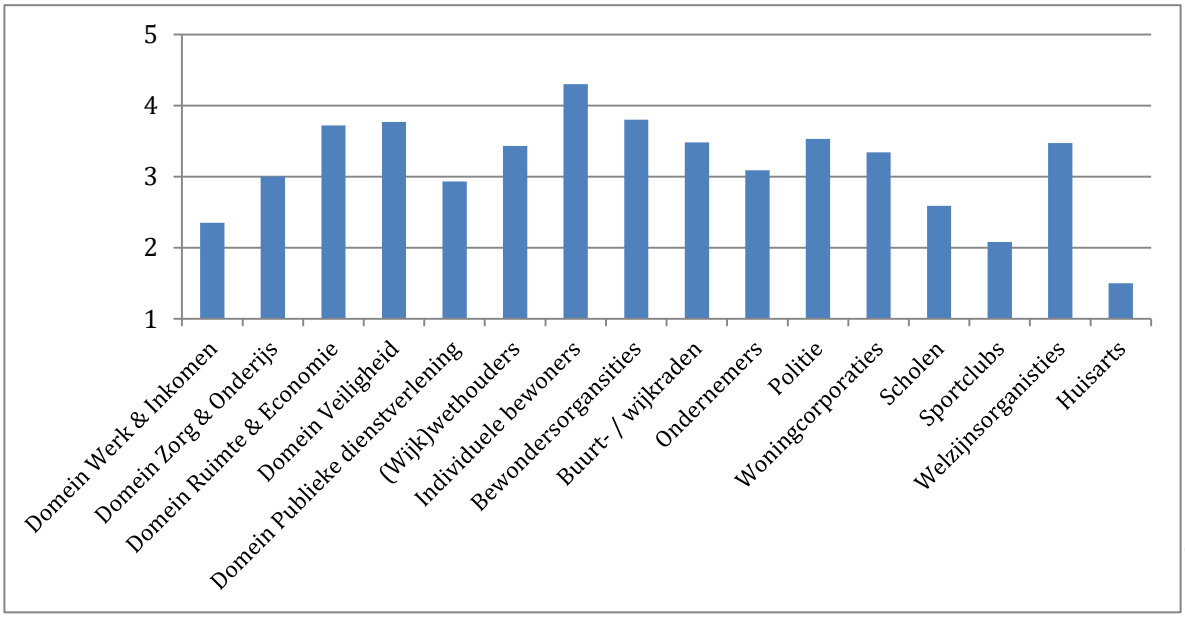
neighbourhood managers perceive the interests and preferences of actors in the neighbourhood somewhat less subject to change.

For the individual determinants, a low score on locus of control indicates that a neighbourhood manager has an internal locus of control (M = 2.29; SD = .553). This means that the neighbourhood manager believes he or she is largely in control of events that affect him or her (Rotter, 1966). A high score, on the other hand, indicates an external locus of control, what means that the neighbourhood manager believes that events are beyond his or her control (ibid.). Furthermore, it was found that respondents have a slightly high need for clarity (M = 3.49, SD = .650). On average, they work about 14 years in their current organization (M = 14.16, SD = 9.67) and about 6 years in their current function (M = 6.03, SD = 5.17).

Lastly, with regard to the job outcomes the descriptive statistics indicate that neighbourhood managers are on average satisfied with their job (M = 4.15, SD = .561). According to their boundary spanning performance measured by means of activities, for 38.7% of the neighbourhood managers it is found that they can be considered as competent boundary spanner (M = .039, SD = .488). For boundary spanning performance measured by means of frequency of contact, this percentage is 34.8% (M = .037, SD = .484).

The figure below indicates how often neighbourhood managers have contact with different actors within the municipality and in the neighbourhood. The figure indicates that neighbourhood managers have contact with a majority of the actors at least monthly. For the internal, municipal actors, neighbourhood managers only have less than monthly contact with colleagues in the fields of Work & Income and Public services. With regard to the actors in the neighbourhood, neighbourhood managers do not seem to have that much contact with schools, sports clubs and the family doctor. As far as the latter is concerned, this is not that surprising as this is may be allocated with neighbourhood teams in the social domain.

Figure 3 Frequency of contact with internal and external actors



Note: 1 = never; 2 = a few times a year; 3 = monthly; 4 = weekly; 5 = daily

4.2 Correlations

In order to analyse the relations between the variables, first a Pearson correlation analysis between the variables included in this study was performed. The results are presented in table 4. The results show that for role ambiguity, several strong negative correlations with organizational determinants were found. This is in line with the hypotheses. The findings imply that a stronger presence of organizational determinants is related to a lower level of role ambiguity. Significant correlations between environmental determinants and role ambiguity seem to be lacking, which also applies to locus of control and need for clarity. For the latter two, however, the non-significant correlation points in the expected direction. Furthermore, relatively strong negative correlations are found for role ambiguity with both job satisfaction and boundary spanning performance based on activities. In line with the expectations, experiencing little role ambiguity is related to a higher degree of job satisfaction and being more likely to be a competent boundary spanner based on the performance of activities. A significant correlation with boundary spanning performance based on frequency of contact was, however, not found. This may indicate that both measures for boundary spanning performance differ from each other, which will be addressed further in the regression analyses. Finally, three of the control variables show a strong correlation with role ambiguity. It seems that a higher age, being male and a lower level of education correlate with a lower level of role ambiguity.

For role conflict, much less significant correlations were found. Role conflict seems to correlate mainly with the environmental determinants. It also appears that experiencing role overload is related to one's locus of control. With regard to the job outcomes, no correlations with role conflict seem to exist. Apparently, experiencing role conflict does not result in lower job satisfaction and poorer performance. Based on the correlation matrix role conflict seems to have a lesser impact on neighbourhood managers. Clarity about the role seems to be more crucial.

Finally, the two measures of boundary spanning performance deserve some attention. The two measures are correlated with one another, indicating that there is some overlap in the measures. However, both measures correlate in different ways with the various variables in this study. This indicates that both measures also differ from each other. What is notable is that boundary spanning performance measured by means of activities is correlated with role ambiguity, whereas boundary spanning performance measured by frequency of contact does not seem to correlate with any of the role stressors. This is further addressed in the regression analyses.

Table 4 Descriptive statistics and correlations between variables surveyed

	N	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Age	160	48.19	10.088	1									
2. Gender	181	1.51	.051	-.102	1								
3. Education level	168	0.44	.664	-169*	.091	1							
4. Municipality size	181	0.60	.492	-.181*	.047	.086	1						
5. Role ambiguity	181	2.24	.487	-.322**	180*	.234**	.006	1					
6. Role conflict – overload	181	3.11	.766	.038	.116	.057	.053	.237**	1				
7. Role conflict – intersender	181	3.07	.690	-.193*	.124	.133	.217**	.282**	.315**	1			
8. Autonomy	174	4.26	.521	.057	-.067	.024	-.147	-.267**	-.122	-.077	1		
9. Feedback	172	3.57	.662	.125	-.024	.001	.051	-.379**	-.103	-.068	.321**	1	
10. Initiation of structure	171	2.81	.576	-.194*	.011	.201*	.308**	-.142	.005	.099	-.141	.306**	1
11. Consideration	170	4.05	.619	-.078	.018	.109	.147	-.189*	-.014	.024	.189*	.444**	.268**
12. Co-worker support	166	3.67	.616	-.113	.037	.052	.041	-.172*	-.102	-.087	.233**	.390**	.122
13. Team external focus	166	4.00	.598	-.148	.037	-.043	.140	-.138	-.075	.085	.220**	.333**	.072
14. Participation	166	3.83	.705	-.077	-.040	.133	.167*	-.324**	-.131	.069	.159*	.500**	.396**
15. Environmental dynamism - algemeen	177	3.78	.505	-.021	.013	.073	.089	-.018	.173*	.235**	.252**	.104	-.006
16. Environmental dynamism - gemeente	177	3.22	.645	-.078	-.070	-.050	-.025	-.004	.327**	.282**	.083	-.026	.018
17. Environmental dynamism - wijk	177	2.80	.685	.025	-.132	-.127	-.115	-.045	.156*	.061	.151*	.054	.001
18. Environmental complexity	174	3.61	.557	-.144	-.045	.125	.073	.132	.103	.358**	.033	-.060	.090
19. Locus of control	166	2.29	.553	.148	.113	-.031	.027	.081	.219**	.123	-.213**	-.316**	-.014
20. Need for clarity	166	3.49	.650	-.144	.193*	.048	.097	.107	.118	.089	-.053	-.042	.183*
21. Experience – time in organization	179	14.16 years	9.69 years	.650**	-.163*	-.255**	.009	-.251**	.060	-.062	.055	.071	.004
22. Experience – time in function	179	6.03 years	5.17 years	.507**	-.182*	-.236**	-.137	-.295**	-.031	-.084	.137	.034	-.156*
23. Job satisfaction	166	4.15	.561	.221**	-.046	-.026	-.043	-.337**	-.089	-.050	.273**	.247**	.122
24. Boundary spanning performance – activities	181	0.39	.488	.046	-.036	.023	.052	-.317**	-.034	-.017	.191*	.117	.049
25. Boundary spanning performance – contact	180	0.37	.484	.124	-.140	-.003	.033	-.082	.038	.002	.145	.258**	.014

Note: * p < .05; ** p < .01 (two-tailed)

11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1														
.284**	1													
.107	.525**	1												
.644**	.312**	.186*	1											
-.022	.012	.153*	.126	1										
-.092	.012	.149*	.001	.442**	1									
-.105	.051	.121	-.041	.250**	.478**	1								
-.013	.026	.158*	.080	.343**	.414**	.292**	1							
-.262**	-.078	-.106	-.245**	-.067	.040	.118	.060	1						
.104	-.031	.016	.046	.091	-.029	.023	.002	.042	1					
-.065	-.167*	-.090	-.019	.072	.049	.038	-.090	.172*	-.141	1				
-.103	-.098	-.013	.021	.164*	.006	.048	.109	.193*	-.172*	.485**	1			
.302**	.108	-.027	.286**	.036	-.009	.127	-.049	-.064	-.076	.127	.063	1		
-.006	.260**	.217**	.206**	.057	.107	.135	.039	.062	-.011	-.008	-.022	.170*	1	
.108	.090	.117	.189*	.091	.163*	.174*	.072	-.012	.025	.023	-.035	.079	.182*	1

Note: * p < .05; ** p < .01 (two-tailed)

4.3 Hypothesis testing

4.3.1 The influence of organizational, environmental and individual determinants on the level of role stress

4.3.1.1 Role ambiguity

Organizational determinants

In order to estimate the influence of the organizational determinants on the level of role ambiguity, a hierarchical multiple regression analysis was performed. On step 1 of the equation, the seven organizational determinants accounted for a significant 22.4% of the variance in role ambiguity, $R^2 = .224$, $F (7, 129) = 5.307$, $p < .001$. Feedback had the strongest significant standardized regression coefficient with the criterion of role ambiguity, $\beta = -.266$, $p < .05$, and explained about 4% of the variance in role ambiguity. Participation had the second strongest significant standardized regression coefficient, $\beta = -.232$, $p < .05$. This determinant explained 2.4% of the variance in role ambiguity. The final determinant with a significant standardized regression coefficient is autonomy, $\beta = -.189$, $p < .05$. Autonomy explained 2.7% of the variance in role ambiguity. These findings mean that neighbourhood managers experience less role ambiguity under higher levels of feedback, participation and autonomy.

On step 2, the control variables age, gender, educational level and municipality size were added to the regression equation. These variables accounted for an additional 15% of the variance in role ambiguity, $\Delta R^2 = .150$, $\Delta F (4, 125) = 7.480$, $p < .001$. In combination, the eleven predictor variables explained a significant 37.4% of the variance in the criterion, $R^2 = .374$, $F (11, 125) = 6.776$, $p < .001$. While feedback had the strongest significant standardized regression coefficient on step 1, this coefficient is no longer significant on step 2. The standardized regression coefficient for both participation and autonomy are still significant, respectively $\beta = -.249$, $p < .05$ and $\beta = -.206$, $p < .05$. So after controlling for age, gender, educational level and municipality size, neighbourhood managers still experience less role ambiguity when the level of participation and autonomy is high. However, age had the strongest significant standardized regression coefficient with the criterion of role ambiguity on step 2, $\beta = -.311$, $p < .001$, and explained 8.3% of the variance in role ambiguity. This indicates that neighbourhood managers with a higher age experience less role ambiguity compared to younger neighbourhood managers. Lastly, educational level was found as a positive predictor for role ambiguity ($\beta = .208$, $p < .05$) on step 2, and explained 4% of the variance in the criterion. This finding means that neighbourhood managers with HBO as highest educational level experience less role ambiguity compared to neighbourhood managers with WO as highest educational level.

Table 5 Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial correlations (sr^2) predicting role ambiguity

	Step 1				**Step 2**			
	B [95% CI]	*SE (B)*	β	sr^2	*B* [95% CI]	*SE (B)*	β	sr^2
(Constant)	4.058 [3.130, 4.985]***	.469			5.029 [3.997, 6.062]***	.522		
Autonomy	-.196 [-.378, -.013]*	.092	-.189	-.027	-.213 [-.381, -.045]*	.085	-.206	-.031
Feedback	-.199 [-.352, -.047]*	.077	-.266	-.040	-.097 [-.242, .048]	.073	-.130	-.009
Initiation of structure	-.044 [-.197, .109]	.077	-.051	-.002	-.137 [-.285, .010]	.075	-.161	-.017
Consideration	.104 [-.060, .268]	.083	.135	.009	.069 [-.082, .220]	.076	.089	.004
Co-worker support	-.042 [-.209, .126]	.085	-.052	-.001	-.068 [-.221, .086]	.078	-.084	-.004
Team external focus	.051 [-.116, .219]	.085	.062	.002	.017 [-.140, .173]	.079	.020	.000
Participation	-.157 [-.312, -.003]*	.078	-.232	-.024	-.168 [-.310, -.027]*	.072	-.249	-.027
Age					-.016 [-.023, -.008]***	.004	-.311	-.083
Gender					.074 [-.069, .217]	.072	.073	.005
Educational level					.210 [.062, .359]**	.075	.208	.040
Municipality size					-.025 [-.181, .132]	.079	-.024	-.000
	Step 1				**Step 2**			
	R^2 = .224	Adjusted R^2 = .181			R^2 = .374	Adjusted R^2 = .318		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 137

With the above analyses, the hypotheses H1, H3, H5, H7, H9 and H11 are tested. For the hypotheses H1 and H11 supportive evidence was found. Partly supportive evidence was found for hypothesis H3, as feedback appeared no longer to be a significant predictor for role ambiguity after adding the control variables. For the remaining hypotheses, no supportive evidence was found. Therefore, these hypotheses are rejected.

Hypotheses role ambiguity – organizational determinants	
H1 The more autonomy is given, the less role ambiguity a neighbourhood manager experiences.	
H3 The more feedback on job performance is provided by co- workers and the supervisor, the less role ambiguity a neighbourhood manager experiences.	
H5 The stricter a role is structured, the less role ambiguity a neighbourhood manager experiences.	
H7 The more leader consideration and co-worker support is provided, the less role ambiguity a neighbourhood manager experiences.	

H9 Team external focus does not directly affect the level of role ambiguity of a neighbourhood manager experiences.	
H11 The more influence on organizational decisions, the less role ambiguity a neighbourhood manager experiences.	

Note: rejected, adopted, partly adopted.

Environmental determinants

A hierarchical multiple regression analysis was performed in order to examine the influence of environmental determinants on the level of role ambiguity. On step 1, the three forms of environmental dynamism together with environmental complexity accounted for a non-significant 2.2% of the variance in role ambiguity, $R^2 = .022$, $F (4, 140) = .789$, $p = .534$. It should be noted that on step 2 none of the environmental determinants was significantly related to role ambiguity.

The control variables added on step 2, account for an additional significant 14.2% of the variability in role ambiguity, $\Delta R^2 = .142$, $\Delta F (4, 136) = 5.767$, $p < .001$. Overall, on step 2 the model explains a significant 16.4% of the variance in role ambiguity, $R^2 = .164$, $F (8, 136) = 3.332$, $p = .002$. On step 2, again none of the environmental determinants was significantly related to role ambiguity. Age and educational level were found as the predictor variables with a significant standardized regression coefficient, respectively $\beta = -.298$, $p < .01$ and $\beta = .166$, $p < .05$. As is also the case for the organizational determinants, the finding for age means that the older a neighbourhood manager is, the less role ambiguity he or she experiences. The finding for educational level indicates that neighbourhood managers with HBO as highest educational level experience less role ambiguity compared to neighbourhood managers with WO as highest educational level.

Table 6 Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial correlations (sr^2) predicting role ambiguity

	Step 1				**Step 2**			
	B [95% CI]	*SE (B)*	β	sr^2	*B* [95% CI]	*SE (B)*	β	sr^2
(Constant)	2.071 [1.363, 2.779]***	.358			2.795 [1.894, 3.697]***	.456		
Environmental dynamism 1	-.067 [-.255, .120]	.095	-.069	-.003	-.069 [-.246, .109]	.090	-.070	-.004
Environmental dynamism 2	.023 [-.138, .185]	.082	.031	.000	.014 [-.139, .166]	.077	.018	.000
Environmental dynamism 3	-.053 [-.199, .092]	.073	-.072	-.004	-.003 [-.143, .137]	.071	-.003	-.000
Environmental complexity	.142 [-.036, .319]	.090	.152	.017	.080 [-.092, .251]	.087	.086	.005
Age					-.015 [-.023, -.007]***	.004	-.298	-.081
Gender					.107 [-.055, .269]	.082	.106	.011

Educational level			.168 [.005, .332]*	.083	.166	.025
Municipality size			-.093 [-.260, .073]	.084	-.090	-.008
	Step 1		**Step 2**			
	R^2 = .022	Adjusted R^2 = -.006	R^2 = .164	Adjusted R^2 = .115		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 145

The findings of the hierarchical multiple regression analyses are in favour of hypothesis H15, as it was expected that environmental complexity is not of influence on the level of role ambiguity. For hypothesis H13 no supportive evidence was found. Therefore, the hypothesis is rejected.

Hypotheses role ambiguity – environmental determinants	
H13 The higher the degree of environmental dynamism, the more role ambiguity a neighbourhood manager experiences.	
H15 Environmental complexity is not of influence on the level of role ambiguity of a neighbourhood manager experiences.	

Note: rejected, adopted, partly adopted.

Individual determinants

To test the influence of individual determinants on the level of role ambiguity, a hierarchical multiple regression was performed. On step 1 of the analysis, the variables locus of control, need for clarity, experience in organization and experience in function explained a significant 12.0% of the variance in role ambiguity, R^2 = .120, F (4, 130) = 4.420, p = .002. The model indicated that experience in function was a negative, significant predictor for role ambiguity (β = -.272, p < .01). This means that the longer a neighbourhood manager has worked in the current function, the more experience he or she has and the less role ambiguity he or she experiences. The predictor explained 5.3% of the variance in the criterion. For the other predictor variables, non-significant standardized regression coefficients were found.

The control variables added on step 2 of the regression equation accounted for an additional 7.7% of the variance in role ambiguity, ΔR^2 = .077, ΔF (4, 126) = 3.004, p = .021. The eight predictor variables together accounted for a significant 19.6% of the variance in the criterion, R^2 = .196, F (8, 126) = 3.848, p < .001. In this step, experience in function was still found as a significant predictor for role ambiguity, although less strong compared to step 1 (β = -.224, p < .05). The predictor explained 3.2% of the variance in role ambiguity. The other predictor with a significant standardized regression coefficient on step 2 was age, β = -.305, p < .01, and explained 4.8% of the variance in the criterion. This finding means that neighbourhood managers with a higher age experience less role ambiguity compared to younger neighbourhood managers.

Table 7 Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial correlations (sr^2) predicting role ambiguity

	Step 1				**Step 2**			
	B [95% CI]	*SE (B)*	β	sr^2	*B* [95% CI]	*SE (B)*	β	sr^2
(Constant)	2.148 [1.589, 2.706]***	.282			2.782 [2.010, 3.555]***	.390		
Locus of control	.119 [-.027, .264]	.073	.137	.018	.110 [-.033, .252]	.072	.127	.015
Need for clarity	.017 [-.111, .146]	.065	.022	.000	.012 [-.115, .140]	.064	.016	.000
Experience in organization	-.006 [-.016, .004]	.005	-.115	-.010	.006 [-.006, .018]	.006	.115	.006
Experience in function	-.026 [-.045, -.008]**	.009	-.272	-.053	-.022 [-.041, -.002]*	.010	-.224	-.032
Age					-.015 [-.026, -.004]**	.006	-.305	-.048
Gender					.063 [-.103, .230]	.084	.063	.004
Educational level					.154 [-.014, .322]	.085	.152	.021
Municipality size					-.137 [-.311, .037]	.088	-.132	-.015
	Step 1				**Step 2**			
	R^2 = .120	Adjusted R^2 = .093			R^2 = .196	Adjusted R^2 = .145		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 135

The hypotheses H17, H19 and H21 are tested with the above analyses. From the analyses it becomes clear that supportive evidence was found for hypothesis H21. As expected, experience results in less role ambiguity for the neighbourhood manager. For the hypotheses H17 and H19 no supportive evidence was found. Bothe hypotheses are rejected.

Hypotheses role ambiguity – individual determinants	
H17 Neighbourhood managers with an internal locus of control experience less role ambiguity compared to neighbourhood managers with an external locus of control.	
H19 Neighbourhood managers with a high need-for-clarity experience more role ambiguity compared to neighbourhood managers with a low need-for-clarity.	
H21 The more experienced, the less role ambiguity a neighbourhood manager experiences.	

Note: rejected, adopted, partly adopted.

Sub-conclusion

Deriving from the analyses initially autonomy, feedback and participation are the organizational determinants that significantly decrease the level of role ambiguity. Neither initiation of structure nor one of the support variables seems to significantly impact the level of role ambiguity. A possible explanation for the absence of a significant effect of initiation of structure

may be the use of a different scale for measuring the construct compared to the study of Walker et al., (1975). The items used in this study are adapted from Teas (1981, 1983), who was not able to find a significant relationship between initiation of structure and role ambiguity as well. For consideration it might be the case that the socioemotional support of the leaders is only shown after the neighbourhood manager has performed well, as assumed by the contingent process (Singh, 1993).

Interestingly, after adding the control variables, feedback appeared no longer to be a statistically significant predictor for role ambiguity. This is probably due to the large number of variables in the model. When the control variables are added to the statistically significant determinants of the first model – autonomy, feedback and participation – feedback remains statistically significant on step 2. In this case a standardized regression coefficient of $\beta = -.178$, $p < .05$, explaining about 3.0% of the variance in role ambiguity. Based on this finding, feedback remains considered one of the predictor variables for role ambiguity.

With regard to the environmental determinants, as expected, no relationship between environmental complexity and role ambiguity was found. The assumption seems to hold that the differences between actors in the neighbourhood are predictable to some extent and can therefore be learned (Sohi, 1996). However, no relationship between environmental dynamism and role ambiguity was found either. An explanation for this finding may be as follows. Despite respondents indicated on average that the number of actors, initiatives and networks in the neighbourhood is subject to change (EnvDyn_algemeen M = 3.78), they do not perceive the interests of these different actors as constantly changing (EnvDyn_wijk M = 2.80). Apparently, the interests and standpoints of new actors in the neighbourhood are to a certain extent evident and can be anticipated.

Concerning the individual determinants, the finding that neither locus of control nor need for clarity are significant predictors for role ambiguity is contrary to the expectations. Experience in function, on the other hand, did appear to be a statistically significant predictor of role ambiguity. As expected, the neighbourhood managers' understanding of role expectations increases when he or she is working in a function for a longer period of time (Perrone et al., 2003; Walker et al., 1975). As a result, the neighbourhood experiences less role ambiguity.

Lastly, in the final model for the organizational and the environmental determinants, the control variables age and educational level appeared to be significant predictors for role ambiguity. For age, this finding is not surprising, as age can be seen as an indicator for experience (Jackson &

Schuler, 1985). The more experience one has, the better one knows what is expected of him or her and how to deal with and respond to uncertainties in the job (Perrone et al., 2003; Walker et al., 1975). The positive relation between role ambiguity and education is in line with previous research (Jackson & Schuler, 1985). However, a theoretical explanation of why a certain level of education results in more role ambiguity compared to other levels is not given (ibid.). A line of reasoning might be that more is expected of neighbourhood managers with a higher level of education and, as a result, the chance of uncertainty about these expectations increases.

In order to determine the variance in role ambiguity that is jointly explained by the significant variables from the three determinants – autonomy, feedback, participation, experience in function, age and educational level –, another multiple regression analysis was performed. However, it turned out that experience in function was no longer significant in this final model. The correlation of r = .507, p <.001 between experience in function and age may be an explanation for the elimination of the significance of experience in function on step 2. Although the correlation between the two variables is not that high for collinearity to exist (Field, 2009), some of the variance in role ambiguity may be explained by both experience in function and age. The respective influence of the two predictors is thereby reduced, as a result of which variables are less likely to be significant (ibid.). As the correlation between age and role ambiguity (r = -.322, p < .001) is a bit stronger than between experience in function and role ambiguity (r = -.295, p < .001), age possibly displaces the effect of experience in function on role ambiguity.

Due to the non-significant effect of experience in function, the variable was dropped from the final model. As table 8 shows, the five remaining variables together explain 35.1% of the variance in role ambiguity, R^2 = .351, F (6, 129) = 11.639, p < .001. For all five variables a significant standardized regression coefficient was found.

Table 8 Final model for predicting role ambiguity

	B [95% CI]	*SE (B)*	β	sr^2
(Constant)	4.701 [3.929, 5.472]***	.390		
Autonomy	-.162 [-.318, -.006]*	.079	-.156	-.031
Feedback	-.132 [-.263, -.001]*	.066	-.176	-.029
Participation	-.182 [-.296, -.068]**	.057	-.268	-.071
Age	-.014 [-.021, -.007]***	.004	-.281	-.101
Educational level	.199 [.053, .345]**	.074	.197	.049
	R^2 = .341	Adjusted R^2 = .316		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 137

4.3.1.2 Role conflict (overload)

Organizational determinants

A hierarchical multiple regression analysis was performed in order to examine the influence of organizational determinants on the level of role overload. On step 1 of the equation, the organizational determinants accounted for a non-significant 5.4% of the variance in role overload, R^2 = .054, F (7, 129) = 1.045, p = .403. None of the determinants proved to be a significant predictor for role overload.

On step 2, the control variables were added to the regression equation, which accounted for an additional non-significant 2.1% of the variance in role overload ΔR^2 = .021, ΔF (4, 125) = .702, p = .592. In combination, the eleven determinants accounted for a non-significant 7.4% of the variance, R^2 = .074, F (11, 125) = .914, p = .529. In this model, for none of the predictor variables a statistically significant standardized regression coefficient was found.

Table 9 Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial correlations (sr^2) predicting role overload

	Step 1				**Step 2**			
	B [95% CI]	*SE (B)*	β	sr^2	*B* [95% CI]	*SE (B)*	β	sr^2
(Constant)	3.726 [2.231, 5.221]***	.756			3.029 [1.196., 4.861]**	.926		
Autonomy	-.027 [-.321, .267]	.149	-.018	-.000	-.004 [-.302, .294]	.150	-.003	-.000
Feedback	-.175 [-.420, .071]	.124	-.160	-.014	-.188 [-.445, .069]	.130	-.172	-.016
Initiation of structure	.013 [-.234, .260]	.125	.011	.000	-.001 [-.263, .261]	.132	-.001	-.000
Consideration	.160 [-.105, .424]	.134	.142	.010	.154 [-.123, .413]	.136	.129	.008
Co-worker support	-.095 [-.365, .174]	.136	-.081	-.004	-.077 [-.350, .197]	.138	-.065	-.002
Team external focus	.097 [-.172, .367]	.136	.080	.004	.086 [-.192, .363]	.140	.071	.003
Participation	-.159 [-.408, .090]	.126	-.160	-.012	-.154 [-.405, .097]	.127	-.156	-.011
Age					.005 [-.008, .019]	.007	.075	.005
Gender					.160 [-.094, .414]	.128	.108	.011
Educational level					.053 [-.210, .317]	.133	.036	.001
Municipality size					.109 [-.169, .386]	.140	.072	.005
	Step 1				**Step 2**			
	R^2 = .054	Adjusted R^2 = .002			R^2 = .074	Adjusted R^2 = -.007		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 137

The findings show that evidence was found for the hypotheses H2 and H4, as autonomy and feedback do not directly influence the level of role overload neighbourhood managers experience. The absence of an effect of the remaining organizational determinants is contrary to the expectations. Therefore, the hypotheses H6, H8, H10 and H12 are rejected for role overload.

Hypotheses role overload – organizational determinants	
H2 Autonomy does not directly affect the level of role conflict of a neighbourhood manager experiences.	
H4 Feedback on job performance provided by co-workers and the supervisor does not directly affect the level of role conflict of a neighbourhood manager experiences.	
H6 The stricter a role is structured, the more role conflict a neighbourhood manager experiences.	
H8 The more leader consideration and co-worker support is provided, the less role conflict a neighbourhood manager experiences.	
H10 The higher the level of external focus among co-workers, the more role conflict a neighbourhood manager experiences.	
H12 The more influence on organizational decisions, the less role conflict a neighbourhood manager experiences.	

Note: rejected, adopted, partly adopted.

Environmental determinants

In order to estimate the influence of environmental determinants on the level of role overload, a hierarchical multiple regression analysis was performed. On step 1, the four environmental determinants explained a significant 11.4% of the variance in role overload, $R^2 = .114$, $F (4, 140) = 4.499$, $p = .002$. A significant standardized regression coefficient was found for the municipal type of environmental dynamism, $\beta = .345$, $p < .01$, indicating that this form of environmental dynamism is a positive predictor for role overload. This finding means that the more the expectations of actors in the neighbourhood regarding municipal services and the activities of the neighbourhood manager are subject to change, the more role overload a neighbourhood manager experiences. The variable explained 7.3% of the variance in the criterion.

The control variables added on step 2, accounted for a non-significant increase of the variance in role overload of 3.0%, $\Delta R^2 = .030$, $\Delta F (4, 136) = 1.194$, $p = .316$. The model involving the eight predictor variables was significant again, explaining 14.4% of the variance in role overload, $R^2 = .144$, $F (8, 136) = 2.859$, $p = .006$. Environmental dynamism regarding the municipality was still the only significant predictor for role overload, having an even stronger standardized regression coefficient compared to step 1, $\beta = .357$, $p < .01$. As explained before, the stronger the dynamism regarding the municipality, the more role overload a neighbourhood manager experiences. The predictor explained 7.7% of the variance in the criterion.

Table 10 Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial correlations (sr^2) predicting role overload

	Step 1				**Step 2**			
	B [95% CI]	*SE (B)*	β	sr^2	*B* [95% CI]	*SE (B)*	β	sr^2
(Constant)	2.108 [1.071, 3.145]***	.525			1.162 [-.241, 2.565]	.709		
Environmental dynamism 1	-.087 [-.361, .188]	.139	-.058	-.003	-.131 [-.407, .146]	.140	-.087	-.005
Environmental dynamism 2	.405 [.169, .641]**	.119	.345	.073	.419 [.181, .656]**	.120	.357	.077
Environmental dynamism 3	.052 [-.161, .264]	.108	.045	.001	.086 [-.132, .304]	.110	.075	.004
Environmental complexity	-.037 [-.296, .222]	.131	-.026	-.000	-.030 [-.297, .236]	.135	-.021	-.000
Age					.007 [-.005, .020]	.006	.099	.009
Gender					.181 [-.071, .433]	.127	.116	.013
Educational level					.042 [-.213, .297]	.129	.027	.000
Municipality size					.181 [-.077, .440]	.131	.114	.012
	Step 1				**Step 2**			
	R^2 = .114	Adjusted R^2 = .089			R^2 = .144	Adjusted R^2 = .094		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 145

Based on the findings presented above, supportive evidence is found for hypothesis H14. Important to note in this respect is that the hypothesis only holds for a particular type of environmental dynamism, which is environmental dynamism regarding the municipality. Due to the absence of an effect of environmental complexity, hypothesis H16 is rejected for role overload.

Hypotheses role overload – environmental determinants	
H14 The higher the degree of environmental dynamism, the more role conflict a neighbourhood manager experiences.	
H16 The higher the degree of environmental complexity, the more role conflict a neighbourhood manager experiences.	

Note: rejected, adopted, partly adopted.

Individual determinants

In order to examine the influence of individual determinants on the level of role overload, a hierarchical multiple regression analysis was performed. On step 1 of the equation, the predictor variables accounted for a significant 7.6% of the variance in role overload, R^2 = .076, F (4, 130) = 2.692, p = .034. Locus of control was the only predictor for which a significant standardized

regression coefficient was found, β = .248, p < .01. As explained in the theoretical framework, locus of control refers to the extent to which people perceive they can control events that affect their lives (Rotter, 1966). People with an internal locus of control believe that they are largely in control of events that affect them whereas externals believe that events are beyond their control. The results found in this study indicate that people with an internal locus of control experience less role overload compared to externals. Locus of control explained 5.8% of the variance in role overload.

On step 2, the control variables accounted for an additional, non-significant 1% of the variance in role overload, ΔR^2 = .010, ΔF (4, 126) = .347, p = .846. In combination, the eight variables explained a non-significant 8.7% of the variance in the criterion, R^2 = .087, F (8, 126) = 1.492, p = .166. Locus of control was still the only positive predictor for role overload, β = .233, p < .01, indicating that neighbourhood managers with an internal locus of control experience less role overload.

Table 11 Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial correlations (sr^2) predicting role overload

	Step 1				**Step 2**			
	B [95% CI]	*SE (B)*	β	sr^2	*B* [95% CI]	*SE (B)*	β	sr^2
(Constant)	1.967 [1.127, 2.807]***	.425			1.742 [.533, 2.952]**	.611		
Locus of control	.315 [.096, .533]**	.111	.248	.058	.296 [.073, .520]**	.113	.233	.050
Need for clarity	.115 [-.078, .308]	.098	.101	.009	.098 [-.101, .297]	.101	.086	.007
Experience in organization	.004 [-.011, .020]	.008	.056	.002	.006 [-.014, .025]	.010	.072	.002
Experience in function	-.006 [-.034, .022]	.014	-.045	-.001	-.004 [-.034, .026]	.015	-.028	-.000
Age					.000 [-.017, .018]	.009	.006	.000
Gender					.123 [-.138, .384]	.132	.083	.006
Educational level					.081 [-.182, .345]	.133	.055	.003
Municipality size					.030 [.243, .302]	.138	.020	.000
	Step 1				**Step 2**			
	R^2 = .076	Adjusted R^2 = .048			R^2 = .087	Adjusted R^2 = .029		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 135

With the above analyses, the hypotheses H18, H20 and H22 are tested. The findings of the hierarchical multiple regression analyses confirm hypothesis H18. Locus of control was found to

affect the level of role overload. For the hypotheses H20 and H22 no supportive evidence was found. Therefore, both hypotheses are rejected for role overload.

Hypotheses role overload – individual determinants	
H18 Neighbourhood managers with an internal locus of control experience less role conflict compared to neighbourhood managers with an external locus of control.	
H20 Neighbourhood managers with a high need-for-clarity experience more role conflict compared to neighbourhood managers with a low need-for-clarity.	
H22 The more experienced, the less role conflict a neighbourhood manager experiences.	

Note: rejected, adopted, partly adopted.

Sub-conclusion

None of the organizational determinants proved to be a significant predictor for role overload. For autonomy and feedback, the absence of an effect on role overload was expected. According to Walker et al. (1975), a further lack of support for the hypothesis concerning role conflict can be explained by the nature of the position of neighbourhood managers. In their job, neighbourhood managers have to deal with conflicts between expectations of role partners within the municipality and expectations of actors in the neighbourhood. As it is difficult for the organization to steer the expectations of actors outside the organization, there is little that can be done from within the organization to adjust these expectations and hence to reduce the level of role conflict experienced by the neighbourhood manager. Even giving neighbourhood managers the possibility to participate in decision-making, and thereby enable them to ensure that expectations of the environment become reflected in organizational standard, does not significantly influence the level of role overload.

Noteworthy is that, although not significant, the effect of initiation of structure appears to be positive. This is in line with the expectations of Walker et al. (1975) and Teas (1983), who state that due to a stricter structure, boundary spanners are likely to experience more role conflict. A strict structure may also limit the time and resources available, and thus increase the level of role overload. This finding indicates that the context matter (Teas, 1983). Employees who only have to deal with counterparts in their own organizations may benefit from a stricter structure (House & Rizzo, 1972). However, for employees who have to deal with both counterparts within the organization and counterparts outside the organization – such as neighbourhood managers – initiation of structure is likely to increase the level of role conflict.

As far as environmental determinants are concerned, municipal dynamism appears to significantly predict role overload, while no significant effect for general dynamism and

dynamism in the interests of actors in the neighbourhood was found. What this finding indicates is that changes in the number of actors and in the preferences and subjects that are of importance to these actors do not affect the level of role conflict among neighbourhood managers that much. Only when the actors in the neighbourhood constantly change their expectations with regard to municipal services and the activities of the neighbourhood manager, this results in a statistically significant increase in the level of role conflict. In this latter case, the dynamism has a direct influence on the neighbourhood manager him- or herself and his or her activities. So if the neighbourhood manager is directly affected by the dynamism of actors in neighbourhood, this leads to an increase in role overload.

A significant effect of environmental complexity on role overload was not found. An explanation for this finding may have to do with the fact that environmental complexity concerns both the number of actors in the neighbourhood and the differences between these actors. It is likely that a larger number of actors will lead to more work for the neighbourhood manager. However, relatively small differences between a large number of actors do not necessarily have to pose a problem to the allocation of time and resources. Neighbourhood managers can meet the requirement of several actors with the same effort. The fact that environmental complexity is a combination of the number of actors and differences between these actors may therefore explain the lack of a relationship with role overload.

Locus of control was the only individual determinants which proved to be a significant predictor for role overload. As expected, internals are better able to deal with role overload than external due to the fact that internals try to find causes and solutions for overload within themselves (Rotter, 1966; Spector, 1982). Neither need for clarity nor experience did significantly predict role overload. An explanation for the absence of an effect of need for clarity may result from the fact that role conflict – and thus role overload as a form or role conflict – is not that much perceived as a source of uncertainty. One's need to know what is expected of him or her does not appear to cause this person to feel that he or she has too little time or resources to carry out job requirements. In addition, experience was not found to significantly predict role overload. According to Jackson and Schuler (1985), the lack of a relationship between experience and role conflict may indicate that dealing with conflictual situations is hard to learn or to overcome, even over time.

All in all, municipal dynamism and locus of control are variables that are found to significantly predict role overload. The two variables together explain 12.7% of the variance in role overload,

R^2 = .127, F (2, 163) = 11.890, p < .001. For both predictor variables significant standardized regression coefficients were found.

Table 12 Final model for predicting role overload

	B [95% CI]	*SE (B)*	β	sr^2
(Constant)	1.460 [.786, 2.135]***	.342		
Environmental dynamism 2	.319 [.156, .482]***	.083	.282	.084
Locus of control	.271 [.082, .459]**	.096	.207	.043
	R^2 = .127	Adjusted R^2 = .117		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 166

4.3.1.3 Role conflict (intersender)

Organizational determinants

A hierarchical multiple regression analysis was run in order to assess the influence of organizational determinants on the level of intersender conflict. On step 1, the organizational determinants were added to the regression equation. The hierarchical multiple regression showed that the seven determinants accounted for a non-significant 7.3% of the variance in intersender conflict, R^2 = .073, F (7, 129) = 1.453, p = .190. For team external focus a significant standardized regression coefficient was found, β = .242, p < .05, indicating that team external focus was a positive predictor. This finding means that the higher the team external focus (i.e. the more co-workers recognize externally oriented activities as important), the more intersender conflict a neighbourhood manager experiences. Team external focus explained 3.4% of the variance in intersender conflict.

Adding the control variables on step 2 resulted in an additional 7.3% of the variance the criterion, ΔR^2 = .073, ΔF (4, 125) = 2.670, p = .035. The eleven variables together accounted for a significant 14.6% of the variance in intersender conflict, R^2 = .146, F (11, 125) = 1.944, p = .040. While team external focus had a significant standardized regression coefficient on step 1, the variable was no longer a significant predictor for intersender conflict on step 2. On step 2, the only predictor with a significant standardized regression coefficient municipality size, β = .190, p < .05, explaining 3.1% of the variance in intersender conflict. The finding indicates that neighbourhood managers who work in larger municipalities experience intersender conflict to a greater extent compared to neighbourhood managers who work in municipalities with less inhabitants.

Table 13 Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial correlations (sr^2) predicting intersender conflict

	Step 1				**Step 2**			
	B [95% CI]	*SE (B)*	β	sr^2	*B* [95% CI]	*SE (B)*	B	sr^2
(Constant)	2.305 [.933, 3.677]**	.694			2.363 [.731, 3.995]**	.825		
Autonomy	.043 [-.227, .313]	.136	.031	.000	.069 [-.197, .334]	.134	.049	.002
Feedback	-.167 [-.393, .059]	.114	-.165	-.015	-.101 [-.330, .127]	.116	-.100	-.005
Initiation of structure	.190 [-.036, .417]	.115	.165	.020	.078 [-.155, .311]	.118	.068	.003
Consideration	.071 [-.172, .314]	.123	.068	.002	.021 [-.218, .260]	.121	.020	.000
Co-worker support	-.224 [-.472, .023]	.125	-.205	-.023	-.215 [-.458, .028]	.123	-.197	-.021
Team external focus	.272 [.025, .520]*	.125	.242	.034	.210 [-.037, .457]	.125	.186	.019
Participation	.020 [-.209, .249]	.116	.022	.000	.012 [-.212, .236]	.113	.013	.000
Age					-.007 [-.019, .005]	.006	-.109	-.010
Gender					.152 [-.074, .379]	.114	.111	.012
Educational level					.132 [-.103, .366]	.118	.096	.008
Municipality size					.267 [.019, .514]*	.125	.190	.031
	Step 1				**Step 2**			
	R^2 = .073	Adjusted R^2 = .023			R^2 = .146	Adjusted R^2 = .071		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 137

As for role overload, for intersender conflict supportive evidence was found for the hypotheses H2 and H4 as well. As expected, both autonomy and feedback did not directly influence the level of intersender conflict. For hypothesis H10 partly supportive evidence was found as locus of control was a predictor for intersender conflict on step 1 of the hierarchical multiple regression analysis, but no longer on step 2. The hypothesis is therefore partly adopted. No supportive evidence was found for the hypotheses H6, H8 and H12. The hypotheses are rejected for intersender conflict.

Hypotheses intersender conflict– organizational determinants	
H2 Autonomy does not directly affect the level of role conflict of a neighbourhood manager experiences.	
H4 Feedback on job performance provided by co-workers and the supervisor does not directly affect the level of role conflict of a neighbourhood manager experiences.	

H6 The stricter a role is structured, the more role conflict a neighbourhood manager experiences.	
H8 The more leader consideration and co-worker support is provided, the less role conflict a neighbourhood manager experiences.	
H10 The higher the level of external focus among co-workers, the more role conflict a neighbourhood manager experiences.	
H12 The more influence on organizational decisions, the less role conflict a neighbourhood manager experiences.	

Note: rejected, adopted, partly adopted.

Environmental determinants

In order to assess the influence of environmental determinants on the level of intersender conflict, a hierarchical multiple regression analysis was performed. The environmental determinants on step 1 accounted for a significant 17.1% of the variance in intersender conflict, $R^2 = .171$, $F\ (4, 140) = 7.202$, $p < .001$. Environmental complexity had the strongest significant standardized regression coefficient with the criterion of intersender conflict, $\beta = .246$, $p < .01$, and explained about 4.5% of the variance in intersender conflict. This finding means that the higher the environmental complexity – i.e. the more actors in the neighbourhood differ from one another on various topics – the more intersender conflict is experienced by neighbourhood managers. Environmental dynamism regarding the municipality had the second strongest significant standardized regression coefficient, $\beta = .225$, $p < .05$, indicating that the more the expectations of actors in the neighbourhood regarding municipal services and the activities of the neighbourhood manager are subject to change, the more intersender conflict neighbourhood managers experience. This predictor variable explained 3.1% of the variance in the criterion.

On step 2, the control variables were added to the regression equation. This has resulted in an increase of the variance in intersender conflict of 7.4%, $\Delta R^2 = .074$, $\Delta F\ (4, 136) = 3.330$, $p = .012$. In combination, the eight variables explained a significant 24.5% of the variance in intersender conflict, $R^2 = .245$, $F\ (8, 136) = 5.506$, $p < .001$. Also on step 2, the standardized regression coefficients for both environmental complexity and environmental dynamism regarding the municipality were significant, respectively $\beta = .203$, $p < .05$ and $\beta = .229$, $p < .05$. The findings indicate that neighbourhood managers experience more intersender conflict under higher conditions of environmental complexity and environmental dynamism. Moreover, municipality size appeared to be a significant predictor for intersender conflict, $\beta = .209$, $p < .01$. According to this finding, the larger the municipality the more intersender conflict neighbourhood managers experience.

Table 14 Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial correlations (sr^2) predicting intersender conflict

	Step 1				**Step 2**			
	B [95% CI]	*SE (B)*	β	sr^2	*B* [95% CI]	*SE (B)*	β	sr^2
(Constant)	.943 [.033, 1.854]	.461			.601 [-.595, 1.798]	.605		
Environmental dynamism 1	.148 [-.093, .389]	.122	.109	.009	.101 [-.135, .336]	.119	.074	.004
Environmental dynamism 2	.240 [.033, .447]*	.105	.225	.031	.244 [.041, .446]*	.102	.229	.031
Environmental dynamism 3	-.131 [-.318, .056]	.094	-.127	-.011	-.062 [-.248, .123]	.094	-.060	-.003
Environmental complexity	.319 [.091, .547]**	.115	.246	.045	.263 [.036, .490]*	.115	.203	.029
Age					-.005 [-.015, .006]	.005	-.072	-.005
Gender					.146 [-.069, .361]	.109	.103	.010
Educational level					.091 [-.126, .309]	.110	.065	.004
Municipality size					.303 [.083, .524]**	.112	.209	.041
	Step 1				**Step 2**			
	R^2 = .171	Adjusted R^2 = .147			R^2 = .245	Adjusted R^2 = .200		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 145

The hypotheses H14 and H16 are tested with the above analyses. The findings show that both environmental dynamism regarding the municipality and environmental complexity affect the level of intersender conflict neighbourhood managers experience. Therefore, both hypotheses H14 and H16 are adopted for intersender conflict.

Hypotheses intersender conflict – environmental determinants	
H14 The higher the degree of environmental dynamism, the more role conflict a neighbourhood manager experiences.	
H16 The higher the degree of environmental complexity, the more role conflict a neighbourhood manager experiences.	

Note: rejected, adopted, partly adopted.

Individual determinants

On step 1 of the hierarchical multiple regression, performed in order to examine the influence of individual determinants on the level of intersender conflict, the individual determinants accounted for a non-significant 6.1% of the variance in intersender conflict, R^2 = .061, F (4, 130) = 2.114, p = .083. None of the determinants proved to be a significant predictor for the criterion.

On step 2, the control variables were added to the regression equation, which accounted for an additional significant 7.5% of the variance in intersender conflict, $\Delta R^2 = .075$, $\Delta F\ (4, 126) = 2.743$, $p = .031$. In combination, the eight determinants accounted for a significant 13.6% of the variance, $R^2 = .136$, $F\ (8, 126) = 2.485$, $p = .015$. Municipality size is the only predictor variable with a significant standardized regression coefficient, $\beta = .187$, $p < .05$, explaining 3.1% of the variance in intersender conflict. This finding indicates that the larger the municipality is, the more intersender conflict the neighbourhood manager experiences.

Table 15 Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial correlations (sr^2) predicting intersender conflict

	Step 1				**Step 2**			
	B [95% CI]	*SE (B)*	β	sr^2	*B* [95% CI]	*SE (B)*	β	sr^2
(Constant)	2.420 [1.636, 3.205]***	.396			2.278 [1.189, 3.367]***	.550		
Locus of control	.158 [-.046, .363]	.103	.135	.017	.128 [-.073, .330]	.102	.109	.011
Need for clarity	.124 [-.057, .304]	.091	.118	.013	.093 [-.087, .272]	.091	.088	.007
Experience in organization	.000 [-.015, .014]	.007	-.006	-.000	.006 [-.012, .023]	.009	.080	.003
Experience in function	-.023 [-.049, .003]	.013	-.176	-.022	-.008 [-.035, .019]	.014	-.062	-.002
Age					-.011 [-.026, .004]	.008	-.161	-.013
Gender					.118 [-.117, .353]	.119	.086	.007
Educational level					.153 [-.085, .390]	.120	.111	.011
Municipality size					.263 [.018, .508]*	.124	.187	.031
	Step 1				**Step 2**			
	$R^2 = .061$	Adjusted $R^2 = .032$			$R^2 = .136$	Adjusted $R^2 = .081$		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 135

The hypotheses H18, H20 and H22 are tested with the above analyses. From the analyses it becomes clear that supportive evidence was found for hypothesis H18. As expected, having an internal locus of control results in less intersender conflict for neighbourhood managers. For the hypotheses H20 and H21 no supportive evidence was found. Therefore, both hypotheses are rejected for intersender conflict.

Hypotheses intersender conflict– individual determinants	
H18 Neighbourhood managers with an internal locus of control experience less role conflict compared to neighbourhood managers with an external locus of control.	

H20 Neighbourhood managers with a high need-for-clarity experience more role conflict compared to neighbourhood managers with a low need-for-clarity.	
H22 The more experienced, the less role conflict a neighbourhood manager experiences.	

Note: rejected, adopted, partly adopted.

Sub-conclusion

For intersender conflict as well, the organizational determinants were hardly found as predictive factors. As explained for role conflict, this limited effect of organizational determinants on role conflict may be due to the nature of a neighbourhood managers' job. In this job, a neighbourhood manager has to deal with the expectations of actors in the neighbourhood. As these actors are outside the organizations, it is difficult for the organization to steer the expectations that are present in the neighbourhood (Walker et al., 1975). Therefore, it is not surprising that the organizational determinants have little effect on role conflict.

Team external focus is the only organizational determinant for which a statistically significant effect on intersender conflict was found. A positive relation was found, indicating that more team external focus results in higher levels of intersender conflict. Due to a higher team external focus, more emphasis is placed upon boundary spanning behaviour (Marrone et al., 2007). When a neighbourhood manager has to perform these boundary spanning activities, he or she is likely to be confronted with a larger number of different role expectations. This increases the chance of experiencing intersender conflict. Only if the burdens of external activities become shared, an individual boundary spanner is likely to experience less role conflict (ibid.). Interestingly however, the significant effect of team external focus disappears after adding the control variables. Even when the control variables are added to team external focus only, a significant effect is not found. This may indicate that the significant effect of team external focus results form it relatively strong correlation with several of the other organizational determinants. The combined predictive value among the several organization determinants may strengthen the effect of team external focus on intersender conflict.

With regard to the environmental determinants, in line with the expectations, environmental complexity was found as a significant predictor for intersender conflict. This may be due to the effort it takes to find jointly satisfying solutions to the divergent expectations and interest of all actors involved. Also for intersender conflict, municipal dynamism proved to be a statistically significant predictor. As explained for role overload, this may have to do with the fact that this type of dynamism has a direct influence on the neighbourhood manager him- or herself and his or her activities. Apparently, the more direct the dynamism of actors in the neighbourhood is

related to the work activities of the neighbourhood manager, the more this influences his or her level of role conflict.

Need for clarity and experience did not appear to be significant predictors for role overload, and neither were they for intersender conflict. In addition to these two variables, locus of control was also not found as a statistically significant predictor for intersender conflict. As indicated by Ng, Soorensen & Eby (2006), internals are expected to be focused on reducing or eliminating stressors. However, dealing with conflict between the expectations of actors within the municipality and those of actors in the neighbourhood is inherent in a neighbourhood managers' job (Stamper & Johlke, 2003; Walker et al., 1975). Therefore, an explanation for the lack of an effect of locus of control may be that even when internals are more focused on reducing stressors, they will not be able to completely overcome intersender conflict as the conflicting expectations are part of the job anyway.

Interestingly, in each of the final models for the three determinants, the control variable municipality size appeared to be a significant predictor for intersender conflict. This finding indicates that neighbourhood managers in larger municipalities experience more intersender conflict comparted to neighbourhood managers in smaller municipalities. The finding makes sense given that municipality size appeared to correlate with the number of actors in the neighbourhood a neighbourhood manager has to deal with (r = .219, p = .004). Neighbourhood managers in larger municipalities are thus faced with a greater number of expectations – due to the larger number of actors they have to deal with –, which increases the likelihood of these expectations conflicting with one another.

The variables that were found to significantly predict intersender conflict – municipal dynamism, environmental complexity and municipality size – jointly accounted for 20.4% of the variance in intersender conflict, R^2 = .204, F (3, 170) = 14.509, p < .001. For all of the predictor variables significant standardized regression coefficients were found.

Table 16 Final model for predicting intersender conflict

	B [95% CI]	*SE (B)*	β	sr^2
(Constant)	.742 [.030, 1.454]*	.361		
Environmental dynamism 2	.168 [.007, .3228]*	.081	.155	.020
Environmental complexity	.343 [.159, .528]***	.094	.277	.063
Municipality size	.340 [.149, 531]**	.097	.242	.058
	R^2 = .204	Adjusted R^2 = .190		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 174

4.3.2 The influence of role stress on job related outcomes

4.3.2.1 Job satisfaction

In order to assess the influence of role stress on job satisfaction, a hierarchical multiple regression analysis was performed. On step 1, the different forms of role stress accounted for a significant 121.8% of the variance in job satisfaction, $R^2 = .128$, $F (3, 133) = 6.489$, $p < .001$. The model indicates that role ambiguity is the only significant predictor for job satisfaction, $\beta = -.363$, $p < .001$. This finding indicates that the less role ambiguity a neighbourhood manager experiences, the more satisfied this person is with his or her job. This predictor variable explained 11.3% of the variance in the criterion.

Adding the control variables on step 2 resulted in an additional non-significant 2.8% of the variance in job satisfaction, $\Delta R^2 = .028$, $\Delta F (4, 129) = 1.086$, $p = .366$. After adding the control variables, the final model accounted for a significant 15.6% of the variance in job satisfaction, $R^2 = .156$, $F (7, 129) = 3.409$, $p = .002$. Role ambiguity was still the only significant predictor, $\beta = -.326$, $p < .01$, and explained 7.8% of the variance in job satisfaction.

Table 17 Unstandardized (B) and standardized (β) regression coefficients, and squared semi-partial correlations (sr^2) predicting job satisfaction

	Step 1				**Step 2**			
	B [95% CI]	*SE (B)*	β	sr^2	*B* [95% CI]	*SE (B)*	B	sr^2
(Constant)	4.964 [4.390, 5.539]***	.291			4.367 [3.428, 5.306]***	.475		
Role ambiguity	-.421 [-.622, -.220]***	.101	-.363	-.113	-.379 [-.595, -.162]**	.109	-.326	-.078
Role conflict - overload	-.031 [-.167, .104]	.069	-.039	-.001	-.053 [-.191, .085]	.070	-.067	-.004
Role conflict - intersender	.075 [-.167, .104]	.074	.088	.007	.095 [-.059, .249]	.078	.111	.010
Age					.010 [-.001, .020]	.005	.165	.023
Gender					.056 [-.135, .247]	.097	.048	.002
Educational level					.053 [-.142, .248]	.099	.045	.002
Municipality size					-.038 [-.241, .165]	.102	-.032	-.000
	Step 1				**Step 2**			
	$R^2 = .128$	Adjusted $R^2 = .108$			$R^2 = .156$	Adjusted $R^2 = .110$		

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 137

Based on the findings presented above, it can be concluded that hypothesis H23 is supported. As expected, higher levels of role ambiguity result in lower levels of job satisfaction. For both role overload and intersender conflict, no effect was found. Therefore, hypothesis H24 is rejected.

Hypotheses role stress – job satisfaction	
H23 The more role ambiguity a neighbourhood manager experiences, the less satisfied he or she is about the job.	
H24 The more role conflict a neighbourhood manager experiences, the less satisfied he or she is about the job.	

Note: rejected, adopted, partly adopted.

4.3.2.2 Boundary spanning performance (activities)

A binary logistic regression was performed in order to ascertain the effects of role ambiguity and both forms of role conflict (i.e. overload and intersender) on the likelihood of neighbourhood managers being a competent boundary spanner based on their performance of activities. On step 1, the variables role ambiguity, role overload and intersender conflict were added to the equation. The logistic regression model was statistically significant, χ^2 (3) = 27.543, p < .001. The model explained 22.5% (Nagelkerke R^2 = .225) of the variance in boundary spanning performance, indicating that the fit of the model to the data was only moderate. The model was able to correctly classify 84.1% of the cases for not being a competent boundary spanner and 45.2% of the cases for being a competent boundary spanner, for an overall success rate of 68%. Only for role ambiguity a negative, significant effect was found, indicating that the less role ambiguity a neighbourhood manager experiences, the more likely he or she is to be a competent boundary spanner. The odds ratio for role ambiguity shows that for every one unit increase in role ambiguity, the odds of a neighbourhood manager being a competent boundary spanner decreases by a factor .117, B = -2.144, Exp(B) = .117, p < .001.

On step 2, the control variables were added to the regressing equation. The model was again statistically significant, χ^2 (7) = 31.072, p < .001 and explained 25.2% (Nagelkerke R^2 = .252) of the variance in boundary spanning performance. Although this model explained a bit more of the variance in the criterion compared to step 1, the fit of the model to the data is still moderate. The model was able to correctly classify 80.7% of the cases for not being a competent boundary spanner and 50% of the cases for being a competent boundary spanner, for an overall success rate of 68%. Role ambiguity was still the only variable with a significant effect, indicating that the odds of a neighbourhood manager being a competent boundary spanner decreases by a factor .094 (Exp(B) = .094, p < .001) for every one unit increase in role ambiguity.

Table 18 Binary logistic regression predicting boundary spanning performance (activities) from role ambiguity, role overload and intersender conflict

	Step1			**Step 2**		
	B	S.E.	Exp(B) [95% CI]	B	S.E.	Exp(B) [95% CI]
(Constant)	3.228	1.196	25.223**	4.178	1.991	65.216*
Role ambiguity	-2.144	.481	.117	-2.359	.537	.094

			[.046, .301]***			[.033, .270]***
Role conflict – overload	.187	.253	1.205 [.734, 1.978]	.272	.265	1.313 [.781, 2.206]
Role conflict – intersender	.195	.281	1.215 [.701, 2.106]	.081	.293	1.084 [.610, 1.928]
Age				-.018	.020	.983 [.944, 1.022]
Gender				-.229	.375	.795 [.381, 1.659]
Education level				.380	.387	1.462 [.685, 3.122]
Municipality size				.393	.394	1.481 [.684, 3.207]
	Step 1			**Step 2**		
	Cox & Snell R^2 = .167		Nagelkerke R^2 = .225	Cox & Snell R^2 = .187		Nagelkerke R^2 = .252

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 150

The hypotheses H25 and H26 are tested with the above analyses. From the analyses it becomes clear that supportive evidence was found for hypothesis H25. Role ambiguity appeared to affect the neighbourhood manager's boundary spanning performance measured by means of activities. No supportive evidence was found for role overload and intersender conflict. Therefore, hypotheses H26 is rejected for boundary spanning performance measure by means of activities.

Hypotheses role stress – boundary spanning performance (activities)	
H25 The more role ambiguity a neighbourhood manager experiences, the lower his or her boundary spanning performance.	
H26 The more role conflict a neighbourhood manager experiences, the lower his or her boundary spanning performance.	

Note: rejected, adopted, partly adopted.

4.3.2.3 Boundary spanning performance (frequency of contact)

A binary logistic regression was used to differentiate between neighbourhood managers who are a competent boundary spanner and respondents who are not, depending on the level of role stress they experience. On step 1, the three forms of role stress were added to the equation. The logistic regression model proved not to be statistically significant, χ^2 (3) = 3.562, p = .313. 3.2% of the variance in boundary spanning performance was explained by the model (Nagelkerke R^2 = .032), indicating a weak fit of the model to the data. The model was able to correctly classify 93.7% of the cases for not being a competent boundary spanner. Only 1.8% of the cases for being a competent boundary spanner were correctly classified by the model. The overall success rate was 60%. None of the three predictor variables was found to significantly affect the criterion of boundary spanning performance.

On step 2, the control variables were added to the regression equation. The model was still not found to be statistically significant, χ^2 (7) = 8.261, p = .310. The model explained 7.3% (Nagelkerke R^2 = .073) of the variance in boundary spanning performance. This indicates that the fit of the model to the data is relatively low. The model was now able to correctly classify 88.4% of the cases for not being a competent boundary spanner and 21.8% of the case for being a competent boundary spanner. The overall success rate was 64%. None of the predictor variables was found to significantly influence boundary spanning performance.

Table 19 Binary logistic regression predicting boundary spanning performance (frequency of contact) from role ambiguity, role overload and intersender conflict

	Step 1			**Step 2**		
	B	S.E.	Exp(B) [95% CI]	B	S.E.	Exp(B) [95% CI]
(Constant)	.352	1.030	1.422	.106	1.776	1.112
Role ambiguity	-.673	.369	.510 [.247, 1.051]	-.536	.398	.585 [.268, 1.278]
Role conflict – overload	.133	.236	1.142 [.719, 1.815]	.128	.248	1.136 [.699, 1.847]
Role conflict – intersender	.062	.265	1.064 [.633, 1.789]	.122	.282	1.130 [.650, 1.962]
Age				.015	.019	1.015 [.978, 1.053]
Gender				-.688	.354	.503 [.251, 1.007]
Education level				.073	.363	1.076 [.528, 2.190]
Municipality size				.045	.372	1.046 [.505, 2.166]
	Step 1			**Step 2**		
	Cox & Snell R^2 = .023		Nagelkerke R^2 = .032	Cox & Snell R^2 = .054		Nagelkerke R^2 = .073

Note: * p < .05; ** p < .01; *** p < .001
CI = confidence interval. *N* = 150

As no effect of either role ambiguity, role overload or intersender conflict on boundary spanning performance measured by means of frequency of contact was found, the hypotheses H25 and H26 are rejected for this type of boundary spanning performance.

Hypotheses role stress – boundary spanning performance (contact)	
H25 The more role ambiguity a neighbourhood manager experiences, the lower his or her boundary spanning performance.	
H26 The more role conflict a neighbourhood manager experiences, the lower his or her boundary spanning performance.	

Note: rejected, adopted, partly adopted.

4.3.2.4 Sub-conclusion

In the analyses above, the relationships between both role ambiguity and role conflict with two job outcomes were tested. The job outcomes examined in this study are job satisfaction and boundary spanning performance. This latter variable is divided into performance measured by means of activities and performance based on frequency of contact.

The findings show that only role ambiguity was a statistically significant predictor for both job satisfaction and boundary spanning performance measured by activities. In line with the expectations, it seems that neighbourhood managers are less satisfied with their work when there are many uncertainties and they are therefore less able to meet the different expectations (Behrman & Perreault, 1984; Churchill et al., 1976; Singh, 1993). Moreover, high role ambiguity seems to lead to less competent behaviour, probably due to the fact that under conditions of uncertainty neighbourhood managers do not know how to perform well (Behrman & Perreault, 1984; Jackson & Schuler, 1985; Singh, 1993). Two more regression analyses were performed in order to test who much of the variance in job satisfaction and boundary spanning performance were explained by role ambiguity. For job satisfaction, role ambiguity explains 11.4% of the variance, $R^2 = .114$, $F(1, 164) = 21.028$, $p < .001$ with a standardized regression coefficient of $\beta = -.394$, $p < .001$. Role ambiguity explains 13.9% of the variance in boundary spanning performance measured by means of activities (Nagelkerke $R^2 = .139$). The likelihood for a neighbourhood manager to be a competent boundary spanner decreases by a factor .213 for every one unit increase in role ambiguity, $B = -1.547$, $Exp(B) = .213$, $p < .001$.

For both role overload and intersender conflict, no significant relationship with any of the job outcomes was found. With regard to the relationship between role conflict and job satisfaction, a possible explanation for the absence of a significant effect may be found in the fact that role conflict is inherent in a boundary spanners' job (Stamper & Johlke, 2003; Walker et al., 1975). Role conflict may be seen as a factor that is simply there. It is therefore possible that the level of conflict is not that much of influence on the extent to which a neighbourhood manager is satisfied with his or her job. Also surprising is the fact that the non-significant relationship between intersender conflict and job satisfaction indicates a positive direction. An explanation for this finding may be that conflict is seen as a challenge that actually makes the work more fun.

The absence of a significant relationship between either type of role conflict and either type of boundary spanning performance may be explained by the fact that neighbourhood managers learn to deal with the conflict inherent in their job. This enables them to nevertheless perform well (Behrman & Perreault, 1984). An explanation for the positive sign of the non-significant

relation between role conflict and performance may be found in the attention-conflict theory (Stamper & Johlke, 2003). This theory suggests that when boundary spanners experience high levels of role conflict, they will focus their attention on the most urgent and feasible aspects of their work. In this way, it is still possible to perform well under high levels of conflict.

4.3.3 The moderating effect of organizational and individual determinants

4.3.3.1 Role ambiguity - job satisfaction

Organizational determinants

In order to examine the potential moderating effect of the organizational determinants on the relation between role ambiguity and job satisfaction, separate hierarchical multiple regression analyses were performed. Prior to these analyses, all variables were standardized and interaction terms between standardized role ambiguity and each of the standardized organizational determinants were computed. For each analysis, the standardized predictor (role ambiguity) and the standardized moderator (one of the organizational determinants at a time) were jointly added on step 1 of the equation. The corresponding interaction term was entered on step 2.

As becomes clear from table 20, none of the organizational determinants was a significant moderator of the relationship between role ambiguity and job satisfaction. In none of the case, the additional explained variance by the role ambiguity × organizational determinant interaction was more than 1%. Due to the absence of statistically significant effects, the hypotheses H27a and H29a are rejected.

Table 20 Moderated regression analyses of role ambiguity and organizational determinants with job satisfaction

	Step 1			**Step 2**		
	B	SE (B)	β	B	SE (B)	β
(Constant)	-.006	.071		.002	.073	
Role ambiguity	-.295***	.074	-.290	-.289***	.075	-.284
Consideration	.245**	.072	.247	.238**	.073	.240
Role ambiguity × Consideration				.040	.074	.040
	R^2 = .172***			ΔR^2 = .002		R^2 = .174***
(Constant)	-.006	.073		-.012	.075	
Role ambiguity	-.334***	.076	-.328	-.337***	.076	-.331
Co-worker support	.051	.075	.051	.052	.075	.052
Role ambiguity × Co-worker support				-.032	.072	-.033
	R^2 = .116***			ΔR^2 = .001		R^2 = .117***

(Constant)	-.005	.072		.005	.075	
Role ambiguity	-.277***	.078	-.273	-.272**	.079	-.268
Participation	.198*	.076	.198	.196*	.077	.196
Role ambiguity × Participation				.030	.059	.038
	R^2 = .149***			ΔR^2 = .001		R^2 = .150***

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H27 Social support decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	
H29 Participation decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

Individual determinants

In order to test the potential moderating effect of the individual determinants on the relation between role ambiguity and job satisfaction, the same procedure was followed as for the organizational determinants. After standardizing the variables and computing the interaction terms, separate hierarchical multiple regressions were performed. On step 1, the standardized predictor (role ambiguity) and the standardized moderator (one of the individual determinants at a time) were added. The corresponding interaction term was entered on step 2.

As is the case for the organizational determinants, none of the individual determinants proved to be a significant moderator on the relationship between role ambiguity and job satisfaction. The additional explained variance by the interaction terms role ambiguity × individual determinant was for none of the cases statistically significant. On the basis of this finding, the hypotheses H31a, H33a and H35a are rejected.

Table 21 Moderated regression analyses of role ambiguity and individual determinants with job satisfaction

	Step 1			**Step 2**		
	B	SE (B)	β	B	SE (B)	β
(Constant)	-.006	.073		-.013	.074	
Role ambiguity	-.340***	.075	-.334	-.335***	.075	-.330
Locus of control	-.037	.074	-.037	-.036	.074	-.036
Role ambiguity × Locus of control				.087	.079	.081
	R^2 = .115***			ΔR^2 = .007		R^2 = .122***
(Constant)	-.006	.073		.004	.074	
Role ambiguity	-.338***	.075	-.333	-.314***	.078	-.309
Need for clarity	-.041	.074	-.041	-.073	.078	-.073
Role ambiguity				-.096	.078	-.098

× Need for clarity						
	R^2 = .115***			ΔR^2 = .008		R^2 = .123***
(Constant)	-.003	.074		-.025	.077	
Role ambiguity	-.329***	.078	-.322	-.350***	.080	-.343
Experience organization	.052	.076	.052	.039	.077	.039
Role ambiguity × Experience organization				-.093	.086	-.083
	R^2 = .114***			ΔR^2 = .006		R^2 = .120***
(Constant)	.003	.074		-.023	.079	
Role ambiguity	-.360***	.079	-.354	-.271*	.124	-.266
Experience function	-.042	.078	-.042	-.069	.083	-.069
Role ambiguity × Experience function				-.017	.018	-.121
	R^2 = .118***			ΔR^2 = .005		R^2 = .123***

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H31 Locus of control decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	
H33 Need for clarity decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	
H35 Experience decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

4.3.3.2 Role conflict (overload) – job satisfaction

Organizational determinants

The potential moderating effect of the organizational determinants on the relation between role overload and job satisfaction was again tested by separate hierarchical multiple regression analyses. Interaction terms were computed by multiplying the standardized role overload construct by each of the standardized organizational determinants. For each analysis, the standardized predictor (role overload) and the standardized moderator (one of the organizational determinants at a time) were jointly added on step 1 of the equation. The corresponding interaction term was entered on step 2.

Table 22 shows that none of the organizational determinants was a significant moderator of the relationship between role overload and job satisfaction. The additional explained variance by each of the interaction terms role overload × organizational determinant

proved not to be statistically significant. Due to the absence of statistically significant effects, the hypotheses H28a and H30a are rejected for role overload.

Table 22 Moderated regression analyses of role overload and organizational determinants with job satisfaction

	Step 1			**Step 2**		
	B	SE (B)	β	B	SE (B)	β
(Constant)	-.001	.074		-.001	.074	
Role overload	-.090	.079	-.085	-.094	.082	-.089
Consideration	.298***	.074	.301	.301***	.075	.303
Role overload × Consideration				-.013	.063	-.016
	R^2 = .098***			ΔR^2 = .000		R^2 = .099**
(Constant)	.000	.077		-.001	.078	
Role overload	-.084	.083	-.079	-.084	.083	-.080
Co-worker support	.100	.078	.100	.100	.080	.100
Role overload × Co-worker support				-.003	.087	-.003
	R^2 = .018			ΔR^2 = .000		R^2 = .018
(Constant)	.000	.075		.002	.075	
Role overload	-.056	.080	-.053	-.053	.081	-.050
Participation	.279***	.076	.279	.276***	.077	.276
Role overload × Participation				.020	.065	.024
	R^2 = .085**			ΔR^2 = .001		R^2 = .085**

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H28 Social support decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H30 Participation decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

Individual determinants

Several hierarchical multiple regressions were run in order to assess the potential moderating effect of individual determinants on the relationship between role overload and job satisfaction. On step 1 of each analysis, the standardized predictor (role overload) and the standardized moderator (one of the individual determinants at a time) were added. The corresponding interaction term was entered on step 2.

Need for clarity, experience in the organization and experience in the function did not significantly moderate the effect of role overload on job satisfaction, as evidenced by the non-

significant increase in the explained variance by the interaction terms (Table 23). For locus of control, however, a statistically significant effect was found. The addition of the interaction term role overload × locus of control explained additional 1.4% of the variance in job satisfaction, $\Delta R^2 = .014$, $\Delta F\ (1, 162) = 6.113$, $p = .014$. The interaction effect was significant, $\beta = .197$, $p = .014$. In order to interpret the pattern of the interaction effect, a simple slopes analysis was performed. From this analysis it becomes clear that there is a negative effect of role overload on job satisfaction for neighbourhood managers with an internal locus of control, $\beta = -.281$, $p < .05$. For externals a positive relation was found, $\beta = .043$, $p = .647$. These findings indicate that the negative effect of role overload on job satisfaction is statistically significant under conditions of internal locus of control. The negative influence of role overload on job satisfaction increases for internals (figure 4). This finding is contrary to the expectations, as it was expected that the negative effect of role overload on job satisfaction would *decrease* for internals. Based on these findings, it can be concluded that hypothesis H32a is not confirmed for role overload. As other statistically significant effects were absent as well, the hypotheses H34a and H36 are rejected for role overload.

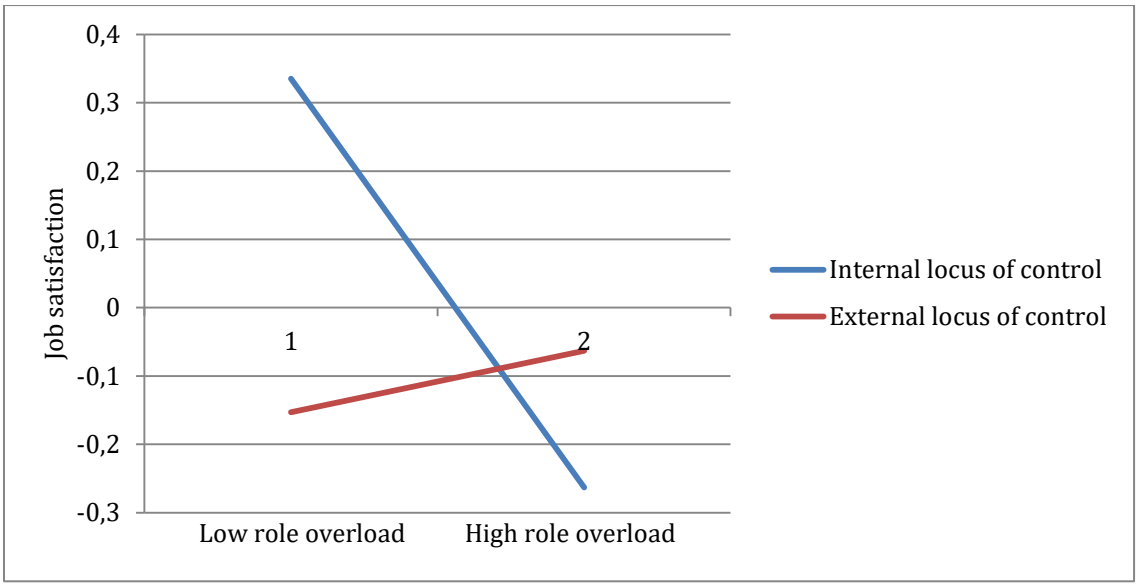
Table 23 Moderated regression analyses of role overload and individual determinants with job satisfaction

	Step 1			**Step 2**		
	B	SE (B)	β	B	SE (B)	β
(Constant)	.000	.078		-.036	.078	
Role overload	-.084	.085	-.079	-.127	.085	-.119
Locus of control	-.047	.080	-.047	-.072	.079	-.072
Role overload × Locus of control				.172*	.069	.197
	$R^2 = .010$			$\Delta R^2 = .036$*		$R^2 = .046$
(Constant)	.000	.078		-.002	.078	
Role overload	-.086	.083	-.082	-.086	.083	-.081
Need for clarity	-.067	.078	-.067	-.068	.079	-.068
Role overload × Need for clarity				.015	.081	.014
	$R^2 = .012$			$\Delta R^2 = .000$		$R^2 = .013$
(Constant)	.005	.078		.003	.078	
Role overload	-.104	.083	-.098	-.100	.083	-.095
Experience organization	.131	.077	.131	.134	.078	.134
Role overload × Experience organization				.049	.089	.044
	$R^2 = .026$			$\Delta R^2 = .002$		$R^2 = .028$
(Constant)	.005	.078		.007	.079	
Role overload	-.098	.083	-.092	-.104	.084	-.098
Experience function	.061	.079	.061	.059	.079	.059

Role overload × Experience function		.060	.078	.061
	R^2 = .012	ΔR^2 = .004	R^2 = .016	

Note: * p < .05; ** p < .01; *** p < .001

Figure 4 The moderating effect of locus of control on the relation between role overload and job satisfaction



Moderating hypotheses	
H32 Locus of control decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H34 Need for clarity decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H36 Experience decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

4.3.3.3 Role conflict (intersender) – job satisfaction

Organizational determinants

In order to examine the potential moderating effect of the organizational determinants on the relation between intersender conflict and job satisfaction, separate hierarchical multiple regression analyses were performed. For each analysis, the standardized predictor (intersender conflict) and the standardized moderator (one of the organizational determinants at a time) were jointly added on step 1 of the equation. The corresponding interaction term was entered on step 2.

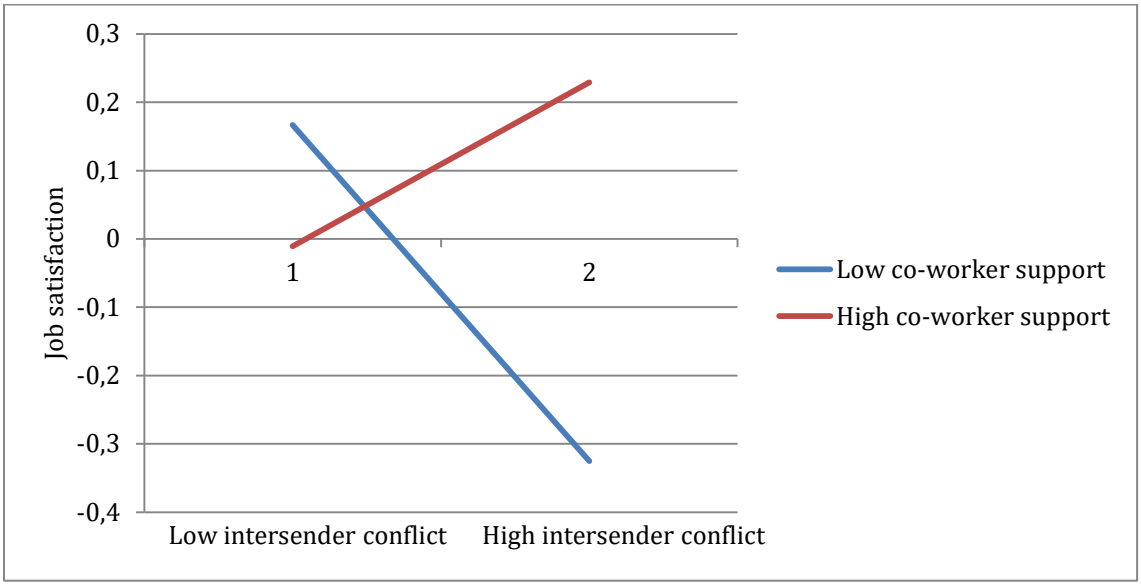
As table 24 shows, the only determinant for which a significant moderating effect was found is co-worker support. The interaction term intersender conflict × co-worker support explained an additional 4.0% of the total variance, $\Delta R^2 = .040$, $\Delta F\ (1, 162) = 6.915$, $p = .009$. The interaction effect was significant, $\beta = .202$, $p = .009$. In order to interpret the pattern of the interaction effect, a simple slopes analysis was performed. It was found that the effect of intersender conflict on job satisfaction was positive under conditions of high co-worker support, $\beta = .116$, $p = .233$. Under conditions of low co-worker support, intersender conflict and job satisfaction were negatively related, $\beta = -.239$, $p < .05$. As shown by figure 5, co-worker support decreases the negative effect of intersender conflict on job satisfaction. On the basis of this finding, hypothesis H28a is adopted for co-worker support and intersender conflict. As other statistically significant effects were not found, hypothesis H30a is rejected for intersender conflict.

Table 24 Moderated regression analyses of intersender conflict and organizational determinants with job satisfaction

	Step 1			**Step 2**		
	B	SE (B)	β	B	SE (B)	β
(Constant)	-.001	.074		-.001	.075	
Intersender conflict	-.058	.077	-.056	-.057	.077	-.056
Consideration	.300***	.074	.303	.300***	.075	.303
Intersender conflict × Consideration				.003	.071	.004
	$R^2 = .094$***			$\Delta R^2 = .000$		$R^2 = .094$**
(Constant)	.000	.078		.015	.076	
Intersender conflict	-.042	.080	-.041	-.063	.079	-.061
Co-worker support	.104	.078	.104	.094	.077	.094
Intersender conflict × Co-worker support				.183**	.070	.202
	$R^2 = .013$			$\Delta R^2 = .040$**		$R^2 = .054$*
(Constant)	.000	.075		.003	.075	
Intersender conflict	-.072	.077	-.070	-.070	.077	-.068
Participation	.291***	.075	.291	.292***	.075	.292
Intersender conflict × Participation				-.048	.074	-.049
	$R^2 = .087$**			$\Delta R^2 = .002$		$R^2 = .089$**

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 5 The moderating effect of co-worker support on the relation between intersender conflict and job satisfaction



Moderating hypotheses	
H28 Social support decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H30 Participation decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

Individual determinants

The potential moderating effect of individual determinants on the relationship between intersender conflict and job satisfaction was again tested by separate hierarchical multiple regression analyses. On step 1 of the equation, the standardized predictor (intersender conflict) and the standardized moderator (one of the individual determinants at a time) were added. The corresponding interaction term was entered on step 2.

As becomes clear from table 25, none of the individual determinants was a significant moderator of the relationship between intersender conflict and job satisfaction. The additional explained variance by the intersender conflict × individual determinant interaction was less than 1% each time and not significant. Supportive evidence for the hypotheses H32a, H34a and H36a was not found and therefore the hypotheses are rejected for intersender conflict.

Table 25 Moderated regression analyses of intersender conflict and individual determinants with job satisfaction

	Step 1			**Step 2**		
	B	SE (B)	β	B	SE (B)	β
(Constant)	.000	.078		-.002	.079	
Intersender conflict	-.044	.081	-.042	-.043	.081	-.041

Locus of control	-.059	.079	-.059	-.059	.079	-.059
Intersender conflict × Locus of control				.017	.080	.017
	R^2 = .006			ΔR^2 = .000		R^2 = .006
(Constant)	.000	.078		.001	.078	
Intersender conflict	-.044	.081	-.043	-.045	.081	-.043
Need for clarity	-.073	.078	-.073	-.073	.079	-.073
Intersender conflict × Need for clarity				-.015	.081	-.015
	R^2 = .008			ΔR^2 = .000		R^2 = .008
(Constant)	.005	.078		.008	.079	
Intersender conflict	-.043	.081	-.042	-.040	.081	-.039
Experience organization	.123	.078	.124	.124	.078	.125
Intersender conflict × Experience organization				.040	.080	.039
	R^2 = .018			ΔR^2 = .002		R^2 = .019
(Constant)	.006	.079		.011	.079	
Intersender conflict	-.051	.081	-.050	-.047	.082	-.046
Experience function	.059	.079	.059	.062	.079	.062
Intersender conflict × Experience function				.063	.090	.055
	R^2 = .006			ΔR^2 = .003		R^2 = .010

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H32 Locus of control decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H34 Need for clarity decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H36 Experience decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

4.3.3.4 Role ambiguity – boundary spanning performance (activities)

Organizational determinants

In order to test the potential moderating effect of organizational determinants on the relation between role ambiguity and boundary spanning performance measured by means of activities, separate binary logistic regressions were performed. Again, the standardized values were used. On step 1, the standardized predictor (role ambiguity) and the standardized moderator (one of the organizational determinants at a time) were added. The binary logistic option in SPSS was

able to create the corresponding interaction term automatically. This interaction term was entered on step 2.

As becomes clear from table 26, none of the organizational determinants was a significant moderator of the relationship between role conflict and boundary spanning performance. The interaction terms did not make a unique contribution to the model, which is shown by the fact that the χ^2 was not significant for each of the interaction terms. Due to the absence of statistically significant effects, the hypotheses H27b and H29b are rejected for boundary spanning performance based on activities.

Table 26 Moderated regression analyses of role ambiguity and organizational determinants with boundary spanning performance (activities)

	Step 1			**Step 2**		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.480	.167	.619**	-.487	.171	.614**
Role ambiguity	-.762	.197	.467***	-.765	.197	.466***
Consideration	-.145	.169	.865	-.143	.169	.867
Role ambiguity × Consideration				-.040	.190	.961
	Cox & Snell R^2 = .101	Nagelkerke R^2 = .136		Cox & Snell R^2 = .101	Nagelkerke R^2 = .137	
(Constant)	-.520	.177	.594**	-.520	.177	.594**
Role ambiguity	-.768	.208	.464***	-.769	.208	.464***
Co-worker support	.532	.192	1.703**	.534	.196	1.705**
Role ambiguity × Co-worker support				.007	.216	1.007
	Cox & Snell R^2 = .157	Nagelkerke R^2 = .212		Cox & Snell R^2 = .157	Nagelkerke R^2 = .212	
(Constant)	-.497	.172	.608**	-.518	.175	.596**
Role ambiguity	-.740	.208	.477***	-.747	.209	.474***
Participation	.279	.186	1.322	.258	.186	1.294
Role ambiguity × Participation				-.126	.175	.881
	Cox & Snell R^2 = .125	Nagelkerke R^2 = .169		Cox & Snell R^2 = .127	Nagelkerke R^2 = .172	

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H27 Social support decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	
H29 Participation decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

Individual determinants

The potential moderating effect of individual determinants on the relation between role ambiguity and boundary spanning performance measured by means of activities was tested by performing separate binary logistic regressions. For each analysis, the standardized predictor (role ambiguity) and the standardized moderator (one of the individual determinants at a time) were jointly added on step 1 of the equation. The corresponding interaction term, created by SPSS, was entered on step 2.

Table 27 shows that none of the individual determinants was a significant moderator of the relationship between role ambiguity and boundary spanning performance. The additional explained variance by each of the interaction terms proved not to be significant as indicated by the non-significant χ^2 and Exp(B) values. The finding indicates that supportive evidence for the hypotheses H31b, 33b and H35b was not found. Therefore, the hypotheses are rejected for boundary spanning performance based on activities.

Table 27 Moderated regression analyses of role ambiguity and individual determinants with boundary spanning performance (activities)

	Step 1			**Step 2**		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.494	.172	.610**	-.500	.175	.606**
Role ambiguity	-.851	.209	.427***	-.850	.209	.427***
Locus of control	.221	.169	1.248	.224	.169	1.251
Role ambiguity × Locus of control				.039	.198	1.040
	Cox & Snell R^2 = .122	Nagelkerke R^2 = .165		Cox & Snell R^2 = .122	Nagelkerke R^2 = .165	
(Constant)	-.486	.171	.615**	-.482	.172	.618**
Role ambiguity	-.816	.204	.442***	-.809	.206	.445***
Need for clarity	.047	.167	1.048	.028	.183	1.029
Role ambiguity × Need for clarity				-.052	.202	.949
	Cox & Snell R^2 = .113	Nagelkerke R^2 = .153		Cox & Snell R^2 = .113	Nagelkerke R^2 = .153	
(Constant)	-.504	.164	.604**	-.598	.180	.550**
Role ambiguity	-.808	.198	.446***	-.904	.215	.405***
Experience organization	-.210	.169	.810	-.296	.182	.744
Role ambiguity × Experience organization				-.323	.222	.724
	Cox & Snell R^2 = .109	Nagelkerke R^2 = .147		Cox & Snell R^2 = .120	Nagelkerke R^2 = .162	
(Constant)	-.522	.165	.593**	-.591	.180	.554**
Role ambiguity	-.827	.198	.437***	-.867	.204	.420***
Experience function	-.277	.172	.758	-.367	.197	.693
Role ambiguity × Experience function				-.242	.236	.785
	Cox & Snell	Nagelkerke R^2 =		Cox & Snell R^2	Nagelkerke R^2 =	

	R^2 = .113	.153		= .118	.160	

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H31 Locus of control decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	
H33 Need for clarity decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	
H35 Experience decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

4.3.3.5 Role conflict (overload) – boundary spanning performance (activities)

Organizational determinants

In order to test the potential moderating effect of organizational determinants on the relation between role overload and boundary spanning performance based on activities, separate binary logistic regressions were performed. The standardized predictor (role overload) and the standardized moderator one of the organizational determinants at a time) were added on step 1 of the equation. On step 2, the corresponding interaction term was entered.

For none of the organizational determinants a significant moderation effect on the relationship between role overload and boundary spanning performance was found. The additional explained variance by the interaction terms proved not to be significant in any of the cases. Based on this finding, the hypotheses H28b and H30b are rejected for boundary spanning performance based on activities and role overload.

Table 28 Moderated regression analyses of role overload and organizational determinants with boundary spanning performance (activities)

	Step 1			**Step 2**		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.430	.157	.650**	-.430	.157	.651**
Role overload	-.085	.169	.919	-.078	.174	.925
Consideration	-.013	.158	.987	-.017	.160	.983
Role overload × Consideration				.022	.136	1.022
	Cox & Snell R^2 = .002	Nagelkerke R^2 = .002		Cox & Snell R^2 = .002	Nagelkerke R^2 = .002	
(Constant)	-.452	.166	.636**	-.462	.167	.630**
Role overload	-.020	.177	.980	-.019	.176	.981
Co-worker support	.589	.184	1.803**	.606	.186	1.833**
Role overload × Co-worker support				-.118	.194	.888
	Cox & Snell R^2 = .069	Nagelkerke R^2 = .093		Cox & Snell R^2 = .071	Nagelkerke R^2 = .096	

(Constant)	-.439	.163	.645**	-.469	.166	.626**
Role overload	-.018	.177	.983	-.020	.176	.980
Participation	.455	.178	1.5768*	.509	.186	1.664**
Role overload × Participation				-.216	.152	.805
	Cox & Snell R^2 = .043	Nagelkerke R^2 = .059		Cox & Snell R^2 = .055	Nagelkerke R^2 = .074	

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H28 Social support decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H30 Participation decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

Individual determinants

Several binary logistic regression analyses were performed in order to test the potential moderating effect of individual determinants on the relationship between role overload and boundary spanning performance measured by means of activities. On step 1 of each analysis, the standardized predictor (role overload) and the standardized moderator (one of the individual determinants at a time) were added. The corresponding interaction term was entered on step 2.

As is the case for the organizational determinants, none of the individual determinants proved to be a significant moderator on the relationship between role overload and boundary spanning performance. The interaction terms did not explain a significant increase in the variance of being a competent boundary spanner. Supportive evidence for the hypotheses H32b, H34b and H36 was not found. Therefore, the hypotheses are rejected for role overload and boundary spanning performance based on activities.

Table 29 Moderated regression analyses of role overload and individual determinants with boundary spanning performance (activities)

	Step 1			**Step 2**		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.419	.159	.658**	-.418	.162	.659*
Role overload	-.105	.174	.900	-.104	.178	.901
Locus of control	.149	.163	1.160	.149	.164	1.161
Role overload × Locus of control				-.004	.144	.996
	Cox & Snell R^2 = .006	Nagelkerke R^2 = .008		Cox & Snell R^2 = .006	Nagelkerke R^2 = .008	
(Constant)	-.416	.159	.659**	-.418	.160	.658**
Role overload	-.069	.170	.934	-.068	.170	.934
Need for clarity	-.016	.160	.984	-.017	.161	.983

Role overload × Need for clarity				.015	.165	1.015
	Cox & Snell R^2 = .001	Nagelkerke R^2 = .001		Cox & Snell R^2 = .001	Nagelkerke R^2 = .002	
(Constant)	-.443	.153	.642**	-.471	.156	.624**
Role overload	-.075	.154	.927	-.035	.159	.966
Experience organization	-.012	.154	.988	.004	.158	1.004
Role overload × Experience organization				.322	.176	1.380
	Cox & Snell R^2 = .001	Nagelkerke R^2 = .002		Cox & Snell R^2 = .021	Nagelkerke R^2 = .028	
(Constant)	-.467	.154	.627**	-.465	.154	.628**
Role overload	-.068	.154	.934	-.070	.154	.933
Experience function	-.048	.155	.953	-.052	.155	.949
Role overload × Experience function				.112	.152	1.118
	Cox & Snell R^2 = .002	Nagelkerke R^2 = .002		Cox & Snell R^2 = .005	Nagelkerke R^2 = .006	

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H32 Locus of control decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H34 Need for clarity decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H36 Experience decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

4.3.3.6 Role conflict (intersender) – boundary spanning performance (activities)

Organizational determinants

In order to examine the potential moderating effect of the organizational determinants on the relation between intersender conflict and boundary spanning performance (activities), separate binary logistic regressions were performed. The standardized predictor (intersender conflict) and the standardized moderator (one of the organizational determinants at a time) were jointly added on step 1 of the equation. The corresponding interaction term was entered on step 2.

As table 30 shows, the relation between intersender conflict and boundary spanning performance is not moderated by consideration, co-worker support or participation. For none of the variables, the interaction term was found to be statistically significant. As supportive evidence for the hypotheses H28b and H30b was not found, the hypotheses are rejected for boundary spanning performance based on activities and intersender conflict.

Table 30 Moderated regression analyses of intersender conflict and organizational determinants with boundary spanning performance (activities)

	Step 1			Step 2		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.430	.157	.651**	-.430	.157	.651**
Intersender conflict	-.037	.162	.964	-.037	.162	.964
Consideration	-.011	.157	.989	-.012	.158	.988
Intersender conflict × Consideration				.010	.151	1.010
	Cox & Snell R^2 = .000	Nagelkerke R^2 = .000		Cox & Snell R^2 = .000	Nagelkerke R^2 = .001	
(Constant)	-.452	.166	.636**	-.462	.167	.630**
Intersender conflict	.003	.171	1.003	.032	.177	1.033
Co-worker support	.591	.184	1.806**	.601	.185	1.824**
Intersender conflict × Co-worker support				-.129	.174	.879
	Cox & Snell R^2 = .069	Nagelkerke R^2 = .093		Cox & Snell R^2 = .072	Nagelkerke R^2 = .097	
(Constant)	-.439	.163	.644**	-.437	.164	.646**
Intersender conflict	-.079	.168	.924	-.075	.170	.928
Participation	.464	.178	1.590**	.464	.178	1.590**
Intersender conflict × Participation				-.026	.172	.974
	Cox & Snell R^2 = .045	Nagelkerke R^2 = .060		Cox & Snell R^2 = .045	Nagelkerke R^2 = .060	

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H28 Social support decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H30 Participation decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

Individual determinants

In order to test the potential moderating effect of individual determinants on the relation between intersender conflict and boundary spanning performance based on activities, separate binary logistic regressions were performed. The standardized predictor (intersender conflict) and the standardized moderator (one of the individual determinants at a time) were added on step 1 of the equation. On step 2, the corresponding interaction term was entered.

As table 31 shows, for none of the individual determinants a significant moderation effect was found on the relationship between intersender conflict and boundary spanning performance. The additional explained variance by the interaction terms proved not to be statistically significant. As statistically significant effects were absent, the hypotheses H32b,

H34b and H36b are rejected for boundary spanning performance based on activities and intersender conflict.

Table 31 Moderated regression analyses of intersender conflict and individual determinants with boundary spanning performance (activities)

	Step 1			**Step 2**		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.417	.159	.659**	-.455	.162	.634**
Intersender conflict	-.060	.165	.942	-.047	.169	.954
Locus of control	.134	.160	1.143	.139	.164	1.149
Intersender conflict × Locus of control				.274	.167	1.315
	Cox & Snell R^2 = .005	Nagelkerke R^2 = .006		Cox & Snell R^2 = .021	Nagelkerke R^2 = .029	
(Constant)	-.416	.159	.660**	-.438	.161	.646**
Intersender conflict	-.041	.164	.960	-.041	.166	.960
Need for clarity	-.020	.159	.980	-.008	.164	.992
Intersender conflict × Need for clarity				.213	.171	1.238
	Cox & Snell R^2 = .001	Nagelkerke R^2 = .001		Cox & Snell R^2 = .010	Nagelkerke R^2 = .014	
(Constant)	-.443	.153	.642**	-.434	.155	.648**
Intersender conflict	-.042	.153	.959	-.011	.157	.989
Experience organization	-.019	.154	.981	-.019	.157	.982
Intersender conflict × Experience organization				.278	.161	1.321
	Cox & Snell R^2 = .000	Nagelkerke R^2 = .001		Cox & Snell R^2 = .018	Nagelkerke R^2 = .024	
(Constant)	-.467	.154	.627**	-.460	.154	.631**
Intersender conflict	-.047	.154	.954	-.039	.155	.962
Experience function	-.050	.156	.952	-.047	.156	.954
Intersender conflict × Experience function				.089	.171	1.093
	Cox & Snell R^2 = .001	Nagelkerke R^2 = .001		Cox & Snell R^2 = .003	Nagelkerke R^2 = .003	

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H32 Locus of control decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H34 Need for clarity decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H36 Experience decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

4.3.3.7 Role ambiguity – boundary spanning performance (frequency of contact)

Organizational determinants

In order to test the potential moderating effect of organizational determinants on the relation between role ambiguity and boundary spanning performance based on frequency of contact, separate binary logistic regressions were performed. The standardized predictor (role ambiguity) and the standardized moderator (one of the organizational determinants at a time) were added on step 1 of the equation. On step 2, the corresponding interaction term was entered.

Table 32 shows that for none of the organizational determinants a significant moderation effect was found on the relationship between role ambiguity and boundary spanning performance. The additional explained variance by the interaction terms was not statistically significant for any of the cases. As no statistically significant effects were found, the hypotheses H27b and H29b are rejected for boundary spanning performance based on frequency of contact.

Table 32 Moderated regression analyses of role ambiguity and organizational determinants with boundary spanning performance (frequency of contact)

	Step 1			**Step 2**		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.644	.163	.525***	-.696	.168	.498***
Role ambiguity	-.152	.170	.859	-.180	.172	.835
Consideration	.208	.171	1.232	.246	.172	1.279
Role ambiguity × Consideration				-.264	.169	.768
	Cox & Snell R^2 = .016	Nagelkerke R^2 = .023		Cox & Snell R^2 = .030	Nagelkerke R^2 = .042	
(Constant)	-.605	.164	.546***	-.648	.168	.523***
Role ambiguity	-.131	.170	.877	-.144	.173	.866
Co-worker support	.171	.169	1.186	.173	.170	1.189
Role ambiguity × Co-worker support				-.228	.164	.796
	Cox & Snell R^2 = .012	Nagelkerke R^2 = .016		Cox & Snell R^2 = .023	Nagelkerke R^2 = .032	
(Constant)	-.623	.167	.536***	-.699	.176	.497***
Role ambiguity	-.031	.181	.969*	-.036	.183	.965*
Participation	.418	.188	1.520	.446	.194	1.563
Role ambiguity × Participation				-.220	.140	.802
	Cox & Snell R^2 = .037	Nagelkerke R^2 = .051		Cox & Snell R^2 = .051	Nagelkerke R^2 = .070	

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H27 Social support decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	
H29 Participation decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

Individual determinants

Separate binary logistic regressions were performed in order to test the potential moderating effect of individual determinants on the relation between role ambiguity and boundary spanning performance based on frequency of contact. For each analysis, the standardized predictor (role ambiguity) and the standardized moderator (one of the individual determinants at a time) were jointly added on step 1 of the equation. The corresponding interaction term, was entered on step 2.

As for the organizational determinants, none of the individual determinants was found to moderate the relationship between role ambiguity and boundary spanning performance. The additional explained variance by each of the interaction terms proved not to be statistically significant as indicated by the non-significant χ^2 and Exp(B) values. Due to the absence of statistically significant effects, the hypotheses H31b, 33b and H35b are rejected for boundary spanning performance based on frequency of contact.

Table 33 Moderated regression analyses of role ambiguity and individual determinants with boundary spanning performance (frequency of contact)

	Step 1			**Step 2**		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.602	.163	.548***	-.595	.163	.551***
Role ambiguity	-.158	.168	.853	-.163	.168	.849
Locus of control	-.012	.164	.988	-.018	.166	.982
Role ambiguity × Locus of control				-.098	.180	.907
	Cox & Snell R^2 = .006	Nagelkerke R^2 = .008		Cox & Snell R^2 = .007	Nagelkerke R^2 = .010	
(Constant)	-.602	.163	.547***	-.601	.164	.549
Role ambiguity	-.166	.168	.847	-.162	.174	.851
Need for clarity	.069	.164	1.072	.063	.176	1.065
Role ambiguity × Need for clarity				-.017	.173	.983
	Cox & Snell R^2 = .007	Nagelkerke R^2 = .009		Cox & Snell R^2 = .007	Nagelkerke R^2 = .009	
(Constant)	-.643	.158	.526***	-.727	.170	.483***
Role ambiguity	-.206	.166	.814	-.288	.179	.750
Experience organization	-.002	.163	.998	-.058	.170	.943
Role ambiguity × Experience organization				-.297	.188	.743

	Cox & Snell R^2 = .009		Nagelkerke R^2 = .012	Cox & Snell R^2 = .023		Nagelkerke R^2 = .032
(Constant)	-.642	.158	.526***	-.669	.170	.512***
Role ambiguity	-.227	.168	.797	-.244	.171	.784
Experience function	-.143	.169	.867	-.173	.183	.841
Role ambiguity × Experience function				-.089	.202	.914
	Cox & Snell R^2 = .012		Nagelkerke R^2 = .016	Cox & Snell R^2 = .013		Nagelkerke R^2 = .018

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H31 Locus of control decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	
H33 Need for clarity decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	
H35 Experience decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

4.3.3.8 Role conflict (overload) – boundary spanning performance (frequency of contact)

Organizational determinants

The potential moderating effect of organizational determinants on the relation between role overload and boundary spanning performance measured by means of frequency of contact was tested by performing separate binary logistic regressions. For each analysis, the standardized predictor (role overload) and the standardized moderator (one of the organizational determinants at a time) were jointly added on step 1 of the equation. The corresponding interaction term, was entered on step 2.

As table 34 shows, participation proved to significantly moderate the effect between role overload and boundary spanning performance. The interaction term role overload × participation had a statistically significant contribution to the model, χ^2 (1) = 3.945, p = .047. The odds ratio for the interaction term is .739, B = -.302, Exp(B) = .739, p < .05. A simple slope analysis was performed in order to interpret the pattern of the interaction effect. The analysis shows that the effect of role overload on the likeliness of being a competent boundary spanner is positive under conditions of low levels of participation, B = 2.175, Exp(B) = 8.804, p = .006. A positive effect was also found for high levels of participation, although weaker and less significant, B = 1.319, Exp(B) = 3,739, p = .040. These findings indicate that under conditions of high levels of role overload neighbourhood managers are likely to be a competent boundary spanner, and that this effect is stronger when there are low levels of participation. The slopes for the interaction effect are shown in figure 6. The effect is, however, contrary to the expectations.

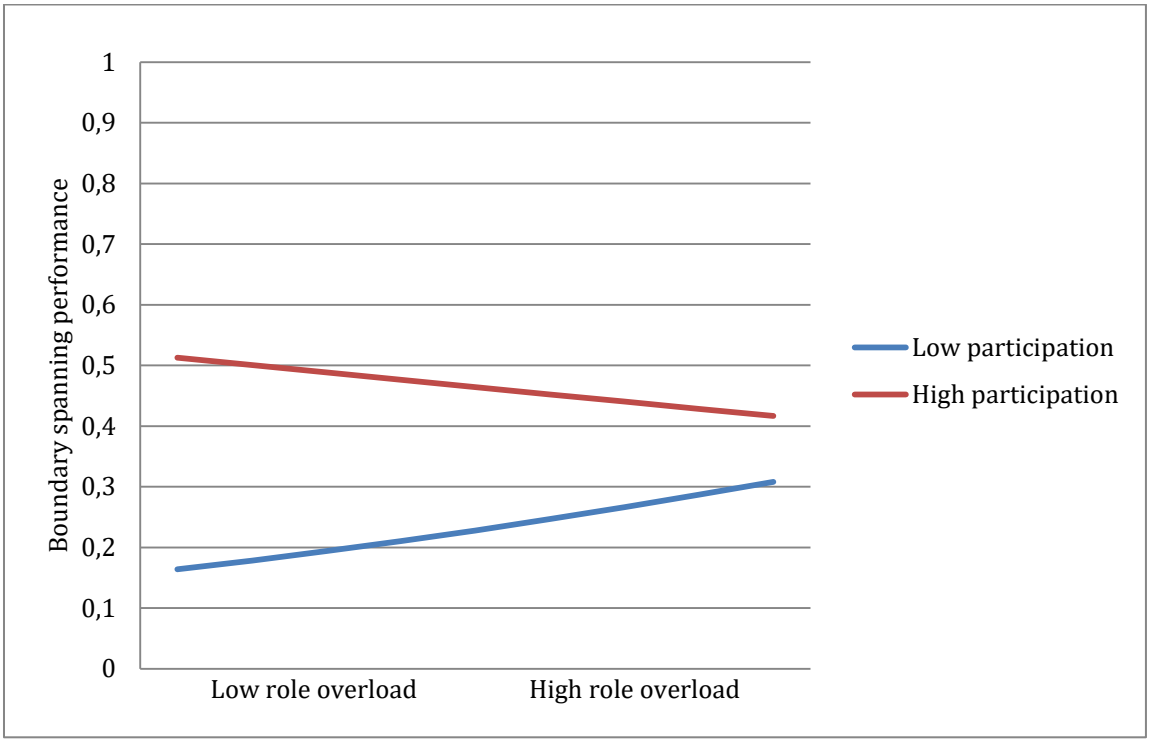
It was expected that higher levels of participation decrease the negative effect of role overload on boundary spanning performance. Due to this finding it can be concluded that hypothesis H30b is not confirmed for boundary spanning performance based on frequency of contact and role overload. As a statistically significant effect for social support was not found either, hypothesis H28b is rejected for boundary spanning performance based on frequency of contact and role overload.

Table 34 Moderated regression analyses of role overload and organizational determinants with boundary spanning performance (frequency of contact)

	Step 1			**Step 2**		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.641	.163	.527***	-.641	.163	.527***
Role overload	.026	.176	1.027	.018	.178	1.018
Consideration	.234	.167	1.263	.241	.169	1.273
Role overload × Consideration				-.040	.142	.961
	Cox & Snell R^2 = .012	Nagelkerke R^2 = .016		Cox & Snell R^2 = .012	Nagelkerke R^2 = .017	
(Constant)	-.601	.163	.548***	-.631	.166	.532***
Role overload	.066	.174	1.069	.054	.176	1.056
Co-worker support	.198	.167	1.219	.243	.172	1.276
Role overload × Co-worker support				-.247	.183	.781
	Cox & Snell R^2 = .009	Nagelkerke R^2 = .012		Cox & Snell R^2 = .020	Nagelkerke R^2 = .028	
(Constant)	-.623	.167	.536***	-.681	.173	.506***
Role overload	.104	.180	1.109*	.108	.181	1.114
Participation	.440	.180	1.553	.538	.195	1.712**
Role overload × Participation				-.302	.154	.739*
	Cox & Snell R^2 = .039	Nagelkerke R^2 = .053		Cox & Snell R^2 = .061	Nagelkerke R^2 = .084	

Note: * p < .05; ** p < .01; *** p < .001

Figure 6 The moderating effect of participation on the relation between role overload and boundary spanning performance (frequency of contact)



Moderating hypotheses	
H28 Social support decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H30 Participation decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

Individual determinants

In order to test the potential moderating effect of individual determinants on the relation between role overload and boundary spanning performance measured by means of frequency of contact, separate binary logistic regressions were performed. On step 1 of the equation, the standardized predictor (role overload) and the standardized moderator (one of the individual determinants at a time) were added. The corresponding interaction term was entered on step 2.

As becomes clear from table 35, none of the individual determinants was a significant moderator of the relationship between role overload and boundary spanning performance. The interaction terms did not make a unique contribution to the model, which is shown by the fact that the χ^2 was not significant for each of the interaction terms. As statistically significant effects were absent, the hypotheses H32b, H34b and H36b are rejected for boundary spanning performance based on frequency of contact and intersender conflict.

Table 35 Moderated regression analyses of role overload and individual determinants with boundary spanning performance (frequency of contact)

	Step 1			Step 2		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.595	.162	.551***	-.577	.164	.562***
Role overload	.054	.177	1.055	.077	.181	1.080
Locus of control	-.036	.167	.965	-.021	.170	.979
Role overload × Locus of control				-.098	.152	.907
	Cox & Snell R^2 = .001	Nagelkerke R^2 = .001		Cox & Snell R^2 = .003	Nagelkerke R^2 = .004	
(Constant)	-.596	.162	.551***	-.642	.167	.526
Role overload	.039	.174	1.040	.026	.179	1.026
Need for clarity	.049	.165	1.050	.034	.171	1.035
Role overload × Need for clarity				.306	.187	1.358
	Cox & Snell R^2 = .001	Nagelkerke R^2 = .001		Cox & Snell R^2 = .018	Nagelkerke R^2 = .025	
(Constant)	-.637	.157	.529***	-.643	.158	.526***
Role overload	.086	.158	1.090	.096	.159	1.101
Experience organization	.043	.157	1.044	.046	.158	1.047
Role overload × Experience organization				.087	.173	1.091
	Cox & Snell R^2 = .002	Nagelkerke R^2 = .003		Cox & Snell R^2 = .004	Nagelkerke R^2 = .005	
(Constant)	-.638	.157	.529***	-.637	.158	.529***
Role overload	.082	.157	1.086	.083	.157	1.086
Experience function	-.073	.160	.929	-.079	.161	.924
Role overload × Experience function				.067	.158	1.070
	Cox & Snell R^2 = .003	Nagelkerke R^2 = .004		Cox & Snell R^2 = .004	Nagelkerke R^2 = .005	

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H32 Locus of control decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H34 Need for clarity decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H36 Experience decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

4.3.3.9 Role conflict (intersender) – boundary spanning performance (frequency of contact)

Organizational determinants

In order to test the potential moderating effect of organizational determinants on the relationship between intersender conflict and boundary spanning performance (frequency of contact), several binary logistic regressions were performed. On step 1 of each analysis, the standardized predictor (intersender conflict) and the standardized moderator (one of the organizational determinants at a time) were added. The corresponding interaction term was entered on step 2.

Table shows that for none of the organizational determinants a moderating effect on the relationship between intersender conflict and boundary spanning performance was found. The additional variance explained by the interaction terms proved not to be statistically significant. Supportive evidence for the hypotheses H28b and H30b was not found. Therefore, the hypotheses are rejected for boundary spanning performance based on frequency of contact and intersender conflict.

Table 36 Moderated regression analyses of intersender conflict and organizational determinants with boundary spanning performance (frequency of contact)

	Step 1			**Step 2**		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.640	.163	.527***	-.639	.163	.528***
Intersender conflict	-.101	.168	.904	-.099	.168	.906
Consideration	.238	.168	1.268	.241	.168	1.273
Intersender conflict × Consideration				-.061	.162	.941
	Cox & Snell R^2 = .014	Nagelkerke R^2 = .019		Cox & Snell R^2 = .015	Nagelkerke R^2 = .020	
(Constant)	-.601	.163	.548***	-.594	.164	.552***
Intersender conflict	-.049	.168	.952	-.077	.172	.926
Co-worker support	.188	.167	1.207	.189	.170	1.208
Intersender conflict × Co-worker support				.157	.155	1.170
	Cox & Snell R^2 = .009	Nagelkerke R^2 = .012		Cox & Snell R^2 = .015	Nagelkerke R^2 = .020	
(Constant)	-.624	.167	.536***	-.614	.167	.541***
Intersender conflict	-.099	.171	.906*	-.065	.176	.937*
Participation	.437	.181	1.548	.447	.183	1.563
Intersender conflict × Participation				-.201	.183	.818
	Cox & Snell R^2 = .039	Nagelkerke R^2 = .053		Cox & Snell R^2 = .046	Nagelkerke R^2 = .063	

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H28 Social support decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H30 Participation decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

Individual determinants

The potential moderating effect of individual determinants on the relation between intersender conflict and boundary spanning performance measured by means of frequency of contact was tested by performing separate binary logistic regressions. For each analysis, the standardized predictor (intersender) and the standardized moderator (one of the individual determinants at a time) were jointly added on step 1 of the equation. The corresponding interaction term, was entered on step 2.

None of the individual determinants proved to be a significant moderator for the relationship between intersender conflict and boundary spanning performance. The interaction terms did not make a unique contribution to the model, which is shown by the fact that the χ^2 was not significant for each of the interaction terms. Due to the absence of statistically significant effects, the hypotheses H32b, H34b and H36b are rejected for boundary spanning performance based on frequency of contact and intersender conflict.

Table 37 Moderated regression analyses of intersender conflict and individual determinants with boundary spanning performance (frequency of contact)

	Step 1			**Step 2**		
	B	S.E.	Exp(B)	B	S.E.	Exp(B)
(Constant)	-.596	.162	.551***	-.579	.163	.560***
Intersender conflict	-.063	.169	.939	-.075	.170	.928
Locus of control	-.017	.164	.983	-.025	.167	.975
Intersender conflict × Locus of control				-.182	.171	.834
	Cox & Snell R^2 = .001	Nagelkerke R^2 = .001		Cox & Snell R^2 = .008	Nagelkerke R^2 = .011	
(Constant)	-.596	.162	.551***	-.603	.163	.547***
Intersender conflict	-.070	.168	.932	-.071	.168	.931
Need for clarity	.059	.165	1.061	.064	.165	1.066
Intersender conflict × Need for clarity				.067	.171	1.070
	Cox & Snell R^2 = .002	Nagelkerke R^2 = .002		Cox & Snell R^2 = .003	Nagelkerke R^2 = .004	
(Constant)	-.635	.157	.530***	-.640	.158	.527***
Intersender conflict	.005	.157	1.005	-.001	.159	.999
Experience organization	.048	.157	1.049	.047	.158	1.048
Intersender conflict × Experience organization				-.070	.158	.933

	Cox & Snell R^2 = .001		Nagelkerke R^2 = .001	Cox & Snell R^2 = .002		Nagelkerke R^2 = .002
(Constant)	-.636	.157	.529***	-.643	.158	.526***
Intersender conflict	.015	.158	1.015	.007	.160	1.007
Experience function	-.075	.161	.928	-.078	.162	.925
Intersender conflict × Experience function				-.078	.178	.925
	Cox & Snell R^2 = .001		Nagelkerke R^2 = .002	Cox & Snell R^2 = .002		Nagelkerke R^2 = .003

Note: * p < .05; ** p < .01; *** p < .001

Moderating hypotheses	
H32 Locus of control decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H34 Need for clarity decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	
H36 Experience decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.	

Note: rejected, adopted, partly adopted.

4.3.3.10 Sub-conclusion

Not many of the moderating effects appeared to significantly affect the relationship between role stress and job outcomes. However, this result is not that surprising as existing literature shows mixed results. Although not many of the moderating effects were found, some interesting findings become clear from the above results. First of all, locus of control was found to moderate the relationship between role overload and job satisfaction. However, contrary to the expectations it was found that higher levels of role overload result in more job satisfaction among externals instead of internals. As Jackson & Schuler (1985) already stated, although it is likely to expect that the negative relation between role stress and job satisfaction is weaker for internals, supportive evidence for the hypothesis is still weak. This is again evident from the finding in this study. This finding indicates that a thorough examination and possible revision of the hypothesis for locus of control is necessary.

A significant moderating effect of co-worker support on the relationship between intersender conflict and job satisfaction was found as well. The finding shows that the negative effect of role stress on job satisfaction is reduced when there is a high level of co-worker support. This finding demonstrates the importance of support for neighbourhood managers, which enables him or her to deal with intersender conflict in their work. In line with previous research, it appears that it is mainly support from co-workers which is likely to reduce the negative effects of role conflict on job satisfaction (LaRocco et al., 1980).

Lastly participation appeared to moderate the relationship between role overload and boundary spanning performance measured by frequency of contact. However, the moderating effect appeared to be stronger for low levels of participation than for high levels of participation. An explanation for this finding may be that neighbourhood managers who participate to a higher extent already know quite well what is going on in the organization. They may therefore feel less need to have contact with various internal, municipal actors. Accordingly, their boundary spanning performance is likely to be slightly less.

4.3.4 Overview of adopted and rejected hypotheses

Now all the results have been discussed, an overview of the hypothesis that are adopted or rejected is given below.

Hypotheses determinants – role stress	RA	RCo	RCi
H1 The more autonomy is given, the less role ambiguity a neighbourhood manager experiences.			
H2 Autonomy does not directly affect the level of role conflict of a neighbourhood manager experiences.			
H3 The more feedback on job performance is provided by co- workers and the supervisor, the less role ambiguity a neighbourhood manager experiences.			
H4 Feedback on job performance provided by co-workers and the supervisor does not directly affect the level of role conflict of a neighbourhood manager experiences.			
H5 The stricter a role is structured, the less role ambiguity a neighbourhood manager experiences.			
H6 The stricter a role is structured, the more role conflict a neighbourhood manager experiences.			
H7 The more leader consideration and co-worker support is provided, the less role ambiguity a neighbourhood manager experiences.			
H8 The more leader consideration and co-worker support is provided, the less role conflict a neighbourhood manager experiences.			
H9 Team external focus does not directly affect the level of role ambiguity of a neighbourhood manager experiences.			
H10 The higher the level of external focus among co-workers, the more role conflict a neighbourhood manager experiences.			
H11 The more influence on organizational decisions, the less role ambiguity a neighbourhood manager experiences.			
H12 The more influence on organizational decisions, the less role conflict a neighbourhood manager experiences.			
H13 The higher the degree of environmental dynamism, the more role ambiguity a neighbourhood manager experiences.			
H14 The higher the degree of environmental dynamism, the more role conflict a neighbourhood manager experiences.			
H15 Environmental complexity is not of influence on the level of role ambiguity of a neighbourhood manager experiences.			
H16 The higher the degree of environmental complexity, the more role conflict a neighbourhood manager experiences.			

H17 Neighbourhood managers with an internal locus of control experience less role ambiguity compared to neighbourhood managers with an external locus of control.			
H18 Neighbourhood managers with an internal locus of control experience less role conflict compared to neighbourhood managers with an external locus of control.			
H19 Neighbourhood managers with a high need-for-clarity experience more role ambiguity compared to neighbourhood managers with a low need-for-clarity.			
H20 Neighbourhood managers with a high need-for-clarity experience more role conflict compared to neighbourhood managers with a low need-for-clarity.			
H21 The more experienced, the less role ambiguity a neighbourhood manager experiences.			
H22 The more experienced, the less role conflict a neighbourhood manager experiences.			

Hypotheses role stress – job outcomes	**JS**	**BSa**	**BSf**
H23 The more role ambiguity a neighbourhood manager experiences, the less satisfied he or she is about the job.			
H24 The more role conflict a neighbourhood manager experiences, the less satisfied he or she is about the job.			
H25 The more role ambiguity a neighbourhood manager experiences, the lower his or her boundary spanning performance.			
H26 The more role conflict a neighbourhood manager experiences, the lower his or her boundary spanning performance.			

Moderating hypotheses	**JS**	**BSa**	**BSf**
H27 Social support decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.			
H28 Social support decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.			
H29 Participation decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.			
H30 Participation decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.			
H31 Locus of control decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.			
H32 Locus of control decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.			
H33 Need for clarity decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.			
H34 Need for clarity decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.			
H35 Experience decreases the negative effect between role ambiguity and both (a) job satisfaction and (b) performance.			
H36 Experience decreases the negative effect between role conflict and both (a) job satisfaction and (b) performance.			

Note: rejected, adopted, partly adopted. RA = role ambiguity. RCo = role overload. RCi = intersender conflict. JS = job satisfaction. BSa = performance of boundary spanning activities. BSf = performance of boundary spanning frequency of contact.

V Conclusion and discussion

5.1 Conclusion

In this study, research has been conducted into the challenges in the work of neighbourhood managers. Neighbourhood managers are municipal officials who work at the neighbourhood level. Their task is to connect the municipality within which they are working and actors in the neighbourhood. In the literature, individuals in such a connective position are often referred to as a boundary spanning persons. Boundary spanning persons work at the boundary of their organization in order to try to realize a better fit between the internal organization and the environment (Tushman & Scanlan, 1981; Van Meerkerk & Edelenbos, 2014; Van Meerkerk & Edelenbos, 2016; Williams, 2002). However, the activities of boundary spanning persons are not without any struggle. Neighbourhood managers as boundary spanning persons are constantly confronted with different role expectations held by the municipality and by the neighbourhood. As a consequence, they are likely to experience role stress.

By marketing and sales scholars, a lot of research has been done on role stress among sales and marketing professionals who operate at the boundary of their organization (e.g. Chebat & Kollias, 2000; Ford et al., 1975; Hartline & Ferrell, 1996; Kahn et al., 1964; Lysonski et al., 1988; Rizzo et al., 1970; Singh, 1993; Stamper & Johlke, 2003). This study aimed to apply sales and marketing literature on role stress to public administration literature on boundary spanners who try to connect the governmental organization and its environment. By building on these theories, a conceptual model was proposed which addresses the effects of role stress on job satisfaction and boundary spanning performance, as well as the determinants which may impact the level of role stress among neighbourhood managers.

To begin with, this study was interested in the extent to which neighbourhood managers experience role stress. The findings of this study show that neighbourhood managers know relatively well what actors within the municipality and in the neighbourhood expect of them. Moreover, respondents indicated that it is quite clear to them what they should do in their work. These findings suggest that neighbourhood managers do not experience high levels of uncertainty and unclarity in their job. The level of role ambiguity thus seems to be moderate. With regard to role overload and intersender conflict, the findings show that neighbourhood managers are more neutral. On average, neighbourhood managers indicated that they have neither insufficient time and resources nor that these matters are sufficiently covered. The same applies to receiving incompatible requests from the municipality and the neighbourhood.

According to neighbourhood managers this is not so much the case, but neither not at all. Based on these findings, respondents thus appear to experience role conflict only to some extent.

In addition to the extent to which neighbourhood managers experience role stress, this study examined determinants which may impact the level of role stress as well as the effect of role stress on the job outcomes job satisfaction and boundary spanning performance. With regard to the consequences of role stress, role ambiguity appeared to be of greater importance for explaining job satisfaction and boundary spanning performance than role conflict. It was found that higher levels of role ambiguity resulted in lower levels of both job satisfaction and performance. What this finding indicates, is that clarity on one's role is important for neighbourhood managers to perceive their job as pleasant and to perform well on the job. When neighbourhood managers are uncertain about how they should perform, because it is unclear to them what is expected of them, then neighbourhood managers may be pessimistic about the chances to meet these expectations (Churchill et al., 1976; Singh, 1993; Walker et al., 1977). This will reduce their pleasure and satisfaction with their work. Moreover, unclear expectations and a lack of information lead to a neighbourhood manager failing to perform well (Behrman & Perreault, 1984; Jackson & Schuler, 1985). An explanation for the lack of an effect of role conflict on both job outcomes may first of all have to do with the fact that conflict is inherent in a boundary spanners' job. As it is simply there, it does not seem to affect the neighbourhood managers' job satisfaction that much. In addition, it is even possible that neighbourhood managers see the conflicts as a challenge that only increases their job satisfaction. With regard to performance, neighbourhood managers seem to be able to learn how to deal with the conflict inherent in their job, which enables them to nevertheless perform well (Behrman & Perreault, 1984). An explanation for the positive sign of the non-significant relation between role conflict and boundary spanning performance is given by Stamper and Johlke (2003) by means of the attention-conflict theory. This theory suggests that when boundary spanning persons experience high levels of role conflict, they will focus their attention on the most urgent and feasible aspects of their work (ibid.). In this study, this could mean, for example, that when neighbourhood managers know that meeting the demands of the neighbourhood has the highest priority at a certain moment, they will focus on this task and as such perform well. The point of this theory is that when one knows which tasks to focus on under high levels of conflict, he or she is nevertheless able to perform well. Moreover, the positive sign of the non-significant relationship between role conflict and boundary spanning performance based on frequency of contact a positive indicates that neighbourhood managers seek even more contact under conditions of conflicting expectations.

Which is also interesting to point at with regard to the job outcomes, is the difference in findings for both measures of boundary spanning performance. As indicated earlier, boundary spanning performance is of importance for the realization of good network activities (Van Meerkerk & Edelenbos, 2014). For this reason, as well as for the reason to control for bias, this study looked at two ways to identify competent boundary spanners. From this study, it appears that activities are a better indicator for measuring boundary spanning performance than frequency of contact. It was expected that neighbourhood managers need to have frequent contact with both internal municipal actors and actors in the neighbourhood in order to successfully carry out boundary spanning activities. This appears to be the case, as most of the neighbourhood managers have at least monthly contact with most actors within the municipality and in the neighbourhood. However, as most neighbourhood managers have frequent contact it is difficult to distinguish between neighbourhood managers who successfully carry out boundary spanning activities based on their frequency of contact and neighbourhood managers who do not. Frequency of contact is important for neighbourhood managers in order to perform boundary spanning activities. However, the successful carrying out of boundary spanning activities seems to go beyond having mere contact. What matters is what is done with the contacts. A neighbourhood manager as competent boundary spanner needs to be able to actually connect people and to provide actors on one side of the boundary with relevant and understandable information that has been selected on the other side of the boundary (Tushman & Scanlan, 1981; Van Meerkerk & Edelenbos, 2014; Van Meerkerk & Edelenbos, 2016). This is what makes a neighbourhood manager a competent boundary spanner. Activities appeared to be a more accurate indicator for boundary spanning performance in this respect, as this variable includes the various elements that are important for being a competent boundary spanner.

As far as the determinants of role stress are concerned, several interesting findings can be noticed. First of all, role ambiguity seems to be mainly explained by organizational determinants. This is a useful finding given the negative impact of role ambiguity on job satisfaction and boundary spanning performance. The findings indicate that higher levels of autonomy, feedback and participation result in neighbourhood managers experiencing less role ambiguity. Higher levels of autonomy, feedback and participation ensure that neighbourhood managers receive more information about how they perform or should perform. In this way they know better what is expected of them, which decreases the level of role ambiguity they experience. Despite the negative consequences of role ambiguity on job outcomes, it is thus possible for the organization to do something about this by providing sufficient autonomy, feedback and participation.

A second interesting finding regarding the determinants of role stress is the finding that role conflict is not so much explained by organizational determinants but by environmental determinants. An explanation for the lack of an effect of organizational determinants may have to do with the fact that neighbourhood managers have to deal with conflicts between expectations from within the municipality and expectations of actors in the neighbourhood. The organization is unable to moderate the expectations of the environment and thus to impact the level of role conflict neighbourhood managers experience. As the influence of role conflict on job satisfaction and boundary spanning performance is less apparent compared to role ambiguity, the lack of an effect of organizational determinants is not that much of a concern.

The findings show that both environmental dynamism and environmental complexity explain role conflict, although environmental complexity only appeared to be an explanatory factor for intersender conflict. The type of environmental dynamism that was found as a positive predictor variable for role conflict is municipal dynamism. This type of environmental dynamism is about the expectations actors in the neighbourhood have regarding municipal services and the activities of the neighbourhood manager. What this finding indicates is that changes in the number of actors and in the preferences and subjects that are of importance to these actors do not so much affect the level of role conflict among neighbourhood managers. Only when dynamism has a direct influence on the neighbourhood manager and his or her work activities, this results in a higher level of role conflict experienced by the neighbourhood manager. Environmental complexity was found as a positive predictor for intersender conflict. The finding indicates that a large number of actors with different expectations has a dysfunctional influence on neighbourhood managers. It takes considerable effort to find solutions that are jointly satisfying to all actors involved, what might cause neighbourhood managers to experience role conflict. The finding is supported by the fact that municipality size also appeared to have a positive effect on intersender conflict. Neighbourhood managers in larger municipalities have to deal with a larger number of actors in the neighbourhood. As a result, they face more and different expectations. In line with the finding for environmental complexity, a large number of different expectations increases the likelihood of experiencing conflicting expectations.

Lastly, the individual determinants hardly explain role ambiguity and role conflict. Only experience in function appeared to be a predictor variable for role ambiguity and locus of control for role overload. The findings indicated that neighbourhood managers experience less role ambiguity when they have more experience – measured by the time working in the organization and in the current function. For locus of control it is found that internals experience

less role overload compared to externals. The absence of further effects is, however, not surprising as findings from previous research are mixed.

Finally, this study looked at the moderating effect of a several organizational and individual determinants on the relationship between role stress and job outcomes. Although not many effects have been found, some interesting findings are revealed. The most remarkable finding is the moderating effect of co-worker support on the relation between intersender conflict and job satisfaction. It appeared that high levels of co-worker support reduce the negative effect of intersender conflict on job satisfaction. Co-workers can support the neighbourhood manager, for example, by sharing knowledge or providing help when the neighbourhood manager falls behind in his or her work. Due to this help, the chances for the neighbourhood manager to satisfy the demands and expectations of its environment will increase. As such, neighbourhood managers who perceive intersender conflict may still be satisfied with their job due to the support they receive from co-workers. This finding indicates the importance of social support, as it provides neighbourhood manager with resources to adapt to role conflict (Stamper & Johlke, 2003).

As previously explained, the lack of a statistically significant effect for the remaining moderating effects is not surprising, as existing literature shows mixed results. According to Miles and Petty (1975) inconsistencies in moderating findings are amongst others due to role requirements, the organizational level of the neighbourhood manager, resources available to the neighbourhood manager and the type of organization. It seems therefore important to reconsider the moderating hypotheses in the context of a particular study.

In conclusion, the application of marketing and sales literature has added some interesting findings to the public administration context of neighbourhood managers as boundary spanning persons. In line with previous research, it also applies to the public administration context of neighbourhood managers that organizational determinants have less influence on role conflict than on role ambiguity. It turned out that autonomy, feedback and participation reduced the level of role ambiguity among neighbourhood managers. This is an interesting finding given the negative effects of role ambiguity on job satisfaction and boundary spanning performance. As opposed to research in marketing and sales contexts, no direct effects of social support and initiation of structure on role stress were found in this study. With regard to the latter, however, it should be noted that the results of previous research are mixed. The fact that no effect of initiation of structure on role stress was found in this study may indicate that the items used were not sufficiently measured in the context of municipal structures. With regard to social support from co-workers, this construct appeared to moderate the negative effects of

intersender conflict on job satisfaction. However, the absence of further effects of social support is contrary to expectations. Support relationships possibly operate differently in the context of neighbourhood manager. What causes the absence of an effect of social support and how support relationships operate in the context of neighbourhood managers should be further investigated by talking to neighbourhood managers. With regard to the environmental determinants it is interesting that this study has shown that not so much changes in the number of actors, initiatives and networks in the neighbourhood are of influence on the level of role stress neighbourhood managers experience. Only when environmental dynamism is of direct influence on the neighbourhood manager, this affects the level of role stress he or she experiences. Finally, the absence of considerable effects of individual determinants on role stress is not that surprising given the fact that findings from previous research are mixed. In future research it might be interesting to focus on the character traits for boundary spanners as described by Williams (2002; 2012).

5.2 Discussion

5.2.1 Implications

In their work neighbourhood managers are confronted with different worlds in which different expectations exist. In the context of this study, it was expected that neighbourhood managers would be confronted with a vertically, hierarchically characterized municipality while the world of the neighbourhood was expected to be characterized by a network structure. However, the fact that the neighbourhood managers in this study experience both moderate role ambiguity and role conflict suggests that the distinction between the world of the municipality and the world of the neighbourhood is not as strict as explained earlier in this study. Stated differently, the differences between both worlds are not that strict for high levels of role stress to be experienced by neighbourhood managers.

What is interesting in the municipal context within which neighbourhood managers work, is the fact that neighbourhood managers need autonomy as a means to deal with role ambiguity. Autonomy is needed because of the environment within which neighbourhood managers work is too complex to be dealt with according to ready-made rules, guidelines and procedures applicable to all cases (Lipsky, 2010). However, the principle of autonomy may be at odds with the idea of hierarchical control, which often holds in bureaucratic governmental organizations. Hierarchical control is about focus on verifiability by means of applying rules and making performance measurable (Hartman & Tops, 2005; Hood, 1991). Neighbourhood managers need

the ability to avoid these control mechanisms to a certain extent. It is important for municipalities to be aware of this when it comes to managing neighbourhood managers.

Also interesting in the context of this study is the lack of an effect of initiation of structure on role stress. It was expected that the neighbourhood managers in this study yet had to act according to standardized rules and procedure imposed by the municipality. Consequently, each case should be treated in the same way despite the specific context (Hartman & Tops, 2005, Hughes, 2003). Although standardization was expected to limit the discretion and freedom of neighbourhood managers in their work – and hence their ability to meet the demands of the environment (Teas, 1983; Walker et al., 1975) –, it was expected that standardization would contribute to reducing the ambiguity about the expectations of municipal actors towards neighbourhood managers (Walker et al., 1975). However, no effect of initiation of structure on role stress was found. An explanation for this finding could, first of all, be that the structure within the municipality is not as strict as expected. It could be that municipalities rely less on standardization, at least with regard to the role of neighbourhood manager. Another explanation could be that the way in which initiation of structure is measured in this study did not sufficiently reflect the extent of standardization and red tape that exists within municipalities. This may imply that the context of neighbourhood managers differs from employees in a sales and marketing context. In order to be able to make sound claims about this, it would be interesting to specify the questions for initiation of structure to the specific municipal context of neighbourhood managers in future research.

Moreover, in this study the perspective of neighbourhood managers themselves on matters of role stress and its consequences was central. As such, boundary spanning performance was measured form the own point of view of neighbourhood managers. Boundary spanning performance is of importance for the realization of good network activities (Van Meerkerk & Edelenbos, 2014). As there was not yet a separate scale for this type of performance available, boundary spanning performance was measured in two different ways in this study. Neighbourhood managers were asked about both the extent to which they successfully carry out boundary spanning activities and the frequency with which they have contact with several actors within the municipality and in the neighbourhood. Measuring boundary spanning performance in two different ways made it possible to control for bias – which may result from the fact that neighbourhood managers could judge their own performance well. Interestingly, aspects of role stress had an effect on boundary spanning performance measured by means of activities. For frequency of contact, no effects were found. This finding indicates the importance of how a variable is measured. The difference in effect of role stress on both measures for

boundary spanning performance may indicate that activities and frequency of contact measure boundary spanning performance to a different extent. It was expected that neighbourhood managers need to have frequent contact with both internal municipal actors and actors in the neighbourhood in order to successfully carry out boundary spanning activities. However, most neighbourhood managers have at least monthly contact with most actors within the municipality and in the neighbourhood. It is therefore difficult to distinguish between neighbourhood managers who successfully carry out boundary spanning activities based on their frequency of contact and neighbourhood managers who do not. The successful carrying out boundary spanning activities seems to go beyond having frequent contact. Activities better distinguish competent boundary spanners from less competent boundary spanners as the variable includes the various elements that are important for being a competent boundary spanner. In order to be able to go even deeper into the boundary spanning activities, it is interesting to collect the activities of the neighbourhood manager in an inductive manner in future research. What would be interesting as well is to present the point of view of neighbourhood managers about their performance in relation to the way actors in the neighbourhood experience the performance of neighbourhood managers.

5.2.2 Limitations

As with any research, this study has some limitations that should be noted. First of all, as described in chapter 3, the data obtained in this study is cross-sectional in nature. This implies that the data is obtained at a single point in time. The cross-sectional nature of this study has consequences for the internal validity, as it is difficult to make causal inferences from data obtained at a single point in time (Bryman, 2012). It is possible that the constructs examined in this study fluctuate over time as a result of changes in the work and/or private context of neighbourhood managers. One should therefore be aware that the results of this study cannot be regarded as a foregone conclusion. The study should be replicated several times in order to see if structural patterns can be discovered.

A second methodological limitation has to do with the generalizability of the results. In general, the external validity of cross-sectional studies is strong as long as the sample from which data is collected has been randomly selected (Bryman, 2012). Although the cases for this study were randomly selected, this study is based on a disproportional sample. The number of neighbourhood managers for each of the three groups of municipalities was not proportional to the size of the group, but was the same for each group. As such, the neighbourhood managers of 19 municipalities in each group were selected. The reason for the disproportionate selection of neighbourhood managers was due to the fact that the largest municipalities include the smallest

group (i.e. there are less large municipalities compared to smaller ones), while there are more neighbourhood managers working in these large municipalities. In order to ensure that sufficient neighbourhood managers were contacted, it was decided to make use of a disproportional sample. Due to this disproportionate sample, the results may not be fully representative for the total population of neighbourhood managers in the Netherlands. As more neighbourhood managers from large municipalities have participated in my study – and these neighbourhood managers have contact with a larger number of actors and experience more intersender conflict – the viewpoint of these neighbourhood managers is somewhat dominant. The generalizability of the study is therefore not fully guaranteed. However, due to the used method a large number of neighbourhood managers could be reached, which in turn enhances the external validity.

Next, there may be criticism regarding the use of self-reported measures in this study (i.e. neighbourhood managers were asked to report the extent to which they themselves experience role stress, its causes and consequences). The subjectivity inherent in these measures raises questions about the external validity of the results. On the one hand do self-reported measures of stress provide a cognitive insight into the way individuals experience stress (Bryman, 2012). On the other hand, self-reported measures may suffer from the fact that the results are biased in various ways. A respondent may be influenced by socially desirable answers and pretend to be better than he or she actually is (Field, 2009). As such, the neighbourhood managers in this study may have judged their performance better than it is. It is therefore important to bear in mind that the results obtained in this study cannot be regarded as objective facts. In order to enhance the validity of self-reported measures, it can be useful in future research to compare the results of the self-reported measure with another self-reported measure on the same topic. In this way, a more objective result can be achieved. This will be discussed in more detail in subsection 5.2.3

Two more limitations have to do with the used instruments. First of all, two of the scales used in this study did not meet the requirement of an alpha level of $\alpha = .70$. This concerns the scales for role overload ($\alpha = .684$) and municipal dynamism ($\alpha = .614$). However, for both scales the item-to-total correlations and the Composite Reliability (CR) were sufficient. Moreover, the analyses have shown that significant effects are found for both scales. Although it is important to mention the low alpha levels, it has not caused serious problems.

Secondly, during the construction of the scales it turned out that the questions for role conflict did not load on one factor. The construct fell apart into several elements, of which some did not

correspond with the aspects of role conflict (i.e. intersender conflict, intra-sender conflict, inter-role conflict, role overload and person-role conflict). It is remarkable that the items that together formed a sufficiently reliable scale were the items for which the questions were specified according to the context of this study. This may indicate that the questions of the original Rizzo et al. (1970) scale are too broad to be used in the context of this study. The questions may not have been precise enough to be recognizable for neighbourhood managers. As not all aspects of role conflict have been included in this study, this may have given a distorted result. In addition, the fact that the items for role conflict fell apart into several factors also affected the accuracy with which the hypotheses for role conflict could confirmed. The hypotheses were focused on overall role conflict, not on specific types of role conflict. In case an effect was found in accordance with a hypothesis for either type of role conflict, this hypothesis could only be adopted with the comment that it holds for a particular type of role conflict.

5.2.3 Recommendations for future research

From the results and findings in this study, some suggestions for future research can be offered. A first suggestion has to do with the construct for measuring role conflict. As just mentioned above, the questions of the original role conflict construct (Rizzo et al., 1970) turned out not to be specified enough for the context of this study. This finding indicates that the role conflict scale needs to be adapted. A better understanding of the conflicting situations neighbourhood managers face in their work should be obtained. In this regard, a possibility would be to organize a focus group with neighbourhood manager, in which the conflicting situations they face can be discussed and obtained. Next, these findings can be compared and/or combined with the existing questionnaire, in order to arrive at a new construct that is suitable to the context of neighbourhood managers. Re-performing this study with the new construct may give a better insight into the role of role conflict. When similar results are found as in this study, firmer conclusions can be drawn on the consequences of role conflict and the influence of various determinants.

In line with this suggestion, it would also be interesting to adapt the scale for initiation of structure to the context of neighbourhood managers. This study was not sufficiently able to show what the impact of structure and standardization within municipalities is on the level of role ambiguity and role conflict among neighbourhood managers. An adapted scale should be used in order to determine whether structure and standardization do have an impact on role stress. Only when the new scale has still no effect on role stress, it is possible to conclude that the structure within the municipality is not as strict as expected from theory.

The third recommendation relates to the measure of boundary spanning performance. This study has indicated that activities are a better measure for performance than frequency of contact. This has to do with the fact that activities can be seen as an indicator for the extent to which neighbourhood managers are able to make the right connections and provide actors on both sides of the boundary with relevant and understandable information. In order to gain a deeper understanding of these activities, it would be interesting to conduct a qualitative study into the activities that neighbourhood managers should perform in order to be regarded as a competent boundary spanner. In this way, the overview of activities can be deepened and insight can be gained into the significance and importance neighbourhood managers attach to certain activities in their work.

In addition, as discussed earlier, the self-reported way of measuring boundary spanning performance includes a certain degree of subjectivity. A recommendation for future research would therefore be to compare the results of the self-reported measure with another self-reported measure on the same topic. As this study mainly focused the level of role stress experienced by neighbourhood managers as well as its causes and consequences, it was decided not to include the perspective of actors in the neighbourhood on the performance of the neighbourhood manager. In a follow-up study in which more emphasis is placed upon the performance of neighbourhood managers, it would be interesting to also include viewpoints of other actors of the neighbourhood managers' role set. In this way, a more objective understanding of the neighbourhood managers' boundary spanning performance can be obtained.

A final possible area for future research is the strengthening of the theoretical reasoning behind the moderating hypotheses. As this study has shown, not many of the moderating relationships are found. This even though there are strong assumptions for the existence of moderating relations of several organizational and individual determinants on the relationship between role stress and job outcomes. The absence of moderating relations in this study shows the importance of adapting the moderating hypotheses in the particular context of a study. Future research could be aimed at improving and testing the hypotheses for various contexts.

5.2.4 Recommendations for practice

As explained in the introduction, this study aimed to provide neighbourhood managers and their organizations with tools to control ambiguous and conflicting role requirements and hence their negative consequences. From this study several insights are gained that can be used in advice

towards municipalities. This concerns organizational determinants which are able to reduce the level of role ambiguity and intersender conflict.

The level of role ambiguity can first of all be influenced by providing neighbourhood managers with sufficient autonomy. Autonomy is needed because the environment within which neighbourhood managers work is too complex to be dealt with according to ready-made rules, guidelines and procedures applicable to all cases (Lipsky, 2010). Neighbourhood managers need to have the freedom and discretion to adjust their behaviour according to the demands of the environment, in order to meet these demands. It is important for neighbourhood managers to be given the opportunity to take their own initiative when carrying out work activities. Moreover, they must be given the freedom to act and make decisions independently. Autonomy helps neighbourhood managers to deal with the unclear and ambiguous role requirements in their job. The level of role ambiguity they experience will decrease, which in turn benefits the degree of job satisfaction. Neighbourhood managers will also better succeed in carrying out boundary spanning activities.

Secondly, neighbourhood managers must be given sufficient feedback. Feedback provides a neighbourhood manager with information about how he or she is performing. Likewise the neighbourhood manager will gain a better understanding of what is expected of him or her (Walker et al., 1975). In this way, feedback reduces unclarity and uncertainty in the work of the neighbourhood manager. This will enable the neighbourhood manager to perform better on the job. Feedback can be given through face-to-face contact, phone calls or written conversations. However, more relevant than the way in which feedback is given, is that this is done on a regular basis. In this respect, it is important that the neighbourhood managers' supervisor and co-workers are open to this and take the time to do so. Frequent contact moments also ensure that the supervisor and co-workers become aware of the demands that other actors place upon the neighbourhood manager. By expressing expectations to each other, one can help the other in carrying out work activities.

A third recommendation to neighbourhood managers and their organization relates to the extent to which neighbourhood managers are given the opportunity to participate in decision-making. When neighbourhood managers participate in the process of determining performance standards as well as in other organizational decisions, they will be more familiar with these decisions. Accordingly, neighbourhood managers are less uncertain about what is expected of them. In this respect, it is important for the neighbourhood manager to be well connected to what is happening within the municipality and in the environment. The municipal organization

can exert less influence on the latter. However, departments within the municipality can ensure that neighbourhood managers are involved in relevant meetings, receive documents that are of interest to them and are informed about decisions that are of importance to their work.

A final recommendation concerns the provision of co-worker support. Co-worker support was found to moderate the negative relation between intersender conflict and job satisfaction. In other words, when co-worker support is provided, this enables the neighbourhood manager to be satisfied with the job despite the existence of intersender conflict. Co-workers can provide support by sharing knowledge and expertise or providing help when the neighbourhood manager falls behind in his or her work. Due to this help, the chances for the neighbourhood manager to satisfy the demands and expectations of its environment will increase. As a result, the neighbourhood manager is likely to be satisfied with the job despite he or she experiences intersender conflict. As co-worker support provides the neighbourhood manager with tools to reduce the negative effects of intersender conflict, it is important for municipal organizations to create an environment in which employees are willing to provide support to each other.

In conclusion, providing neighbourhood managers with sufficient autonomy, feedback and participation reduces the level of role ambiguity they experience. This is interesting given the negative effect of role ambiguity on job satisfaction and boundary spanning performance. When neighbourhood managers experience less role ambiguity, this will positively influence both job outcomes. In addition, it is important to ensure that neighbourhood managers are supported by their co-workers, as this reduces the negative effects of intersender conflict on job satisfaction. Municipalities are highly recommended to take the advices as explained above into account. This will first ensure that neighbourhood managers experience less stress in their work, as a result of which they may enjoy their work more. Moreover, neighbourhood managers will be better able to perform well, which also benefits the municipal organization.

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Appendix

Appendix A – Survey[2]

0 Achtergrond vragen[3]

1. Wat is uw leeftijd? …….. jaar
2. Wat is uw geslacht? M / V
3. Wat is uw hoogst behaalde opleidingsniveau? VMBO / HAVO / VWO / MBO / HBO / WO
4. Wat is de grootte van uw gemeente? <100.000 inw/100.000 – 50.000 inw/ >50.000 inw
5. Hoe lang bent u werkzaam binnen uw huidige organisatie? …….. jaar
6. Hoe lang bent u werkzaam binnen uw huidige functie? …….. jaar

I Dagelijkse werkzaamheden[4]

- In uw functie houdt u zich bezig met uiteenlopende activiteiten. Een aantal van deze activiteiten is in de onderstaande vragen beschreven en er wordt gevraagd naar de mate waarin u zich hiermee bezig houdt. Vervolgens wordt er gevraagd naar de frequentie waarin u contact heeft met verschillende personen en partijen.

7. In mijn werk besteed ik tijd aan het uitwisselen van informatie tussen afdelingen binnen de gemeentelijke organisatie enerzijds en partijen, initiatieven en netwerken in de wijk anderzijds.
8. In mijn werk besteed ik tijd aan het opbouwen en onderhouden van relaties met partijen, initiatieven en netwerken in de wijk.
9. In mijn werk slaag ik erin om effectieve verbindingen te realiseren tussen afdelingen binnen de gemeentelijke organisatie enerzijds en partijen, initiatieven en netwerken in de wijk anderzijds.
10. In mijn werk besteed ik tijd aan het ophalen van signalen en initiatieven uit de wijk.
11. In mijn werk slaag ik erin om tijdig relevante personen binnen de gemeentelijke organisatie te mobiliseren in relatie tot ontwikkelingen in de wijk.

Hoe vaak heeft u contact met …

12. Collega's werkzaam binnen het domein werk en inkomen (of vergelijkbaar).
13. Collega's werkzaam binnen het domein zorg en onderwijs (of vergelijkbaar).
14. Collega's werkzaam binnen het domein ruimte en economie (of vergelijkbaar).
15. Collega's werkzaam binnen het domein veiligheid (of vergelijkbaar).
16. Collega's werkzaam binnen het domein publieke dienstverlening (of vergelijkbaar).
17. (Wijk)wethouders.
18. Individuele bewoners.
19. Bewonersorganisaties.
20. Buurt- / wijkraden.
21. Ondernemers.
22. Politie.
23. Woningcorporaties.
24. Scholen.
25. Sportclubs.
26. Welzijnsorganisaties.
27. Huisarts.

[2] Alle vragen worden beantwoord door middel van de antwoordcategorie (1) helemaal oneens; (2) oneens; (3) neutraal; (4) eens; (5) helemaal eens, tenzij anders aangegeven.
[3] Voor de vragen 1-6 wordt een aangepaste antwoordcategorie gebruikt.
[4] Antwoordcategorie voor de vragen 7-28: (1) nooit; (2) soms; (3) regelmatig; (4) vaak; (5) altijd.

28. Andere belangrijke partijen, initiatieven en netwerken in de wijk waar u contact mee heeft, zijn…. (+ frequentie)
    Andere belangrijke afdelingen binnen de gemeente waar u contact mee heeft, zijn…. (+ frequentie)

II Werkgerelateerd verwachtingen

- De volgende vragen gaan over verwachtingen die bestaan over uw werk, zowel vanuit afdelingen binnen de gemeentelijke organisatie als vanuit partijen, initiatieven en netwerken in de wijk. In hoeverre bent u het eens met de volgende stellingen:

29. Ik weet precies wat er van mij wordt verwacht in mijn werk.**
30. Ik weet precies wat mijn leidinggevende van mij verwacht.**
31. Ik weet precies wat directe collega's binnen mijn wijk van mij verwachten.**
32. Ik weet precies wat partijen, initiatieven en netwerken in de wijk van mij verwachten.**
33. Het is duidelijk voor mij wat er in mijn werk moet worden gedaan. **
34. Er bestaan duidelijke, geplande doelstellingen voor mijn werk.**
35. Ik weet wat mijn verantwoordelijkheden zijn.**
36. Ik ben zeker van de hoeveelheid zeggenschap die ik heb in mijn werk.**
37. Ik weet dat ik mijn tijd goed heb verdeeld.**

38. Ik krijg opdrachten zonder de mankracht om deze te voltooien.
39. Ik heb onvoldoende tijd om mijn werkzaamheden uit te voeren.
40. Ik beschik over onvoldoende middelen en materialen om mijn werkzaamheden uit te voeren.
41. Ik werk met twee of meer groepen die heel anders te werk gaan.
42. Ik ontvang onverenigbare verzoeken vanuit verschillende afdelingen binnen de gemeentelijke organisatie.
43. Ik ontvang onverenigbare verzoeken vanuit partijen, initiatieven en netwerken in de wijk.
44. Verzoeken die ik ontvang vanuit afdelingen binnen de gemeentelijke organisatie enerzijds en vanuit partijen, initiatieven en netwerken in de wijk anderzijds, zijn onverenigbaar met elkaar.
45. De taken die ik uitvoer worden ofwel vanuit de gemeentelijke organisatie ofwel vanuit de wijk geaccepteerd, maar niet vanuit beide.
46. Ik moet soms regels negeren om mijn werkzaamheden uit te kunnen voeren.
47. Ik moet dingen doen waarvan ik vind dat ze anders moeten worden gedaan.
48. Ik werk aan onnodige dingen.

III Omgevingskenmerken

- Uw werkveld wordt gekenmerkt door een omgeving waarin verschillende partijen, initiatieven en netwerken actief zijn. In dit onderdeel wordt gevraagd naar de dynamiek in de omgeving alsook naar de verschillen tussen partijen, initiatieven en netwerken in de wijk. In hoeverre bent u het eens met de volgende stellingen:

49. Het aantal **partijen** in de wijk waar ik in mijn werk mee te maken heb, is altijd constant.**
50. Er zijn telkens nieuwe **partijen** in de wijk waar ik in mijn werk mee te maken heb.
51. Het aantal **initiatieven** in de wijk waar ik in mijn werk mee te maken heb, is altijd constant. **
52. Er ontstaan telkens nieuwe **initiatieven** in de wijk waar ik in mijn werk mee te maken heb.
53. Het aantal **netwerken** in de wijk waar ik in mijn werk mee te maken heb, is altijd constant.**
54. Er zijn telkens nieuwe **netwerken** in de wijk waar ik in mijn werk mee te maken heb.

55. De verwachtingen vanuit de wijk ten aanzien van mijn werkzaamheden veranderen continu.
56. De behoefte vanuit de wijk ten aanzien van het aantal contactmomenten met mij wisselt sterk.
57. De behoefte vanuit de wijk ten aanzien van gemeentelijke dienstverlening verandert vaak.
58. De onderwerpen die voor de wijk van belang zijn, veranderen vaak.
59. De standpunten vanuit de wijk ten aanzien van actuele onderwerpen veranderen continu.
60. De belangen die vanuit de wijk bestaan, wijzigen geregeld.

61. Met hoeveel verschillende partijen, initiatieven en netwerken in de wijk heeft u in uw werk te maken?[5]
62. Partijen, initiatieven en netwerken in de wijk verschillen sterk van elkaar wat betreft verwachtingen van mijn werkzaamheden.
63. Partijen, initiatieven en netwerken in de wijk verschillen sterk van elkaar wat betreft behoefte aan contact met mij.
64. Partijen, initiatieven en netwerken in de wijk verschillen sterk van elkaar wat betreft behoefte aan gemeentelijke dienstverlening.
65. Partijen, initiatieven en netwerken in de wijk verschillen sterk van elkaar wat betreft onderwerpen die voor hen van belang zijn.
66. Partijen, initiatieven en netwerken in de wijk verschillen sterk van elkaar wat betreft standpunten ten aanzien van actuele onderwerpen.
67. Partijen, initiatieven en netwerken in de wijk verschillen sterk van elkaar wat betreft belangen die zij hebben.

IV Organisatie condities

- De vragen in dit onderdeel gaan over kenmerken binnen uw organisatie. Er wordt hier ingegaan op de bewegingsvrijheid in uw werk, de feedback over uw werk, de structuur en ondersteuning en de mate waarin u wordt betrokken bij het maken van beslissingen. In hoeverre bent u het eens met de volgende stellingen:

68. Mijn baan geeft mij de mogelijkheid om veel eigen initiatief te nemen in de uitvoering van mijn werkzaamheden.
69. Mijn baan geeft mij veel mogelijkheden tot zelfstandigheid en vrijheid in de uitvoering van mijn werkzaamheden.
70. Mijn baan biedt genoeg mogelijkheden voor zelfstandig denken en handelen.
71. Ik heb voldoende vrijheid om te doen wat ik wil in mijn baan.

72. Ik krijg voldoende informatie van mijn leidinggevende over mijn werkprestaties.
73. Ik krijg voldoende feedback van mijn leidinggevende over hoe goed ik mijn werk doe.
74. Directe collega's binnen mijn wijk laten mij in voldoende mate weten hoe goed ik het op mijn werk doe.
75. Er is voldoende gelegenheid in mijn werk om uit te vinden hoe ik het doe.
76. Ik weet hoe goed ik het doe op mijn werk.

77. Mijn leidinggevend bepaalt wat er gedaan moet worden en hoe dit moet gebeuren.
78. Mijn leidinggevende verzoekt mij om standaard regels en voorschriften te volgen.
79. Mijn leidinggevende hanteert duidelijke prestatiecriteria.
80. Mijn leidinggevende controleert of gestelde doelen worden behaald.
81. Mijn leidinggevende bedeelt werk op een adequate en duidelijke manier toe.
82. Mijn leidinggevende laat mij weten wat er van mij wordt verwacht.

[5] Antwoordcategorie voor vraag 61: (1) minder dan 10; (2) 10-20; (3) 20-30; (4) 30-40; (5) meer dan 40.

83. Mijn leidinggevende zorgt ervoor dat er op de meest belangrijke taken wordt gefocust.

84. Mijn leidinggevende is vriendelijk en toegankelijk.
85. Mijn leidinggevende helpt mij om mijn werk aangenamer te maken.
86. Mijn leidinggevende doet weinig om mijn werk bevredigend te maken.**
87. Mijn leidinggevende behandelt alle werknemers als zijn/haar gelijke.
88. Mijn leidinggevende bekommert zich om het persoonlijk welzijn van zijn/haar werknemers.

89. Directe collega's binnen mijn wijk zijn bereidwillig om hun kennis en expertise met mij te delen.
90. Directe collega's binnen mijn wijk helpen mij als ik achterop raakt in mijn werk.
91. Directe collega's binnen mijn wijk moedigen mij aan op moeilijke momenten.
92. Directe collega's binnen mijn wijk proberen te bemiddelen als er onenigheid is.

93. Directe collega's binnen mijn wijk hechten er veel waarde aan dat er solide relaties met partijen, initiatieven en netwerken in de wijk worden opgebouwd.
94. Directe collega's binnen mijn wijk hechten er veel waarde aan dat er kennis wordt verkregen van partijen, initiatieven en netwerken in de wijk.
95. Directe collega's binnen mijn wijk hechten er veel waarde aan dat er wordt samengewerkt met partijen, initiatieven en netwerken in de wijk.

96. Voordat er een **beslissing** wordt genomen, besteedt mijn leidinggevende serieuze aandacht aan wat ik te zeggen heb.
97. Voordat er tot **actie** wordt overgegaan, besteedt mijn leidinggevende serieuze aandacht aan wat ik te zeggen heb.
98. Mijn leidinggevende vraagt naar mijn suggesties over **hoe** werkzaamheden moeten worden uitgevoerd.
99. Mijn leidinggevende vraagt naar mijn suggesties over **welke** werkzaamheden moeten worden uitgevoerd.

V Werktevredenheid

- In dit een na laatste onderdeel worden er vragen gesteld over de mate waarin u tevreden bent met uw werk. In hoeverre bent u het eens met de volgende stellingen:

Werktevredenheid

100. Over het algemeen ben ik tevreden met mijn werk.
101. Ik ben niet van plan om voor een andere organisatie te gaan werken.
102. Er zijn geen fundamentele dingen die ik niet leuk vind aan mijn werk.
103. Het grootste deel van de tijd ben ik enthousiast over mijn werk.
104. Ik vind veel plezier in mijn werk.

VI Werkbelevenissen

- Tot slot nog enkele vragen over uw persoonlijke mening omtrent werkbelevenissen. In hoeverre bent u het eens met de volgende stellingen:

105. In de meeste banen is het mogelijk om vrij veel te bereiken van wat je zou willen bereiken. **
106. Wanneer je weet wat je zoekt in een baan, is het mogelijk om een baan te vinden die je dit geeft.**
107. Het krijgen van de baan die je het liefst wilt, is doorgaans een kwestie van geluk.
108. Promoties zijn doorgaans een kwestie van geluk.
109. Promoties worden gegeven aan werknemers die goed presteren.**
110. Het is een kwestie van geluk om een uitstekende werknemer te zijn.

111. Mensen die hun werk goed doen, worden daar over het algemeen voor beloond.**
112. Het belangrijkste verschil tussen mensen die veel geld verdienen en mensen die minder geld verdienen, is geluk.

113. Het is voor mij erg belangrijk om te weten wat ik moet doen in mijn werk.
114. Het is voor mij erg belangrijk om te weten hoe ik word geacht mijn werk te doen.
115. Het is voor mij erg belangrijk om te weten wat de grenzen van mijn bevoegdheden zijn.
116. Het is voor mij erg belangrijk om te weten hoe goed ik het doe in mijn werk.

** Item was reversed for analysis.

Appendix B – Factor loadings and alpha levels

	Items	Factor loading	Alpha level
Autonomy	• My job gives me any chance to use personal initiative or discretion in carrying out the work. • My job gives me considerable opportunity for independence and freedom in my work. • My job has enough opportunity for independent thought and action. • I have enough freedom to do what I want on my job.	.828 .874 .876 .828	.870
Feedback	• I receive enough information from my supervisor about job performance. • I receive enough feedback from my supervisor on how well I'm doing. • Co-workers let me know how well I'm performing on my job. • There is enough opportunity in my job to find out how I'm doing. • I know how well I'm performing on my job. [xx]	.829 .871 .626 .804 -	.810
Initiation of structure	• My supervisor decides what shall be done and how it shall be done. • My supervisor asks me to follow standard rules and regulations. [xx] • My supervisor maintains definite standards of performance. • My supervisor monitors the goal achievement. • My supervisor delegates work in an adequate and clear way. • My supervisor lets me know what is expected of me. • My supervisor ensures that focus is on the most important tasks.	.529 - .732 .765 .730 .715 .682	.787
Leader consideration	• My supervisor is friendly and approachable. • My supervisor helps make my job more pleasant. • My supervisor does little things to make my work satisfying. • My supervisor treats all the workers as his equal. [xx] • My supervisor looks out for the personal welfare of group members.	.788 .881 .780 - .800	.841
Co-worker support	• Co-workers are willingly to share their expertise with me. • Co-workers are willingly to help me out if I falls behind in my work.	.725 .844 .860	.839

	• Co-workers are willingly to encourage me when I'm down. • Co-workers try to act like peacemakers when there are disagreements.	.859	
Team external focus	• Co-workers place great importance on building solid relationships with key external stakeholders. • Co-workers place great importance acquiring knowledge from persons external to the team. • Co-workers place great importance collaborating with other professionals outside of the team.	.900 .923 .921	.901
Participation	• Before making decisions, my supervisor gives serious consideration to what I have to say. • Before taking action, my supervisor gives serious consideration to what I say. • My supervisor asks me for my suggestions concerning how to carry out job assignments. • My supervisor asks me for my suggestions on what job assignments should.	.902 .931 .901 .840	.912

	Items	**Factor loading**	**Alpha level**
Environmental dynamism	• The number of parties in the neighbourhood is always constant. • There are constantly new parties I have to deal with. • The number of initiatives in the neighbourhood is always constant. • There are constantly new initiatives I have to deal with. • The number of networks in the neighbourhood is always constant. • There are constantly new networks I have to deal with	.556 .769 .568 .677 .759 .805	.784
	• The expectations of actors in the neighbourhood regarding my activities are subject to change • The need of actors in the neighbourhood regarding contact with me is subject to change. • The need of actors in the neighbourhood regarding municipal services is subject to change.	.632 .822 .703	.614
	• The subjects that are of importance to actors in the neighbourhood is subject to change. • The viewpoints actors neighbourhood have on topics is subject to change. • The interests of actors in the neighbourhood, are subject to change	.717 .825 .845	.796
Environmental complexity	• Actors in the neighbourhood differ from each other regarding their expectations of my activities. • Actors in the neighbourhood differ from each other regarding need for contact with me. • Actors in the neighbourhood differ from each other regarding need for municipal services. • Actors in the neighbourhood differ from each other regarding subjects that are of importance to them. • Actors in the neighbourhood differ from each other regarding their viewpoints on topics. • Actors in the neighbourhood differ from each other regarding interests they have.	.603 .773 .770 .722 .762 .726	.814

	Items	Factor loading	Alpha level
Locus of control	• On most jobs, people can pretty much accomplish whatever they set out to accomplish. [xx]	-	.706
	• If you know what you want out of a job, you can find a job that gives it to you. [xx]	-	
	• Getting the job you want is mostly a matter of luck.	.803	
	• Promotions are usually a matter of good fortune.	.777	
	• Promotions are given to employees who perform well on the job. [xx]	-	
	• It takes a lot of luck to be an outstanding employee on most jobs.	.640	
	• People who perform their jobs well generally get rewarded for it. [xx]	-	
	• The main difference between people who make a lot of money and people who make a little money is luck. [xx]	-	
Need for clarity	• It is important to me to know what I have to do on my job.	.850	.761
	• It is important to me to know what I'm supposed to do on my job.	.818	
	• It is important to me to know what the limits of my authority are.	.661	
	• It is important to me to know how well I'm doing on my job.	.728	
Experience	• Number of years working in the current organization.	-	-
	• Number of years working in the current position.	-	

	Items	Factor loading	Alpha level
Role ambiguity	• I know exactly what is expected of me in my job.	.735	.834
	• I know exactly what my supervisor expects of me.	.661	
	• I know exactly what my co-workers expect of me.	.664	
	• I know exactly what actors in the neighbourhood expect of me.	.671	
	• Explanation is clear of what has to be done.	.744	
	• Clear, planned goals and objectives exist for my job.	.548	
	• I know what my responsibilities are.	.718	
	• I feel certain about how much authority I have.	.646	
	• I know that I have divided my time properly.	.564	
Role conflict	• I receive an assignment without the manpower to complete it.	.786	.684
	• I receive an assignment without enough time to carry it out.	.792	
	• I receive an assignment without adequate resources and materials.	.771	
	• I work with two or more groups who operate quite differently.	-	-
	• I receive incompatible requests from the municipality.	.827	.736
	• I receive incompatible requests from the neighbourhood.	.807	
	• Requests from the municipality and from the neighbourhood are incompatible with each other.	.793	
	• I do things that are apt to be accepted by one person and not by others.	-	-
	• I have to buck a rule or policy in order to carry out an assignment.	-	
	• I have to do things that should be done differently.	-	
	• I work on unnecessary things.	-	

	Items	Factor loading	Alpha level
Job satisfaction	• Overall, I am quite satisfied with my job. • I do not intend to work for a different company. • There are no fundamental things I dislike about my job. • Most days. I am enthusiastic about my work. • I find real enjoyment in my work.	.820 .632 - .836 .860	.770
Boundary spanning performance – activities	• I spent time exchanging information between municipal departments and actors in the neighbourhood. • I spent time building and maintaining sustainable relationships with actors in the neighbourhood. • I spent time retrieving signals and initiatives from the neighbourhood.	.826 .905 .717	.779
	• I succeed in realizing effective connections between municipal departments and actors in the neighbourhood. • I succeed in mobilizing municipal departments in relation to developments in the neighbourhood.	.868 .868	.673
Boundary spanning performance – contact	• Frequency of contact with different actors within the municipality and in the neighbourhood.	-	-

[xx] This item was dropped from the summated scale due to insufficient factor loading.