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## **Finding common ground in urban governance networks: what are its facilitating factors?**

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This article deals with the subject of finding common ground in urban governance networks. A theoretical model is developed in which three potential facilitating factors of common ground, i.e. trust, consensus orientation, and boundary spanning activity, are investigated. We have used Structural Equation Modeling in testing the relationships. We have made use of the results of survey research into urban governance networks in the Netherlands. We have selected urban projects and respondents from the four biggest cities in the Netherlands: Amsterdam, Rotterdam, the Hague, and Utrecht to conduct the survey research. We have found that all three factors have a significant relationship with developing common ground in urban governance networks, and can therefore be considered important facilitating factors of common ground.

**Keywords:** common ground; trust; consensus; boundary spanning; urban governance

### **1. Introduction**

Common ground is considered an important aspect in multi-actor governance processes and networks, because these are characterized by multiple and often competing values and interests (Gray 1991; Innes and Booher 1999, 2003; Susskind, McKearnen, and Thomas-Lamar 1999; Klijn and Koppenjan 2016). Organizations in governance networks face the tension between, on one hand self-interest, understood as individual organizational goals, and on the other hand collective interest, which can be described as achieving joint and collaboration goals (Thomson and Perry 2006). Collaboration in governance networks means that actors try to find mutual interests and goal congruence (Vangen and Huxham 2012; Ansell and Gash 2008). A shared interest can be a powerful stimulator of collaboration in governance networks (O'Toole 1983), whereas diverging objectives may hamper or reduce collaboration (O'Toole 2003, 239; Schmidt and Kochan 1977) and may lead to conflict and litigation (Susskind, McKearnen, and Thomas-Lamar 1999; Gray 1991).

From this perspective, common ground is treated as a prerequisite or condition for collaboration (Innes and Booher 1999). Despite the considered importance of common ground to realize collaboration in governance networks, we still do not know much about exactly which factors facilitate the development of common ground. In the literature, we can find reference to a number of factors, such as trust (Lewicki and Bunker 1996; Child 1998; Klijn, Steijn, and Edelenbos 2010), connective agents/boundary spanning (Williams 2002; Maglaughlin and Sonnenwald 2005; Young 2010; Etkowitz 2012),

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consensus orientation (Laumann and Knoke 1987; Provan and Kenis 2008; Ansell and Gash 2008), the presence of a conflict mediator (Susskind, McKearnen, and Thomas-Lamar 1999; Gray 1991), constructive dialogue (Ansell and Gash 2008; Healey 2006; Innes and Booher 1999) and endurance, the long lasting nature, of interaction processes among stakeholders (Klijn and Koppenjan 2016). However, as yet, the explicit relationship has not been subject to much (quantitative) research. We want to investigate this relationship more explicitly. In doing so, we limited ourselves to the first three factors, as these factors often recur in the literature, and test whether these were stimulating conditions for reaching common ground. In this article, we therefore want to investigate the following main research question: what are the facilitating factors of common ground in governance networks?

In finding the answer, we have made use of the results of survey research into urban governance networks in the Netherlands. We have selected projects and respondents from the four biggest cities in the Netherlands: Amsterdam, Rotterdam, the Hague, and Utrecht. These urban projects take place in complex environments and processes, as many interdependent actors with different (sectoral and organizational) backgrounds are involved. This makes finding common ground a challenge, and urban governance networks are therefore good testing grounds for examining facilitating factors for common ground development. We will use structural equation modeling (SEM) to test theorized relationships between facilitating factors and common ground.

This article has the following structure. In [Section 2](#), we develop our theoretical framework and embed our hypotheses in literature. In [Section 3](#), we deal with the methodological aspects of our study in explaining the respondents and discussing the method of analysis (SEM). In [Section 4](#), we discuss the results of our quantitative study, followed by conclusions in [Section 5](#).

## 2. Theoretical framework and research hypotheses

### 2.1. Conceptualizing common ground

Common ground is a concept being used in consensus building and conflict resolution literature (Petts 1995; Susskind, McKearnen, and Thomas-Lamar 1999; Gray 1991). In this strand of literature, common ground is used to indicate to what extent interests are shared between actors with different backgrounds and different goals and ambitions (Susskind, McKearnen, and Thomas-Lamar 1999; Innes and Booher 1999). In line with this strand of literature, common ground can be defined (from a social-psychology perspective) as the pertinent mutual understanding, interests and goals that support interdependent actions in some joint activity (Clark 1996; Clark and Brennan 1991; Baker *et al.* 1999, 3). Grounding ‘is the process by which agents augment and maintain such a common ground’ (Baker *et al.* 1999, 33).

Common ground is not a stable state of having the same goals, interests, and understandings (Klein, Feltovich, and Woods 2005), but refers to a dynamic state, a process of communicating, updating, tailoring, and repairing mutual understandings (Brennan 1998). Common ground also does not mean that actors in the network have a purely homogeneous or uniform set of values, interests and beliefs; actors can vary due to the particulars of people, circumstances, and their current objectives, but there is sufficient overlap or congruence in goals and ambitions to provide shared identity (Vangen and Huxam 2012). Common ground is also often (directly or indirectly) related to collaboration and cooperation. It is mentioned as a prerequisite for collaboration in

multi-actor processes and networks. Klein, Feltovich, and Woods (2005) argue that common ground is what makes joint activity and collaboration work in complex multi-actor settings.

Bromme (2000) introduces the concept of negotiation of common ground, iteratively making one's private understanding of the other explicit and providing feedback so as to reach common ground, which is a common cognitive frame of reference. Common ground, once it has been achieved, can act as a shared interface between multiple representations (Beers *et al.* 2006). An explicit process of negotiation is needed to create and maintain the common ground for groups to go on together (Baker *et al.* 1999). Paulus (2009) claims that negotiating common ground, or grounding, is a promising theoretical framework for understanding the way that participants develop their mutual relationships and achieve collaboration regarding complex issues.

In this dynamic view of common ground, it can therefore not only be considered as input for cooperation and collaboration processes, but also as output of these processes. Actors in the network probe each other to find out the specific driving forces, ambitions and interests people have, and subsequently explore to what extent these ambitions and interests have similarities and overlap. And if there are (initial) differences in interests and goals, one can try to find greater alignment in developing new shared problem definitions and solutions (Klijn and Koppenjan 2016).

From this perspective, reaching common ground then refers to what extent actors 'grow closer together', in achieving greater overlap between interests, goals and understandings. It is then relevant to find the facilitating factors stimulating the process of finding common ground. The factors leading to common ground, i.e. growing closer together regarding viewpoints and interests, has not much been the subject of research and scholarly debate. However, different factors are touched upon and could be brought into a relationship with the concept of common ground. These factors relate to attitude, behavior, and (quality of the) relationships between actors. We will theoretically argue that the factors of actor orientation, trust between actors, and boundary spanning behavior of actors (in theory) will foster common ground in complex (urban) governance networks. Below, we discuss these potential facilitating factors. We finish each theoretical argument for the (potential) importance of the facilitating factor with a research hypothesis which we will test with survey research.

## 2.2. Consensus orientation

In general, an actor orientation is a stable pattern of perceptions of an actor involving beliefs, values, and dispositions to act in certain ways. It is about an integrated set of attitudes that lead to inclinations of behaviors and actions (Bossel 1977). Bossel (2000, 338) distinguishes two kinds of concepts that orientate the behavior of human actors: factual knowledge (correct or incorrect) about the world, and normative orientations (values, social norms, etc.). Actor orientations thus involve integrated sets of values, codes and norms that feed and direct actors' behavior and actions. These actors might have different orientations guiding their behavior or they may share certain values (Laumann and Knoke 1987).

Much attention has actually been given to consensus seeking and orientation in complex governance networks (Petts 1995; Provan and Kenis 2008; Ansell and Gash 2008; Connick and Innes 2003; Emerson, Nabatchi, and Balogh 2011). Ansell and Gash (2008, 544) define collaborative governance as "A governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-

making process that is formal, *consensus-oriented*, and deliberative and that aims to make or implement public policy or manage public programs or assets (italics added by the authors)". So they distinguish consensus seeking as a core aspect of collaborative governance, but at the same time argue that consensus needs to be realized: '...the forum aims to make decisions by consensus (even if consensus is not achieved in practice)' (Ansell and Gash 2008, 545). The goal of collaboration in governance networks is to realize some degree of consensus among the stakeholders. The premise of engaging in a multilateral, collaborative, and deliberative process is to seek and strive for consensus and to discover areas of agreement. Consensus orientation is thus about the willingness and openness of actors to engage in a process of joint goal finding with other actors, possessing different interests and perceptions in relation to the issue at stake.

People who are consensus driven try to develop common ground and mutual understanding in a process of deliberation, communication, and interest alignment (Innes and Booher 1999). Hence, the extent to which actors are consensus oriented is an important factor for developing, or not developing, common ground in governance networks. This leads to the following hypothesis:

**H1:** Consensus orientation of actors in the governance network has a positive effect on developing common ground

### 2.3. Trust

Next to the orientation of actors, we argue that the quality of the relationship emerging between actors impacts on the extent to which common ground is developed. Trust between actors is an important characteristic of this relational quality (Sharp *et al.* 2013; Bloomfield *et al.* 2001). The literature on trust indicates that this factor is important in improving collaboration in multi-actor processes (Lundin 2007) and network performance (Klijn, Steijn, and Edelenbos 2010). As previously mentioned, goal conflict and complexity exists in decision-making due to differing interests and perceptions and the variety of (sometimes-conflicting) strategies. This uncertainty and complexity will drive actors to pursue 'go it alone strategies' and not co-operation, which is necessary to achieve innovative and supported results (Klijn and Koppenjan 2016). In general, authors argue that trust enhances the chances for cooperation between actors in the governance network (O'Toole 2003; Edelenbos and Klijn 2007). Trust and distrust both emerge through interactions and reflect both the cause and consequences of repeated alliances (Gulati 1995; Sharp *et al.* 2013; Lee *et al.* 2012).

Trust can be defined as 'a stable positive expectation that actor A has (or predicts he has) of the intentions and motives of actor B in refraining from opportunistic behavior, even if the opportunity arises' (Edelenbos and Klijn 2007). Klijn, Edelenbos, and Steijn (2010) have developed a reliable scale of trust based on an extensive review of the existing literature on trust. In this scale, good intentions, refraining from opportunistic behavior, reliability, benefit of the doubt, and agreement trust, are the core indicators. Trustworthy relationships in governance networks lead to stabilized expectations, and frame alignment, for example finding similar problem definitions (Klijn and Koppenjan 2016, which lead to cognition and identification based trust, see Lewicki and Bunker 1996) and, in this way, subsequently lead to finding common ground. We see that due to the building of trustworthy relationships people identify more easily with the interests, values and perspectives of others in the governance network. As Child (1998) aptly notes (p. 245): "... mutual understanding is developed to the point that each can effectively act

for the other. (...) . . . it enables a person to ‘feel’ as well as to ‘think’ like the other”. This view is confirmed with Lundin’s research (2007), revealing that the effect of goal congruence is dependent on mutual trust. If organizations do not trust each other, similar priorities do not matter.

We therefore formulate the following hypothesis:

**H2:** Trust stimulates the development of common ground in governance networks

#### 2.4. *Boundary spanners*

Often during a collaboration, specific individuals may help collaborators better understand one another and work together more effectively (Maglaughlin and Sonnenwald 2005; Young 2010; Etkowitz 2012). Organizational research, as well as network literature, has discussed the role of boundary spanners in this respect (Tushman and Scanlan 1981; Edelenbos and Van Meerkerk 2015); individuals who span boundaries by passing on relevant information (e.g. Tushman, 1977; Etkowitz 2012) and the role of agents who facilitate interaction and arbitrate conflict among team members (Sonnenwald 1996). The boundary spanners may help to bring potential collaborators together, align problem definitions, and resolve differences between various groups and organizations, and language barriers among collaborators (Maglaughlin and Sonnenwald 2005; Young 2010).

The development of common ground in governance networks therefore calls for boundary spanners (Ysa, Sierra, and Esteve 2014). In this context, competent boundary spanners are engaged in three main (and interrelated) activities: connecting or linking different people and processes on both sides of the boundary, selecting relevant information on both sides of the boundary, and translating this information to the other side of the boundary (Williams 2002; Van Meerkerk and Edelenbos 2014; cf. Tushman and Scanlan 1981). With their role in information exchange, timely mobilization of people and processes across boundaries and building sustainable relationships between actors, boundary spanners are likely to contribute to the development of common ground between actors. Competent boundary spanners understand other actors’ needs and are so-called *active listeners* (Williams 2002; Van Hulst, De Graaf, and Van den Brink 2012): especially being open to the views of other people. This enables them to search for shared meanings (Levina and Vaast 2005). Hence, they can play an important role in (pro-actively) finding and developing common ground between actors. This leads to the following hypothesis:

**H3:** Boundary spanning has a positive effect on reaching common ground in governance networks

Previous research on the role of boundary spanners in governance networks in urban settings has shown that boundary spanners are important in developing trust among actors in the network (Van Meerkerk and Edelenbos 2014). Through their relational activities and their feeling for the interests and social constructs of other actors, they contribute to trustful relationships. Similar results are found in other research on the effects of boundary spanners on trust in inter-organizational settings (e.g. Ebers and Maurer 2014; Brion *et al.* 2012). Hence, we expect that they contribute to trust building between actors and, in this way, also indirectly contribute to common ground:

**H4:** Boundary spanning has a positive effect on developing trust in governance networks.

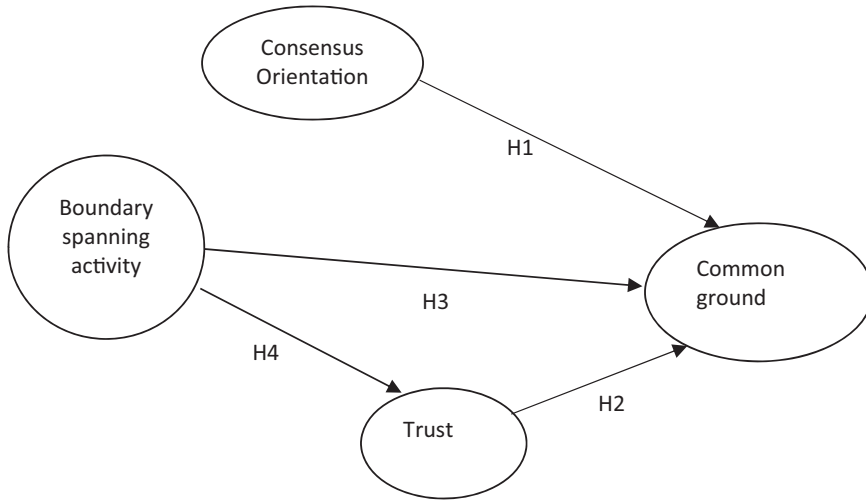


Figure 1. Conceptual model.

Figure 1 shows the conceptual model we will test, including all hypotheses, based on our theoretical discussion. The relationships are discussed in previous sections and formulated as hypotheses, which we will test by survey research.

### 3. Research methodology

#### 3.1. Sample and data collection

We collected data from a survey held in 2011 among leading project managers operating in the four largest cities of the Netherlands (Amsterdam, Rotterdam, The Hague, and Utrecht). We prepared the survey together with eight representative project managers from the four cities (two per city). These contact people organized the email to the project managers and encouraged them to participate in the survey. In addition, we held three preparation sessions with eight project managers from the four participating cities to validate our survey approach and questionnaire. In these sessions, we tested understanding of the questions and improved them where necessary. The questionnaire was sent as a link in an email which was coordinated by the eight representative project managers in order to improve the response. Two reminders were sent to further improve the response rate.

Each respondent of the survey is a manager involved in specific urban projects in one of the four cities. They can all be considered project managers with similar general task descriptions, belonging to the project management bureaus in the four cities, responsible for preparing, developing and implementing complex urban projects. The managers are involved in a variety of urban projects, but generally the projects concern the restructuring of parts of a city. Some of the projects concern restructuring/building dwellings and community facilities in a neighborhood; others are more focused on business and/or commercial functions (shopping malls and so forth). We explicitly selected the project managers because they know what is going on in the surveyed projects and are also capable of answering specific questions concerning other actors in the network, project management and relationship with principal, and so forth. To

Table 1. Population and response of the survey.

	Population	Response (absolute)	Response (percentage)
Municipalities (4)	288	117	40.6%
Private organizations (2)	57	24	42.1%
Total	345	141	40.9%

safeguard the independence of our data, we arranged with participating organizations that they send emails to each leading project manager of a specific urban project. In this way, we made sure that we had one manager for each project. We consider the set of actors involved in each (urban) project as a governance network: a governance network consists of actors (local government, project developers, building companies, residents, societal stakeholder groups, etc.) who have an interdependent relationship with one another in developing and implementing an urban project. Each project manager was asked as a respondent to fill in the questionnaire with a specific urban project in mind in which they are/were most intensively involved, and which they had to keep in mind when responding to all questions.

Table 1 indicates the population of the project managers from the four largest municipalities of the Netherlands and from two private firms. No significant statistical differences exist between respondents from the four different municipalities or consultancy firms according to the ANOVA tests comparing the six groups regarding the core variables (common ground, boundary spanning, trust, consensus orientation). The table also shows the response rate, which is 41% ( $N = 141$ ).

### 3.2. City projects as urban governance networks

The urban projects could be described as complex projects developed within governance networks. The networks around the projects on which the managers reported, mostly included more than 10 organizations (66%). Most of the networks included societal interest groups (94.3%), private developers (78.6%), architectural firms (79.4%), housing associations (60.7%), and different governmental organizations (other local governments, regional government, and national government). These organizations all have their own interests, values, and perspectives on the project at stake in the four cities, ranging from economic, environmental, social, physical, sustainable, and cultural issues.

### 3.3. Measurement of variables

In this section, we discuss the different scales we used to measure our core variables common ground, trust, boundary spanning, and consensus orientation. We constructed all variables as factors. In Table 2, we present the specific items of the scales, their factor loadings, and the construct reliabilities. In the next section, we discuss the convergent and discriminant validity of the measurement model.

*Consensus orientation:* This is a newly developed variable. We used a single item with a 10-point horizontal rating scale to measure this type of actor orientation in the governance network. Horizontal rating scales provide two opposite attitude positions and ask respondents to show where on the 10-point scale – in between two opposites – their



Table 2. Measurement items and constructs' reliability.

Items and constructs	Factor loading	Corrected item-to-total correlations	Alpha/composite reliability/AVE
Common ground <sup>a</sup>			0.70/0.71
(1) In the urban project, the different stakeholders grow closer to each other regarding interests, goals, and understanding versus in the urban project, the different stakeholders do not get closer to each other	0.72	0.53	
(2) In the urban project, the public and the private actors grow closer to each other regarding interests, goals, and understanding versus in the urban project, the public and private actors do not get closer to each other	0.59	0.49	
(3) In the urban project, the public and the societal/non-profit actors grow closer to each other regarding interests, goals, and understanding versus in the urban project, the public and societal/non-profit actors do not get closer to each other	0.69	0.55	AVE 0.45
Boundary Spanning activity <sup>b</sup>			0.84/0.85
(1) In this project, there are many active people who are able to build and maintain sustainable relationships with different organizations in the network	0.70	0.59	
(2) In this project, there are many active people who have a feeling of what is important and what matters for other organizations in the network	0.81	0.71	
(3) In this project, there are many active people who take care of a good information exchange between the network and their home organization	0.80	0.73	
(4) In this project, there are many active people who make effective connections between developments in the network and internal work processes of their home organizations	0.71	0.66	
(5) In this project, there are many active people who are able to mobilize their home organization in a timely manner in relation to developments in the network	0.60	0.54	AVE 0.53
Trust between actors in the governance network <sup>b</sup>			0.80/0.80
The parties in this project generally live up to the agreements made with one another	0.53	0.49	
(1) The parties in this project give one another the benefit of the doubt	0.65	0.60	
(2) The parties in this project keep in mind the intentions of the other parties	0.84	0.69	
(3) Parties in this project can assume that the intentions of the other parties are good in principle	0.64	0.57	AVE 0.45
(4) Parties in this project feel a good personal connection with one another	0.67	0.61	

<sup>a</sup>These items were measured on a 10-point horizontal rating scale.

<sup>b</sup>These items were measured on a five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree.

own view falls (de Vaus 2013). Consensus orientation was measured by this statement and the 10-point scale.

- Consensus: (1) consensus is important for decision-making processes in the urban governance network versus consensus is unimportant for decision-making processes in the urban governance network, 10.

*Trust:* To measure trust between actors within the network, we build strongly on the existing scale of Klijn, Edelenbos, and Steijn (2010), consisting of different dimensions derived from the business literature, including the notions of agreement trust, benefit of the doubt, reliability, and goodwill trust. Because the project managers in the sessions to improve our questionnaire argued that, for them, an important additional element of trust is 'feeling a good connection with the other actors', we improved the scale by adding this aspect of trust, as this also enhanced the reliability and construct validity. According to the managers, trust is partly based on whether they sense mutual understanding. This greater emotional connection between individuals is also described by Lane and Bachmann (1998).

*Boundary spanning activity:* We used our previously tested scale on measuring boundary spanning activity in governance networks (Van Meerkerk and Edelenbos 2014). This scale consists of five items (see Table 2) distinguishing different boundary spanning activities, such as good information exchange between the network and the home organization (e.g. Tushman and Scanlan 1981), building and maintenance of sustainable relationships between organizations in the network (Williams 2002; Klijn, Steijn, and Edelenbos 2010) and making effective connections between developments in the network and work processes in the home organization (cf. Steadman 1992). In the survey, we asked the respondents whether they thought there were many people active in the network who show these kinds of activities.

*Common ground:* This is a newly developed variable. In theory, we can speak of common ground when people do not differ in their approach, goals, and intentions and have a mutual understanding and interest in certain issues (Huxham and Vangen 2005). One develops goal congruence, joint identification of issues and similarity in perspectives and interests towards challenges that arrive in the urban context (Clark and Brennen 1991; Baker *et al.* 1999). The choice for this operationalization is not without consequences. By putting these elements in the same definition, we implicitly assume these more or less occur at the same time, whereas one can argue that actors have mutual understanding, but do not fully agree on the same goals and interests. However, at the same time the involved actors in the collaboration should show some tolerance and acceptance of diverging interests (Huxham and Vangen 2005; Ansell and Gash 2008; Emerson, Nabatchi, and Balogh 2011). From these theoretical assumptions, we developed three questions that indicated to what extent actors with different organizational backgrounds in the governance networks grew closer together during the process of collaboration.

- In the urban project, the different stakeholders grow closer to each other regarding interests, goals, and understanding versus in the urban project the different stakeholders do not grow closer to each other.
- In the urban project, the public and the private actors grow closer to one another regarding interests, goals, and understanding versus in the urban project the public and private actors do not grow closer to each other.

- In the urban project, the public and the societal/non-profit actors grow closer to each other regarding interests, goals, and understanding versus in the rural project the public and societal/non-profit actors do not grow closer to each other.

### 3.4. Reliability and validity

The measurement model was first examined for convergent and discriminant validity, based on confirmatory factor analyses. All factor loadings are greater than 0.50 (see Table 2), a very conservative cut-off level (Hair *et al.* 1995), which is a first important indicator demonstrating convergent validity within a factor. Furthermore, the composite reliability indexes of the three scales all exceed the 0.60 threshold (Fornell and Larcker 1981). To further assess the reliability of the measures, we computed corrected item-to-total correlations and Cronbach's alphas. All items had corrected item-to-total correlations that were greater than 0.40, which represents a general threshold (Field 2005). All Cronbach's alphas exceeded the minimum accepted cutoff value of 0.70.

To establish discriminant validity, we compared the average variance extracted (AVE) with the squared inter-construct correlation estimates (SIC). The AVE of all five constructs are greater than the corresponding squared inter-construct correlations, revealing the distinctiveness of each of the constructs and, thus, discriminant validity.

### 3.5. Testing for general method bias

The data collection process used in this study could induce a common-method bias, as the data are based on single informants and are self-reported (Podsakoff and Mackenzie 2003). We therefore conducted two procedures and a statistical test to deal with this issue. Statistically, we used a Harman one-factor test to evaluate the extent to which common method variance was a concern (Podsakoff and Mackenzie 2003). A factor analysis was conducted on all 14 items used to measure the core variables covered by the hypotheses. No single factor accounted for the majority of the explained variance, i.e. the first factor accounted for 39%. Procedurally, we reduced the risk of socially desirable responses and/or to be lenient when crafting their responses by protecting respondent anonymity (Podsakoff and Mackenzie 2003). Moreover, we reduced item ambiguity by pretesting the survey among eight project managers from the four participating cities (Tourangeau, Rips, and Rasinski 2000). Although the above analysis and procedures do not totally rule out the possibility of same-source, self-report biases, it does suggest that general method variance is probably not an adequate explanation for the findings obtained in this study (Podsakoff and Organ 1986).

### 3.6. Control variables

We selected four control variables to test whether the measured effects on our dependent variables are not caused by certain specific characteristics of the project or the reporting managers. With regard to the projects, we included two control variables in our analyses, based on the literature: task complexity and the phase of the project. Increased task complexity might affect the development or non-development of common ground (cf. Klijn, Steijn, and Edelenbos 2010). We measured this by asking about the amount and types of development and/or spatial activities included in the project (Klijn, Steijn, and Edelenbos 2010). Consequent to the preparation sessions with the eight project managers, we asked about six different kinds of spatial activities/tasks: infrastructure (rail and

public highways), water management, housing, social facilities (schools, sports facilities), development and/or regeneration of business areas, and development of city parks (cf. Klijn, Steijn, and Edelenbos 2010). Measured on a five-point Likert scale, on average, more than three of these tasks ( $M = 3.76$ ) play a medium to large part in the projects, which confirms the complex nature of the projects. The phase of the project is about the activities realized within the project, such as the development of the final project plan and the realization of the first physical constructions. In 81% of the sample projects, a master plan has been developed and has been established by the city council, and in 40%, the first physical constructions have been built.

With regard to the reporting managers, we included: the number of years the respondent has been involved in the project as the manager and the general experience of the project manager in working on comparable projects. The first is a general check on whether the respondent has participated for a sufficiently substantive amount of time to actually be able to make experience-based judgments. The mean score on this variable is 3.0 years, which is a considerable amount of time managing any one project, although there are strong differences ( $SD = 2.1$ ). The second, general experience, is also measured in years of experience in such projects. Our main argument here is that, through increased time spent working in the field, project managers will gain more experience in terms of analyzing and understanding network relationships, which makes an impact on the development of common ground and building of trust between actors (cf. Juenke 2005). Although most project managers involved in this survey are relatively experienced in the management of urban projects (more than 13 years, on average, and a modus of seven years), there are strong differences ( $SD = 7.2$  years).

#### 4. Results

We used SEM for the data analysis, and ultimately to test the hypotheses in the conceptual model. One important reason to choose SEM is that it allows simultaneous analysis of all the variables in the model, instead of separately, and it enables measurement of direct and indirect effects. Moreover, it provides explicit estimates of error variance parameters, thereby improving the accuracy of the data analysis (Byrne 2010).

Table 3 presents means, standard deviations, and correlations for all model constructs and control variables. The mean scores on trust and boundary spanning activity are around the mid-range of the scales, indicating that managers generally perceive a moderate presence of these constructs. The mean scores of common ground and consensus orientation are somewhat above the mid-range (especially consensus orientation). A possible explanation for these relatively high scores could be the Dutch administrative and political culture of which consensus seeking behavior is a core characteristic (e.g. Skelcher *et al.* 2011).

Figure 2 shows the results of the structural model tests. Control variables were also regressed on all variables in the model. The presented model had the best fit excluding any control variables that were not significant. The overall fit of the measurement model was tested by the fit indices CFI, RMSEA, and PCLOSE. The CFI index has a value of 0.96, the parameter RMSEA has a value of 0.05 and PCLOSE has a value of 0.50, which indicates a good fit of the measurement model with the data (Byrne 2010). The significant relationships ( $p < 0.05$ ) are presented (the standardized regression coefficients are reported) and the explained variance is noted in the boxes.

Table 3. Means, standard deviations, and correlations for all model constructs and control variables.

	Mean	SD	Common ground	Consen. orient.	Trust	BSA	Task compl.	Project phase	Years of exper.	Years of involve.
Common ground (1–10)	6.56	1.51	1							
Consensus orient. (1–10)	7.33	1.77	0.18*	1						
Trust (1–5)	3.34	0.64	0.56**	0.08	1					
Boundary spanning activity (1–5)	3.37	0.67	0.56**	-0.10	0.55**	1				
Task complex. (1–6)	3.16	0.83	0.24**	0.20*	0.18*	0.17*	1			
Project phase (1–6)	3.21	1.34	0.19*	-0.08	0.22*	0.21*	0.14	1		
Years of experience	13.01	7.23	0.15	0.11	0.01	-0.00	0.11	0.04	1	
Years of involvement	2.99	2.12	0.04	-0.02	0.09	0.13	0.19*	0.28**	0.19*	1

\*\* $p < 0.01$ ; \* $p < 0.05$ .

*N* is in between 133 and 141 (pairwise deletion of missing values).

The SEM analysis shows that all hypotheses in the conceptual model are confirmed in this model. Consensus orientation, trust and boundary spanning activity all show strong relationships (Standardized Betas between 0.44 and 0.53,  $p < 0.01$ ) with common ground, together explaining 70% of its variance. Therefore, consensus orientation, trust, and boundary spanning activity have an important part in explaining the extent to which common ground is reached in complex urban governance networks.

Boundary spanning activity shows the strongest relationship. Also, because of its effect on trust, indirectly impacting upon common ground. We tested the indirect effects of boundary spanning activity on common ground by performing the bias-corrected bootstrap method as described by Shrout and Bolger (2002). We requested 2,000 bootstrap samples and found this indirect effect to be significant. The standardized indirect effect is 0.30 ( $0.63 \times 0.48$ ;  $p < 0.05$ ). Therefore, boundary spanning activity has a direct and an indirect effect by building trust on reaching common ground.

The final step in the analysis was the examination of the control variables. We omitted the control variables that had no significant effects. These were the controls on the

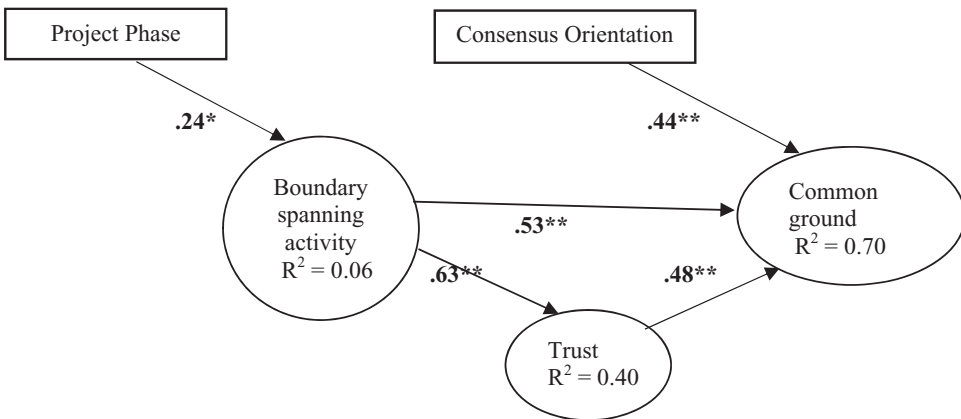


Figure 2. Structural model.

respondent (years of involvement, years of experience) and task complexity. The project phase showed a significant relationship with boundary spanning activity. Urban governance projects that are in the implementation phase require more boundary spanning activity ( $\beta = 0.24, p < 0.05$ ), as in this phase (urban development) projects become more concrete and demand more activities by different actors and organizations and therefore indicate greater need to span various organizational boundaries.

## 5. Conclusion and discussion

The exploration and reaching of common ground among actors in networks and decision-making processes have been subject to several studies, for example in the literature on cooperation (Lundin 2007), negotiation (Beers *et al.* 2006), and collaboration (Huxham and Vangen 2005). Common ground is sometimes coined differently, such as goal congruence and alignment (Lundin 2007; Huxham and Vangen 2005; Provan and Kenis 2008). Common ground is not only input for cooperation and collaboration processes, but can also be considered as the output of these processes. In governance networks, reaching common ground then refers to the extent to which actors 'grow closer together' during the process of cooperation, negotiation and collaboration, given their different interests, goals and viewpoints. We departed from this definition in our study, and were interested in which factors then potentially influence reaching common ground. There is relatively less attention in the literature on investigating the antecedents of reaching common ground in multi-actor governance networks. We developed and underpinned a theoretical model, which was tested by SEM. In this section, we discuss the findings and limitations of our study and draw several conclusions.

Our study, in common with much other research, is not without limitations. It is based on perceptual measures coming from project managers in the urban governance networks. Although we have tried to minimize the risks of common method bias with the methods as discussed, we have to be careful in making generalizations. In addition, we have chosen a particular operationalization of common ground in which mutual understanding and acceptance and tolerance of other goals and interests happen at the same time. We have tried to develop a (reliable) construct for common ground which is not yet present in the literature. We reflect upon this coincidence of the three aspects; in future research it would be worthwhile to separate these aspects theoretically and empirically treat them as single items in distinct questions. Factor analysis could further reveal whether these items measure one construct or different dimensions of common ground. Furthermore, this study has focused on specific kinds of governance networks; all the networks studied were in the field of urban development and restructuring. These results cannot automatically be assumed to hold for other policy domains. Further research involving samples from other domains and in countries other than The Netherlands, is needed to fully validate our results. Moreover, the reliability of the measure for common ground could be improved. However, 70% of this measure could be explained by the model. Despite these constraints, we believe that our research has provided interesting empirical insights, which provide input for theory development.

Our first conclusion is that the attitudes of actors in governance networks are important in developing and reaching common ground among actors. An actor orientation is about an integrated set of attitudes and beliefs that lead to inclinations of behaviors and actions (Bossel 1977). When this attitude is aimed towards consensus-seeking in multi-actor governance networks, it is more likely that common ground will be developed. In the theoretical model by Ansell and Gash (2008) consensus-seeking is a

core aspect of collaborative governance. In this study, we empirically prove the importance of this antecedent in reaching common ground. By consensus orientation actors in the governance network show the willingness and openness to engage in a process of joint goal congruence, and growing together in processes of collaboration, deliberation and communication. A next step for research on collaboration in governance networks would be to systematically examine antecedent factors that trigger consensus orientated behavioral attitudes of network actors. According to the literature, institutional design factors (such as process arrangements) are likely to play a crucial role in this respect (Ansell and Gash 2008).

The second conclusion is that certain behavior (next to attitudes, in our first conclusion) can also be considered important in explaining the finding of common ground in governance networks. We found that boundary spanning behavior, which is characterized by trying to connect to actors with different organizational backgrounds in the network, will lead to the fostering of common ground. Other research has generally shown the importance of boundary spanning activity in enhancing the performance of governance networks and trust-building in governance networks (Van Meerkerk and Edelenbos 2014). However, in our study, we have shown that boundary spanning behavior is also related to reaching common ground as these boundary spanning individuals and activities succeed in developing mutual understanding, durable and trustworthy relationships, receptivity and empathy among actors in the network (see also Williams 2002). Institutional factors and facilitative leadership, are often examined in collaborative governance research (Ansell and Gash 2008), which points to the importance of including the specific behavior of network actors (the specific individuals who show negotiating and interacting behavior in the network) into the equation.

Our final conclusion is that next to attitude (consensus orientation) and behavior (boundary spanning activity) the quality of the relationships between actors in the network can also be considered important for reaching common ground. A relationship is of high quality when there is trust between actors in the governance network (Gulati 1995; Child 1998; Lewicki and Bunker 1996). When trust is present, actors in the network are more inclined to open up, because they have less fear of opportunistic behavior by others, and create the pathway to receptively discuss each other's viewpoints and goals, and try to explore overlap and congruence, and pay less attention to conflict of interest and goals. In this environment, people grow closer together and ultimately reach common ground. Boundary spanning activity also contributes to this exploration of overlapping goals, as we have observed that indirect relationships via trust find common ground.

In all, we have found that factors of attitude (consensus orientation), behavior (boundary spanning activity), and relationships (trustworthy actor relationships) are important predictors of reaching common ground in urban governance networks. Attitude and behavior are important dimensions of agency in explaining the evolution of interaction in collaborative forms of governance (Emerson, Nabatchi, and Balogh 2011). An avenue for further research into explaining common ground would be to also take contextual and institutional factors into account. In this respect, comparison between different types of networks and cultural differences between countries in explaining the level of common ground between actors can be an interesting next step.

#### **Disclosure statement**

No potential conflict of interest was reported by the authors.

## References

- Ansell, C., and A. Gash. 2008. "Collaborative Governance in Theory and Practice." *Journal of Public Administration and Theory* 18 (4): 543–571.
- Baker, M. J., T. Hansen, R. Joiner, and D. Traum. 1999. "The Role of Grounding in Collaborative Learning Tasks." In *Collaborative Learning: Cognitive and Computational Approaches*, edited by P. Dillenbourg, 31–63. Amsterdam: Pergamon/Elsevier Science.
- Beers, P. J., H. P. A. Boshuizen, P. A. Kirschner, and W. H. Gijssels. 2006. "Common Ground, Complex Problems, and Decision Making." *Group Decision and Negotiation* 15: 529–556.
- Bloomfield, D., K. Collins, C. Fry, and R. Munton. 2001. "Deliberation and Inclusion: Vehicles for Increasing Trust in UK Public Governance?" *Environment and Planning C* 19 (4): 501–513.
- Brennan, S. E. 1998. "The Grounding Problem in Conversations with and through Computers." In *Social and Cognitive Psychological Approaches to Interpersonal Communication*, edited by S. R. Fussell and R. J. Kreuz, 210–225. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bossel, H. 1977. "Orientors of Nonroutine Behavior." In *Concepts and Tools of Computer-Assisted Policy Analysis*, edited by H. Bossel, 227–265. Basel: Birkhauser.
- Bossel, H. 2000. "Policy Assessment and Simulation of Actor Orientation for Sustainable Development." *Ecological Economics* 34: 337–355.
- Brion, S., V. Chauvet, B. Chollet, and C. Mothe. 2012. "Project Leaders as Boundary Spanners: Relational Antecedents and Performance Outcomes." *International Journal of Project Management* 30 (6): 708–722.
- Bromme, R. 2000. "Beyond One's Own Perspective: The Psychology of Cognitive Interdisciplinarity." In *Practicing Interdisciplinarity*, edited by P. Weingart and N. Stehr, 115–133. Toronto: University of Toronto Press.
- Byrne, B. M. 2010. *Structural Equation Modeling with Amos. Basic Concepts, Applications, and Programming*. New York: Routledge.
- Child, J. 1998. "Trust and International Strategic Alliances: The Case of Sino-Foreign Joint Ventures." In *Trust within and between Organizations. Conceptual Issues and Empirical Applications*, edited by C. Lane and R. Bachman, 241–272. Oxford: Oxford University Press.
- Clark, H. H. 1996. *Using Language*. Cambridge: Cambridge University Press.
- Clark, H. H., and S. E. Brennan. 1991. "Grounding in Communication." In *Perspectives on Socially Shared Cognition*, edited by L. B. Resnick, J. M. Levine, and S. D. Teasley, 127–149. Washington, DC: American Psychological Association.
- Connick, S., and J. Innes. 2003. "Outcomes of Collaborative Water Policy Making: Applying Complexity Thinking to Evaluation." *Journal of Environmental Planning and Management* 46 (2): 177–197.
- de Vaus, D. 2013. *Surveys in Social Research*. London: Routledge.
- Ebers, M., and I. Maurer. 2014. "Connections Count: How Relational Embeddedness and Relational Empowerment Foster Absorptive Capacity." *Research Policy* 43 (2): 318–332.
- Edelenbos, J., and E. H. Klijn. 2007. "Trust in Complex Decision-Making Networks: A Theoretical and Empirical Exploration." *Administration and Society* 39 (1): 25–50.
- Edelenbos, J., and I. F. van Meerkerk. 2015. "Connective Capacity in Water Governance Practices: The Meaning of Trust and Boundary Spanning for Integrated Performance." *Current Opinion in Environmental Sustainability* 12: 25–29.
- Emerson, K., T. Nabatchi, and S. Balogh. (2011). "An Integrative Framework for Collaborative Governance." *Journal of Public Administration Research and Theory* 22 (1): 1–29.
- Etzkowitz, H. 2012. "Triple Helix Clusters: Boundary Permeability at University – Industry – Government Interfaces as a Regional Innovation Strategy." *Environment and Planning C* 30 (5): 766–779.
- Field, A. P. 2005. *Discovering Statistics Using SPSS*. 2nd ed. London: Sage.
- Fornell, C., and D. F. Larcker. 1981. "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error." *Journal of Marketing Research* 18: 39–50.
- Gulati, R. 1995. "Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choices in Alliances." *The Academy of Management Journal* 38 (1): 85–112.
- Gray, B. 1991. *Collaborating: Finding Common Ground for Multiparty Problems*. San Francisco, CA: Jossey-Bass.
- Hair, J. F., R. E. Anderson, R. L. Tatham, and W. C. Black. 1995. *Multivariate Data Analysis*. Upper Saddle River, NJ: Prentice-Hall.



- Healey, P. 2006. "Transforming Governance: Challenges of Institutional Adaptation and a New Politics of Space." *European Planning Studies* 14 (3): 299–320.
- Huxham, C., and S. Vangen. 2005. *Managing to Collaborate: The Theory and Practice of Collaborative Advantage*. New York: Routledge.
- Innes, J. E., and D. E. Booher. 1999. "Consensus Building and Complex Adaptive Systems: A Framework for Evaluating Collaborative Planning." *Journal of the American Planning Association* 65 (4): 412–423.
- Innes, J. E., and D. E. Booher. 2003. "Collaborative Policymaking: Governance through Dialogue." In *Deliberative Policy Analysis. Understanding Governance in the Network Society*, edited by M. A. Hajer and H. Wagenaar, 33–59. Cambridge: Cambridge University Press.
- Juenke, E. G. 2005. "Management Tenure and Network Time: How Experience Affects Bureaucratic Dynamics." *Journal of Public Administration Research and Theory* 15 (1): 113–131.
- Klein, G., P. J. Feltoch, and D. D. Woods. 2005. "Common Ground and Coordination in Joint Activity." In *Organizational Simulation*, edited by W. R. Rouse and K. B. Boff, 240–256. New York: Wiley.
- Klijn E.H., and J. F. M. Koppenjan. 2016. *Governance Networks in the Public Sector*. London: Routledge.
- Klijn, E. H., A. J. Steijn, and J. Edelenbos. 2010. "The Impact of Network Management Strategies on the Outcomes in Governance Networks." *Public Administration* 88 (4): 1063–1082.
- Klijn, E. H., J. Edelenbos, and A. J. Steijn. 2010. "Trust in Governance Networks: Its Impact and Outcomes." *Administration and Society* 42 (2): 193–221.
- Lane, C., and R. Bachmann, eds. 1998. *Trust Within and Between Organizations: Conceptual Issues and Empirical Applications*. Oxford: Oxford University Press.
- Laumann, E. O, and D. Knoke. 1987. *The Organizational State: Social Choice in National Policy Domains*. Madison, WI: The University of Wisconsin Press.
- Lee, H. W., P. J. Robertson, L. Lewis, D. Sloane, L. Galloway-Gilliam, and J. Nomachi. 2012. "Trust in a Cross-Sectoral Interorganizational Network: An Empirical Investigation of Antecedents." *Nonprofit and Voluntary Sector Quarterly* 41 (4): 609–631.
- Levina, N., and E. Vaast. 2005. "The Emergence of Boundary Spanning Competence in Practice: Implications for Implementation and Use of Information Systems." *MIS Quarterly* 29 (2): 335–363.
- Lewicki, R. J., and B. B. Bunker. 1996. "Developing and Maintaining Trust in Work Relationships." In *Trust in Organizations*, edited by R. M. Kramer and T. R. Tyler, 114–139. London: Sage Publications.
- Lundin, M. 2007. "Explaining Cooperation: How Resource Interdependence, Goal Congruence, and Trust Affect Joint Actions in Policy Implementation." *Journal of Public Administration Research and Theory* 17 (4): 651–672.
- Maglaughlin, K. L., and D. H. Sonnenwald. 2005. "Factors that Impact Interdisciplinary Natural Science Research Collaboration in Academia." Paper presented at the 10th International Conference of the International Society for Scientometrics and Informetrics (ISSI), Istanbul, Turkey, July 24–28. <http://www.diva-portal.org/smash/get/diva2:886335/FULLTEXT01.pdf>
- O'Toole, L. J., Jr. 1983. "Interorganizational Co-Operation and the Implementation of Labour Market Training Policies: Sweden and the Federal Republic of Germany." *Organization Studies* 4: 129–150.
- O' Toole, L. J., Jr. 2003. "Interorganizational Relations in Implementation." In *Handbook of Public Administration*, edited by J. Pierre and B. G. Peters, 234–244. London: Sage.
- Paulus, T. M. 2009. "Online But Off-Topic: Negotiating Common Ground in Small Learning Groups." *Review of Scientific Instruments* 37: 227–245.
- Petts, J. 1995. "Waste Management Strategy Development: A Case Study of Community Involvement and Consensus-Building in Hampshire." *Journal of Environmental Planning and Management* 38 (4): 519–536.
- Podsakoff, P. M., and S. B. MacKenzie. 2003. "Common Method Biases in Behavioural Research: A Critical Review of the Literature and Recommended Remedies." *Journal of Applied Psychology* 88 (5): 879–903.
- Podsakoff, P. M., and D. W. Organ. 1986. "Self-Reports in Organizational Research: Problems and Prospects." *Journal of Management* 12: 531–544.

- Provan, K. G., and P. Kenis. (2008). "Modes of Network Governance: Structure, Management, and Effectiveness." *Journal of Public Administration Research and Theory* 18 (2): 229–252.
- Schmidt, S. M., and T. A. Kochan. 1977. "Interorganizational Relationships: Patterns and Motivations." *Administrative Science Quarterly* 22: 220–234.
- Sharp, E. A., R. Thwaites, A. Curtis, and J. Millar. 2013. "Trust and Trustworthiness: Conceptual Distinctions and their Implications for Natural Resources Management." *Journal of Environmental Planning and Management* 56 (8): 1246–1265.
- Shrout, P. E., and N. Bolger. 2002. "Mediation in Experimental and Nonexperimental Studies: New Procedures and Recommendations." *Psychological Methods* 7: 422–445.
- Skelcher, C., E. H. Klijn, D. Kübler, E. Sørensen, and H. Sullivan. 2011. "Explaining the Democratic Anchorage of Governance Networks: Evidence from four European Countries." *Administrative Theory and Praxis* 33 (1): 7–38.
- Sonnenwald, D. H. 1996. "Communication Roles that Support Collaboration During the Design Process." *Design Studies* 17: 277–301.
- Steadman, H. J. 1992. "Boundary Spanners: A Key Component for the Effective Interactions of the Justice and Mental Health Systems." *Law and Human Behavior* 16 (1): 75–87.
- Susskind, L. E., S. McKeaveney, and J. Thomas-Lamar. 1999. *The Consensus Building Handbook: A Comprehensive Guide to Reaching Agreement*. London: Sage Publications.
- Thomson, A. M., and J. L. Perry. 2006. "Collaboration Processes: Inside the Black Box." *Public Administration Review* 66: 20–32.
- Tourangeau, R., L. J. Rips, and K. Rasinski. 2000. *The Psychology of Survey Response*. Cambridge: Cambridge University Press.
- Tushman, M. L., and T. J. Scanlan. 1981. "Boundary Spanning Individuals: Their Role in Information Transfer and Their Antecedents." *The Academy of Management Journal* 24 (2): 289–305.
- Tushman, M. 1977. "Special Boundary Spanning Roles in the Innovation Process." *Administrative Science Quarterly*, 24: 82–98.
- Vangen, S., and C. Huxham. 2012. "The Tangle Web: Unraveling the Principle of Common Goals in Collaborations." *Journal of Public Administration Research and Theory* 22 (4): 731–760.
- Van Hulst, M., L. De Graaf, and G. Van den Brink. 2012. "The Work of Exemplary Practitioners in Neighborhood Governance." *Critical Policy Studies* 6 (4): 434–451.
- Van Meerkerk, I., and J. Edelenbos. 2014. "The Effects of Boundary Spanners on Trust and Performance of Urban Governance Networks: Findings from Survey Research on Urban Development Projects in The Netherlands." *Policy Sciences* 47 (1): 3–24.
- Williams, P. 2002. "The Competent Boundary Spanner." *Public Administration* 80 (1): 103–124.
- Young, R. F. 2010. "The Greening of Chicago: Environmental Leaders and Organisational Learning in the Transition Toward a Sustainable Metropolitan Region." *Journal of Environmental Planning and Management* 53 (8): 1051–1068.
- Ysa, T., V. Sierra, and M. Esteve. 2014. "Determinants of Network Outcomes: The Impact of Management Strategies." *Public Administration* 92 (3): 636–655.