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Machiel van der Heijden & Jelmer Schalk

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## MAKING GOOD USE OF PARTNERS: DIFFERENTIAL EFFECTS OF MANAGERIAL NETWORKING IN THE SOCIAL CARE DOMAIN

MACHIEL VAN DER HEIJDEN AND JELMER SCHALK  
LEIDEN UNIVERSITY

**ABSTRACT:** *Public managers engage in networking relationships with a wide variety of external actors and organizations from which they can draw different types of support and resources. Most empirical studies on managerial networking merely present different intensities of external networking in general, as if it were a unidimensional concept. In practice, however, public managers strategically differentiate between functional or task-related groups of external partners, based on the specific policy context. Moreover, such differentiation in networking behavior can be expected to systematically impact agency and public program performance outcomes. This article derives contextualized hypotheses on how managerial networking affects the performance of Dutch local governments in the social care domain. Multilevel structural equation analyses of 3,257 social care clients in 71 local governments provide evidence that bilateral client-interest networking is more beneficial to the Social Support Act's overall goal of improving the level of social participation of clients than professional networking. Moreover, the effect is indirect: managerial networking with client interest groups improves the physical self-reliance of clients, enabling them to engage in social activities.*

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### INTRODUCTION

At the local government level, the delivery and management of public services increasingly relies on complex networks of interdependent actors and organizations (Walker and Andrews 2015). Within these service delivery arrangements, the managerial networking efforts of public managers have been shown to positively

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affect performance (Agranoff and McGuire 2001; Goerdel 2006; Meier and O'Toole 2003; 2012; Akkerman, Torenvlied, and Schalk 2012). Departing from a resource-based perspective, managerial networking with actors in the agency's environment is seen as an important means of securing external resources such as time, money, information, and legitimacy (Pfeffer 1987). Moreover, in a local government setting, it enables managers to "build support for programs, attract partners in cooperative efforts and fend off challenges from other actors" (Walker, O'Toole, and Meier 2007, 743). However, there are several potential inadequacies of current public management network research.

First, the hypothesized positive relationship between networking activity and performance often focuses on different intensities of external networking in general, as if it were a unidimensional concept (Torenvlied et al. 2013). In practice, however, public managers can strategically differentiate between different kinds of external partners, depending on the types of resources and (intermediate) goals they are pursuing (Walker et al. 2010). Thus, different dimensions of networking behavior can be expected to impact differently on performance outcomes. Recent studies have indeed found evidence for this expectation in the context of public education (Torenvlied et al. 2013; Rho 2013).

Second, as O'Toole (2015) observes, the performance-enhancing aspects of networking are likely dependent on the specific policy context. So far, however, most managerial networking studies have relied on the Texas school district dataset. Although the significance of managerial networking for this research context is evident (Meier and O'Toole 2003; O'Toole and Meier 2011), its effects in the context of English local government (Walker et al. 2010) and Danish public education (Meier et al. 2015) have been less convincing. Moreover, different policy contexts involve different types of actors that operate under different institutional arrangements. The behavior of public managers and the context in which it takes place should thus be analyzed jointly, as the one cannot be understood without the other (cf. Flyvbjerg 2001; Johns 2006). Contextual factors convey important explanatory mechanisms and are likely to impact the management-performance linkage (Provan and Milward 1995; 2001; O'Toole and Meier 2015).

Third, the use of performance as a dependent variable is not uncontested (Boyne et al. 2006; Walker, Boyne, and Brewer 2010). Scholars and public managers can draw from a wide range of performance dimensions and—particularly in the public sector—goals are multiple, conflicting, and vague (Heinrich and Fournier 2004; Rainey and Jung 2010, 35). There is no single dimension of performance, and management variables that are positively related to one may be negatively related to others (Boyne, Brewer, and Walker 2010, 271). These considerations force us to be specific about what dimension(s) of local government performance we link to management variables, and what performance indicators can be used as adequate operationalizations (Boyne 2002).

This study turns to the context of Dutch local governments and the networking behavior of public managers in the social care domain. In terms of public service delivery, this domain has been presented with fierce challenges. The lasting

financial-economic crisis and ongoing demographic changes have forced Western European governments to strike a balance between the imperative of curbing public spending and the growing demands for social services (Pavolini and Ranci 2008). A much reported government response is a move away from institutionalized care towards “enablement” and personalized services at the community level (Callaghan and Towers 2014, 1427). Here, “refamilization” is seen as a means to reduce the financial burden of public health and welfare programs (Kröger and Silpa 2005; Pavolini and Ranci 2008). Waves of decentralization have accordingly shifted authority from central to local government and ensured the involvement of a wide array of actors and organizations in both service financing and provision. In what some have dubbed a move from welfare *state* to welfare *system*, service management in the social care sector is now largely concentrated at the local level and involves *networks* of actors, including families, nonprofit, private, and public organizations (Longo et al. 2015). As government programs and policies in the social care domain have become more differentiated, pluralistic, and decentralized, local public managers increasingly face the arduous task of managing these networks.

To study how network management affects service provision quality in this policy context, we combine insights from the public management network literature with arguments on client-level mechanisms derived from the social care literature (Plaisier et al. 2014; Callaghan and Towers 2014; Longo, Notarnicola, and Tasselli 2015). This helps us to formulate a more context-specific conceptual model by identifying possible dimensions of networking behavior and specifying important intermediate goals that relate these dimensions to local government performance. The performance dimension we are primarily interested in is the *effectiveness* of service delivery in terms of *service outcomes* (Boyne 2002); i.e., the actual achievement of formal service objectives (Walker and Andrews 2015, 103).

To evaluate local government effectiveness in terms of service outcomes, we focus on self-reported behavioral data at the client level. This is particularly appropriate for studies in the area of community-based health care and social services, as formal policy goals in this field are often stated in terms of desired changes in client behavior, such as healthier living or engagement in social activities (Provan and Milward 1995). A focus on outcomes thus implies that we should capture the extent to which behavioral change envisaged by government policy is realized. Also, services in this field are typically delivered jointly by a number of providers (Provan and Milward 2001). Therefore, if we want to evaluate whether the management of the variety of services delivered by multiple providers improves client conditions, we must analyze outcomes at the client level, where the effects materialize. What is more, our focus on client-level behavioral outcomes constitutes a welcome methodological addition to existing local government performance studies, which predominantly rely on archival performance data (Walker and Andrews 2015). When perceptual survey data of clients are used, they typically capture satisfaction with services (i.e., performance in terms of responsiveness; cf. Boyne 2002).

In terms of networking, the policy changes in the Dutch social care domain can be expected to influence the external behavior of public managers by making some networking nodes more salient to the core agency than others (Walker et al. 2010). A more *contextualized* analysis then allows us to assess what exactly has changed in terms of service delivery arrangements, how this influences the public manager's behavior, and what responses these institutional changes evoke in terms of strategic behavior (cf. Scharpf 1997; Johns 2006). We thus aim to open—at least partly—the black box between networking and performance. In this fashion, we provide a networking model that is more accurate in terms of description, while still facilitating explanatory research (cf. Sartori 1970).

To test our hypotheses, we compiled a longitudinal, hierarchical, and multi-actor dataset, consisting of 71 Dutch local governments and 3,257 clients. Data were collected in 2008 and 2009 in the context of the Dutch Social Support Act (SSA), a large-scale decentralization in the social care domain implemented in 2007, primarily aimed at increasing the level of social participation of physically and socially disadvantaged individuals. In terms of research design, the institutional set-up of the SSA offers distinct advantages that will be discussed, after presenting our theoretical framework.

## THEORETICAL FRAMEWORK

### Networking and Local Government Performance

This article builds on the *managerial networking* perspective, which analyzes the actions of the individual manager in the networked environment of the organization or government agency (O'Toole and Meier 2011, 59). The unit of analysis is thus the public manager and the direct relations with actors in the environment that constitute the “ego-network” (Wasserman and Faust 1994). Representing the core of empirical evidence, several studies on the Texas school districts have shown that managerial networking positively influences organizational performance (O'Toole and Meier 2011). Using one common networking factor, these studies operationalize networking activity as the contact frequencies that high-ranking managers maintain with external actors and organizations and accordingly link it to performance indicators. However, as Torenvlied et al. (2013, 253) note, this one-factor design does not take into account that *different* kinds of external actors and organizations provide *different* types of support to the core agency. Patterns of managerial activity can then be discovered as managers are expected to discriminate between different types of network partners to attain different objectives (Akkerman and Torenvlied 2011; Torenvlied et al. 2013, 253).

This decomposition of networking behavior into its constituent nodes problematizes its relationship with local government performance, as the overall effect of networking seems to be based on a variety of more complex relations in which not every dyadic interaction is equally beneficial to performance (Walker et al. 2010, 733). Managerial networking can then have various implications for performance, dependent on which actors interact and what the nature of these interactions

is. As Walker et al. (2010, 738) have shown in the context of British local government, interactions with specific network nodes still mattered, even though networking overall had no impact on performance. Similarly, in the context of Dutch colleges, Akkerman and Torenvlied (2013) demonstrate that maintaining *specific* networking ties with professional organizations is more beneficial for performance than entertaining *diverse* networks of many different types of actors and organizations. Moreover, when considering the wide range of performance dimensions with which public management is concerned, some networking ties will be beneficial to some dimensions of performance, though to the detriment of others (Boyne, Brewer, and Walker 2010, 271; Lee and Whitford 2012).

### Multiple Dimensions of Networking

Under the assumption that public managers are limited in terms of time and resources, the question of how much to invest in networking relationships with certain types of actors becomes an important strategic choice (Rho 2013, 44). As networking can be considered a costly endeavor that need not always be effective (Provan and Sydow 2008), public managers are best advised to be selective in their investments in relationships with external actors based on the salience of policy goals (Heymann 1987; Moore 2000). It is then vital to investigate the different types of functions that networking can fulfill (Walker et al. 2010, 738). Networking behaviors can have important operational differences and, in assessing their effects on performance, it is important to consider the purpose for which they were intended in the first place (McGuire 2002, 602).

These nuances in managerial networking behavior have also been noted by Meier and O'Toole (2005, 533), who argue that adding more nodes would eventually generate additional dimensions of networking activity. This also leads them to distinguish between networking aimed at *local politics* and at cultivating *professional* ties; a two-factor solution accordingly developed by Rho (2013). Here, it is emphasized that “the relative types of resources that can be obtained from these two sets of patterns should vary in both type and abundance, and strategic actions may likewise vary by pattern” (Meier and O'Toole 2005, 534). Similarly, Torenvlied et al. (2013) argue that, in fact, three dimensions of networking can be shown to have differential effects on performance. They demonstrate that a bureaucratic coping dimension has a positive effect, while political support and co-production dimensions make no difference for school performance.

However, these studies all rely on the same policy context; namely, that of Texas school districts. This is problematic, as it inhibits an evaluation of the effect of context, which may not only influence the functional relationship between networking and performance, but also the occurrence and meaning of organizational behavior itself (Johns 2006, 386). Rather than exporting the generalized and context-independent categorizations of networking behavior by Torenvlied et al. (2013) and Rho (2013), we are therefore more interested in identifying specific attributes of the SSA's institutional setting that have the potential to shape the actual meaning of the networking and performance concepts in the context under study. This

*contextualization* thus entails “linking observations to a set of relevant facts, events, or points of view that make possible research and theory that form part of a larger whole” (Rousseau and Friend 2001, 1) and underpins the process of hypotheses development which follows. To do so accurately, we must first describe the context in which our research takes place.

## RESEARCH CONTEXT: THE SOCIAL SUPPORT ACT

In 2007, the Dutch government shifted main decision-making authority in the social policy domain from the national to the local level (Da Roit and De Klerk 2014). This means that municipalities now carry main responsibility for the areas of service provision for persons with disabilities, youth policy, and work and income. For the SSA specifically, the focus is on facilitating social participation and independent functioning of all citizens, particularly those who experience physical or mental impediments (De Klerk, Gilsing, and Timmermans 2010).

Two aspects of the SSA in particular make it an interesting research context for our present purpose. First, the SSA is a “framework law.” That is, although central government outlines the broader goals and intended social effects of the policies in the SSA set-up, municipalities are given an extensive degree of autonomy and discretion in formulating their own variant of the local policy to be implemented and the choice of instruments by which the central goals are to be attained. Thus, municipalities are free to develop their own policy within the bounds of the set framework (see Koppenjan and Van der Voort 2009). Second, the vertical lines of accountability are absent in the institutional set-up through which the SSA policy is implemented: local governments are held accountable in a *horizontal* fashion, through formally required evaluations by their citizens. Thus, local governments are left with far more discretion and autonomy in formulating and executing local policy than before. Rather than maintaining a nation-wide and homogeneous conception of welfare state regimes, substantial local differences should then exist in the provision of social care services (Jensen and Lolle 2013). Moreover, the *management* of service delivery should vary from jurisdiction to jurisdiction as a consequence of the strategic choices of public managers in relation to the particular local socio-economic and demographic situation.

Besides a realignment of legislation, the SSA is also an emphatic attempt to realize social and administrative innovation (Timmermans, Gilsing, and De Klerk 2010, 23–33). Rather than providing institutionalized care, the focus in care provision is on “enablement,” supporting clients to maintain their independence for as long as possible (Callaghan and Towers 2014, 1427). Informal caregiving through family and private relationships is emphasized, only to be substituted by formal care arrangements in the absence of family caregivers, insufficient economic means, and serious physical impediments (Pavolini and Ranci 2008). Rather than seeking out the help of professional organizations, clients are thus expected to take more responsibility for their own care arrangements and should first turn to their personal networks of families and friends for support (Da Roit 2012; Plaisier et al. 2014). In this fashion, the SSA hopes to ensure that citizens can remain self-sufficient for as

long as possible and are enabled to participate in society (Van der Veer, Schalk, and Gilsing 2011, 266). In this process, local governments fulfill the role of “care commissioners,” assessing the need and eligibility for social care within broadly defined national parameters (De Klerk et al. 2010; Van Leeuwen et al. 2014). An important consideration, however, is that the SSA is also characterized by decreased public spending and budget cuts so that local governments are confronted with fewer resources and more responsibility.

These shifts in service delivery arrangements also mean that the role of public managers has changed significantly. For the wide range of services provided to SSA clients to be effective, extensive coordination among a wide variety of different types of actors is needed. This requirement is also reflected by the SSA’s strong recommendation to involve multiple actors in all stages of policymaking (Van Houten, Schalk, and Tuynman 2010). Consistent with the managerial networking logic specified earlier, this recommendation carries the underlying assumption that an intensive degree of direct engagement of local organizations will eventually result in better service delivery. In developing and maintaining bilateral relations with different stakeholder organizations, local governments are attributed a role of policy broker or “lead organization” (cf. Provan and Kenis 2008).

## CONTEXTUALIZED HYPOTHESES

To assess what context-specific attributes can help us understand the behaviors and incentives of the SSA managers more accurately, we turn to a set of situational factors that Johns (2006, 393) has labeled the *task* context. Describing what this context means for the SSA specifically then enables us to formulate *contextualized* hypotheses on how different dimensions of managerial networking are related to local government performance.

First, public managers in the SSA context will be limited in terms of available *resources*. The SSA reforms are essentially about budget cuts, obliging local governments to do more with less. Second, the many different kinds of organizations and actors relevant to the core agency’s tasks force the SSA manager to work in a highly *complex* environment (O’Toole and Meier 2015, 245–246). Although greater environmental complexity is already associated with lower local government performance (Andrews 2009), it may also increase *uncertainty* and *ambiguity* about their newly acquired role in service delivery arrangements (Johns 2006, 393). Lastly, working within broadly defined national parameters of the SSA’s framework law, in which accountability checks are organized horizontally (i.e., locally), results in a high degree of *autonomy*.

Particularly when considering the limited resources and high complexity with which SSA managers are confronted, we then expect them to concentrate their networking behaviors on certain types of actors. This results in both theoretically and empirically discernible networking dimensions. To see what these are, however, we have to ask the question of what specific goals are salient for public managers in the SSA context. This helps us assess what types of resources and information they



will be pursuing and how the resulting types of networked interaction can be expected to affect goal attainment.

The SSA is essentially about facilitating *social participation*, or having clients engage in social activities. Rather than institutionalized care, the focus in service delivery arrangements is on “enablement” and personalized services at the community level (Callaghan and Towers 2014, 1427). Here, the personal networks and *social capital* (Putnam 1995; Van der Gaag 2005) of clients through which informal care is provided are of crucial importance. However, in order for these personal networks to be effective, coordination of a wide variety of actors and organizations is needed. To organize this environmental landscape of different actors and organizations, two functional types can be distinguished in SSA policymaking: *professional* organizations and *client interest* organizations (De Klerk et al. 2010). *Professional* organizations are the formal care providers to the client population. They operate under different levels of government and have either a non-profit or semi-public legal status, although some private organizations also provide services (e.g., transport companies). *Client interest* organizations, on the other hand, represent the interests of different client groups under the umbrella of different types of “impediments,” such as the elderly or disabled. Their main focus lies with influencing policy outcomes as to embody the concerns of their clients, while, at the same time, co-production arrangements have increasingly put them in a service delivery role (Bovaird 2007; Van Houten, Schalk, and Tuynman 2010).

So how do these different types of actors relate to the context-specific (intermediate) goals of the SSA? Contextual conditions of *uncertainty* and *ambiguity* involved in the SSA reforms will have public managers looking for information and feedback from the client groups that the SSA is intended to serve. However, in the social care domain, these clients are often not able to form politically powerful interest groups by themselves and are therefore represented by client-interest organizations (Provan and Milward 2001, 417). In order to attain critical knowledge on client groups, these organizations will then become important networking partners for SSA managers (Head 2008). Bilateral networking relations with these actors can transfer information on what barriers specific client-groups have towards social participation, and what is needed to overcome them. Moreover, through performance-related feedback, these network actors can also “send a ‘wake-up call’ when performance deteriorates, or alternatively, ring the bells of success when performance moves in the desired direction” (Walker et al. 2010, 733). This information can then be used to alter the course of public service delivery when needed and networking relations with client-interest organizations are thus expected to positively affect SSA outcomes. Also, involving client groups in the policymaking process is an important means of securing their support (cf. Bozeman 1987; Edelenbos, Klijn, and Steijn 2011).

Under conditions of limited *resources*, professional organizations can also be considered valuable network partners, as these organizations can provide local governments with specialized expertise, as well as financial and other resources to deliver organization-specific services (Meier and O’Toole 2003; Boyne et al. 2006). However, when considering the policy changes of the SSA, we can question whether a networking strategy aimed at professional organizations is as beneficial as a strategy

aimed at client-interest organizations. SSA managers are concerned with correctly identifying necessary participants in a process of “selective activation” (Scharpf 1978, 364). But these participants must also be willing to devote resources to the network and not be influenced by actors with other interests at stake (Agranoff and McGuire 2001, 298). For networking with professional organizations, the changed situation brought about by the implementation of the SSA—in which the establishment of local markets and the process of annual bidding has opened up the policy process to new parties (Van Leeuwen et al. 2014)—may then prove problematic. It will have professional organizations more concerned with notions of self-interest and survival as their various specializations and according interests can lead to substantial problems regarding the sharing of resources, political turf battles, and regulatory differences (Provan and Milward 2001, 416). Particularly in a policy arena marked by budget cuts and limited resources, client-interest organizations then seemingly have significantly lower barriers in terms of establishing new and effective forms of collaboration. Therefore, we expect that:

H1: *Client-interest networking* more strongly affects the *social participation* of SSA clients compared to *professional networking*.

Apart from a direct effect, however, we also expect distinct indirect effects to exist through which managerial networking affects social participation. In order for SSA clients to be able to participate in their community, several necessary conditions have to be met. That is, *intermediate* goals have to be attained and managerial networking can be expected to target these intermediate goals more directly. Here, we distinguish between a social and a physical component, both of which are expected to contribute to a client’s degree of social participation (Gilsing et al. 2010, 58). First, clients need the necessary *social capital* to mobilize their personal networks of family and friends to act as main service providers (cf. Putnam 2005). Second, social participation means “getting out of the house,” and clients need to be physically able to do so. They thus have to be *physically self-reliant* to some degree in order to participate in society. But then how are these intermediate goals of the SSA related to networking with client-interest and professional organizations?

Again, client-interest networking seems particularly beneficial in terms of providing critical information on the situations in which different client groups typically find themselves. More specifically, information on the barriers to mobilizing family and friends to act as service providers, or the physical impediments that restrict a client’s ability to manage a household, enables local governments to do something about them. Moreover, the previously identified “wake-up calls” can similarly be expected to favorably alter the course of service delivery, leading to better outcomes (Walker et al. 2010). Network relations with client-interest organizations can then be expected to positively influence the social capital of clients (Putnam 1995), enabling them to mobilize their personal networks of friends and family to act as care providers, while also improving physical self-reliance, enabling clients to move freely around their neighborhoods.

When comparing this to the potential benefits of networking with professional organizations, we see that, despite their enduring important role in overall SSA service delivery, the key to a successful SSA policy is found in effective informal care provision (Plaisier et al. 2014). Networking strategies targeted directly at acquiring information on how SSA clients can be enabled to take care of their own care arrangements should then be considered more beneficial in terms of improved service outcomes. Although professional organizations will also possess such information, it is essentially what client-interest networking is all about. We therefore similarly expect that:

H2a: *Professional networking* and *client-interest* networking positively affect *social participation* through increased levels of *physical self-reliance* of clients. This effect is stronger for *client-interest networking* than for *professional networking*.

H2b: *Professional networking* and *client-interest* networking positively affect the *social participation* of clients through increased levels of *social capital* of clients. This effect is stronger for *client-interest networking* than for *professional networking*.

## DATA AND METHODS

The secondary dataset used for testing the hypotheses is constructed on the basis of two separate, nationally representative surveys conducted by the Netherlands Institute for Social Research (SCP). The SCP is a government agency that conducts research into the social aspects of all areas of government policy. Both surveys were part of a large evaluation project commissioned by the Dutch Ministry of Health, Welfare, and Sports (De Klerk et al. 2010). The first survey is the so-called “Process Scan” (PS) for which a questionnaire was sent to the key coordinator (public manager) of the local SSA policymaking process in each Dutch local government administration in the first quarter of 2008 ( $N = 443$ ). The response rate was 83%, a total of 383 public managers in the same number of local jurisdictions. The PS survey retrospectively addresses the policymaking process of 2007 (the first year after effectuation of the SSA). We complemented these data with data on general socio-economic and demographic local government characteristics obtained from Statistics Netherlands (CBS).

The second sample is a random sample of SSA clients, conducted in the first quarter of 2009. Dutch municipalities can choose to provide services either directly themselves or indirectly through contracts with local organizations, or to compensate clients by means of a personal budget to buy their own care and support. Either way, individual clients have to apply for services and local governments subsequently evaluate their eligibility based on local SSA regulations.<sup>1</sup> Based on the list of new applicants (as of 2008) provided by 81 municipalities (the sampling frame), 5,535 randomly selected clients were contacted. The sample overrepresents the 31 largest

municipalities in The Netherlands. Questionnaires were obtained for 4,055 clients, which constitutes an impressive response rate of 73% (Lee, Benoit-Brian, and Johnson 2012). The main reasons for non-response were refusal (38%), not being at home (20%), and deceased or moved away (13%).

A subcontractor of the SCP held structured, 45-minute personal interviews with each client at home. In 90% of the interviews, the client was the primary respondent. The other interviews were held by a partner or family member—who was also involved in the application process for the client—because these clients themselves were not able to do the interview (due mostly to dementia or mental health problems). The questionnaire addresses the clients' health and health-related problems, their social networks, as well as general socio-economic attributes.

The final dataset used for the analysis thus consists of 4,055 clients nested in 81 local governments. After listwise deletion of cases with missing values for the variables used in the analyses, 3,256 clients nested in 71 local governments remain. The dataset contains information on the behavior of both public managers and the clients whose needs they aim to address. It offers two distinct advantages from a methodological point of view. First, the independent and dependent variables were obtained from *different sources*—public managers and SSA clients. Therefore, common source and social desirability bias is avoided (Spector and Branninck 2009; Podsakoff, MacKenzie, and Podsakoff 2012), at least with respect to the relation between the exogenous and outcome variables. Common source bias has proven to be problematic for public management research in which the same respondents are often used to supply information on both the independent and dependent variables (Jakobsen and Jensen 2014). These empirical studies then run the risk of overstating relationships, leading to spurious results (Conway and Lance 2010; Meier and O'Toole 2013).

Second, the data have a *longitudinal* structure: managerial networking (PS sample) is measured at the beginning of 2008, while client outcomes (SSA client sample) are measured in early 2009. The time lag between the networking variables and the actual performance variables limits—although it does not exclude—the risk of reverse causality for these variables, and constitutes a significant improvement on cross-sectional studies of stakeholder involvement and performance (Walker et al. 2010). In fact, many studies emphasize the importance of using a longitudinal design to link managerial behavior to outcomes (Burkhardt and Brass 1990; Ring and Van de Ven 1994; Brass et al. 2004; Rho 2013).<sup>2</sup>

## MEASURES: MUNICIPAL VARIABLES

### Professional and Client-Interest Networking

To operationalize the distinction between managerial networking with professional organizations vis-à-vis informal care and client representative organizations, we use two variables from the PS questionnaire. Public managers were asked to indicate which of 20 different functional types of *professional* organizations and

11 different functional types of *client interest* organizations were involved in the local SSA policymaking process. To determine the list of organizations, the subcontractor of the SCP involved in questionnaire construction (SGBO) conducted roundtable sessions with representatives from stakeholder organizations in the field across The Netherlands—local governments, professional, and client interest organizations. These sessions resulted in a list of organizations that (1) is exhaustive in the sense that all relevant functional organizations are represented; and (2) is meaningful to public managers in terms of the categorization of these organizations. Furthermore, the lists were cross-validated with the organizations mentioned in the documents issued by the Ministry of Health, Welfare, and Sports, designed to advise local governments and their partners with respect to different aspects of the SSA.

In the resulting questionnaire, public managers could indicate whether they involved each of the client interest organizations in the SSA policymaking process (yes/no). For this question, the public manager was asked specifically about the *bilateral* relations, as opposed to the formal *collective* collaborative platform for these organizations (the so-called “SSA Council” (Schalk 2015)). The professional networking question in the questionnaire instead asked for different categories of information sharing; namely, whether the organization: (1) was informed; (2) was asked for information; or (3) was formally asked for permission.<sup>3</sup> We recoded this variable to a dichotomous variable (yes/no) over the different types of partners. The reason for doing this is twofold. First, our focus is on types of partners, not types of relations. Second, because public managers could choose only one category, treating the types of relations as separate would not do justice to reality because multiple types of relations may exist, which would make for highly skewed variables. Thus, in the analysis, we use the sum scale for both networking dimensions: *professional networking* and *client-interest networking*.<sup>4,5</sup> Table 1 shows the percentage of public managers who indicate that they have a relation with each type of organization in the respective scales. Public managers are most active in terms of networking with professional care organizations that particularly provide the types of services for which SSA clients apply, most notably home care organizations, welfare organizations, and housing corporations. Comparatively, public managers network less with client interest organizations, although most managers still collaborate with most types of client interest organizations (see also Table 2).

### Control Variables (Municipal-Level)

Arguably, the most important control variable at the municipal level is the *SSA budget*. Financial resources will always have an impact on effective service delivery, and any study should therefore control for resource capacity (O’Toole and Meier 2006). More personnel and monetary resources enable local governments to develop and provide more effective, although not necessarily more efficient, services (Turrini et al. 2010). Apart from the financial resources, we also take into account the efforts that the local governments make to facilitate informal care and number of

**TABLE 1**

Percentage of Public Managers Indicating the Involvement of Professional and Client-Interest Organizations (Non-SSA Council) in Local SSA Policymaking ( $N = 71$ ); Public Manager Sample (2008)

<i>Professional networking</i>	%	<i>Client-interest networking</i>	%
Regional governments	38	Informal care clients	65
Transportation companies	34	Voluntary work clients	63
Housing corporations	87	Disabled clients	73
Health care service coordination office	70	Social security clients	42
CIZ, <sup>1</sup> SSA client eligibility indication office	70	Elderly clients	77
Home care organizations	92	Patient associations	58
GGD, <sup>1</sup> primary health care	87	Local neighborhood platforms	61
Residential care homes	85	Homeless, disabled, and clients suffering from domestic violence	34
GGZ, <sup>1</sup> primary health care	85	Migrant associations	24
Organizations for disabled clients	87	Youth associations	54
Financial-aid organizations (excluding banks)	51	Individual citizens	66
Welfare organizations	93		
Community shelters	69		
BJZ, <sup>1</sup> youth health care coordination office	76		
Schools	62		
Police departments	51		
Religious organizations	73		
Informal care organizations	94		
Voluntary work organizations	93		
MEE, administrative aid office	87		

*Data Source:* Netherlands Institute for Social Research (SCP).

<sup>1</sup>The Dutch Acronyms stand for the following: CIZ = “Centrum indicatiestelling zorg”; GGD = “Gemeentelijke gezondheidsdienst”; GGZ = “Geestelijke gezondheidszorg”; BJZ = “Bureau jeugdzorg.”

inhabitants (Plaisier et al. 2014). The operationalization of this scale variable—*support informal caregivers*—can be found in Appendix 1, together with all other variables constructed of multiple items. Finally, we control for municipal size in terms of the number of inhabitants.

## MEASURES: CLIENT-LEVEL VARIABLES

### Social Participation of SSA Clients (Dependent Variable)

The SSA ultimately aims to improve the level of social participation of clients. Social participation means being able to participate in social activities and being an active member in society. As others have demonstrated for the same client population, social participation is a crucial determinant of successful rehabilitation,

reduced feelings of loneliness, and shorter hospital visits (Noreau, Robichaud, and Rochette 2004; Newall, McArthur, and Menec 2015). Moreover, feedback effects may enhance civic engagement through conveying full civic status, greater civic commitment, and providing citizens with a positive government experience in general (Soss 2000; Mettler 2005). We operationalize *social participation* as a sum scale over different social activities, such as cultural activities like visiting a theatre, a concert, or a movie, going out to a restaurant, and visiting a community center (see Appendix 1). Previous studies have used similar items (Adams, Leibbrandt, and Moon 2011). The reliability of the scale is not of concern, because there is a time constraint on social activities, which implies that we do not expect all social activity items to correlate positively. Rather, we are interested in *more* versus *less* activity as such.

### **Physical Self-Reliance (Endogenous Variable)**

We expect social participation to be affected by managerial networking directly, but also indirectly, by enabling clients both physically and socially to participate in society. Hence, we develop two indicators, one for each mediation hypothesis (H2a and H2b). The construct *physical self-reliance* is a sum scale of four items related to various tasks that are essential for moving around the house and the neighborhood freely. This variable is closely linked to what the SSA law text refers to as “independent functioning” (Tweede Kamer 2004–2005). As this scale contains items that all have to do with physical ability, we do expect these items to correlate (Cronbach’s  $\alpha = .71$ ).

### **Social Capital (Endogenous Variable)**

To be able to participate in society, it is expected that individuals need to have friends, family, and people they can trust. After all, nobody wants to “bowl alone” (Putnam 1995). The concept of social capital has been studied extensively in various contexts (neighborhoods, organizations, countries) and many conceptualizations and measurement strategies have been developed (see Van der Gaag 2005 for an overview). The scale we use in the present analysis aims primarily to capture the level of personal isolation (Cronbach’s  $\alpha = .73$ ). The scale consists of seven items that ask the respondent about their access to non-superficial social contacts (see Appendix 1). The items are close to the “core discussion network” items in the General Social Survey that ask with whom a respondent would discuss important matters, which have also been linked to social isolation (McPherson, Smith-Lovin, and Brashears 2006).

### **Control Variables (Client-Level)**

Most network studies on public performance take into account variations in client characteristics that indicate the difficulty of service delivery to these clients (Provan and Milward 1995; O’Toole and Meier 2006; Andrews and Entwistle 2010). Moreover, if the individual-level factors that stimulate or inhibit social participation are

**TABLE 2**

Descriptive Statistics for Municipal-Level and Client-Level Variables; Public Manager (2008) and SSA Client (2009) Samples

<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
<i>Municipal level</i>					
Professional networking	71	14.8	5.1	0.0	20.0
Client-interest networking	71	6.2	3.5	0.0	11.0
Support informal caregivers	71	7.1	3.0	0.0	12.0
SSA budget (2007; Euro per capita)	71	73.0	23.4	29.2	150.2
Number of inhabitants (2007; *1,000)	71	48.5	46.5	7.2	181.6
<i>Client level</i>					
Social participation	3,257	4.1	3.4	0.0	18.0
Physical self-reliance	3,257	8.1	2.0	0.0	12.0
Social capital	3,257	10.9	3.1	0.0	14.0
Education	3,257	3.6	1.8	1.0	8.0
Household income	3,257	2.3	1.1	1.0	5.0
Living alone	3,257	0.5		0.0	1.0
Age	3,257	68.1	17.1	2.0	105.0
Physical difficulty	3,257	6.1	4.6	0.0	16.0
Male	3,257	0.3		0.0	1.0
Informal care	3,257	0.6		0.0	1.0
Received support (number of hours)	3,257	7.5	12.7	0.0	112.0

*Data Source:* Netherlands Institute for Social Research (SCP).

systematic across municipalities, these factors constitute compositional effects which need to be controlled for (Schalk, Torenvlied, and Allen 2010). Based on the social care literature discussed in the theory section (Davey and Patsios 1999; Plaisier et al. 2014; Callaghan and Towers 2014; Longo et al. 2015), we include a number of client-level control variables. Social participation is expected to be positively related to a client's level of *education* (ranging from 1—no education to 8—a university degree), *household income* (ranging from 1—less than 1,000 euro net per month to 5—over 3,000 per month), *informal care* (a dummy variable indicating whether or not the client actually receives non-professional help from family or friends), and *received support* (the actual number of hours that a client receives from any formal or informal care provider). Social participation is expected to be negatively related to *living alone* (a dummy variable indicating whether the client runs a single-person household), *age*, and *physical difficulty*. Finally, we also control for gender (*male*).

## ANALYTICAL STRATEGY

In order to test the hypotheses, we fit a series of multilevel structural equation models (MSEM) to our data (Kaplan 2008). Multilevel analysis (Hox 2002) allows



group characteristics to be included in models of individual behavior. To the extent that municipal-level factors affect SSA client outcomes, we should observe client outcomes to vary systematically between local governments. The generalized structural equation model (StataCorp 2013) combines features of multilevel analysis with structural equation modeling (SEM). SEM offers the possibility of estimating indirect effects. The multilevel structural equation model fits our purpose particularly well, because it allows us to simultaneously model municipal-level direct effects (H1) as well as indirect effects (H2a and H2b) on social participation. The advantages of MSEM over SEM have been well-documented (Preacher, Zhang, and Zyphur 2011).

We fit a series of three multilevel structural equation models with maximum likelihood estimation and robust standard errors for clustering of clients in municipalities. All models include random intercepts for the endogenous client-level variables. The first model (Model 1) is a random-intercept model that includes only the hypothesized direct effects on social participation. The second model (Model 2) adds the indirect effects for the hypothesized relations. Model 3, finally, includes both the municipal- and client-level control variables. For all models, all variables except the dependent variable social participation were grand-mean centered to facilitate interpretation of the coefficients (Hox 2002).

The model fit statistics produced by the standard approach in SEM (TFI; RMSEA, CFI) are considered unsuitable for MSEM (Rya 2014). This is because of their inability to detect lack of fit at any particular level, especially if the higher-level sample size is much smaller, as is the case in our data. Rather, we compare the model fits by using the likelihood-ratio test and the BIC index (Kaplan 2008). The likelihood-ratio test compares each model to the previous—more constrained—model, where Model 1 is compared to the empty model with only random intercepts estimated for the endogenous variables (not shown). A complication is that the likelihood-ratio test is likely to be invalid for models with robust standard errors. Hence, we performed the test based on Models 1–3 estimated without robust standard errors.<sup>6</sup> In addition, the BIC index (Raftery 1995) is a relative goodness-of-fit index for comparing models based on the model log-likelihoods. A reduction in the BIC of a model compared to the more constrained model of  $-2$  is considered a minimum, and differences larger than  $-10$  are considered very strong evidence of a better fit.

## RESULTS

Tables 2 and 3 present the descriptive statistics and correlations for all variables used in the analyses. As Table 1 already showed in more detail, public managers choose to network more often with professional organizations than with client interest organizations. At the same time, the correlation between the two networking scales is positive ( $r = .52$ ), which indicates that there is an overall tendency for public managers to network more or less. At the client level, the mean values for the endogenous client variables in Table 2 show that SSA clients are physically quite able

**TABLE 3**  
Correlations for Municipal-Level and Client-Level Variables; Public Manager (2008) and SSA Client (2009) Samples

<i>Variables</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<i>Municipal level</i>															
(1) Professional networking	1.00														
(2) Client-interest networking	.52*	1.00													
(3) Support informal caregivers	.21*	.04	1.00												
(4) SSA budget (per capita)	.17	-.08	.09	1.00											
(5) Number of inhabitants 2007	.33*	.17	.23	.28*	1.00										
<i>Client level</i>															
(6) Social participation	-.25*	.08	.05	-.36*	-.18	1.00									
(7) Physical self-reliance	.05	.19	.01	-.31*	.00	.23*	1.00								
(8) Social capital	-.06	.09	.21	-.09	-.10	.31*	.24*	1.00							
(9) Education	-.08	.17	-.01	.19	.05	.18*	.09*	.10*	1.00						
(10) Household income	-.10	.12	.02	.18	-.16	.13*	.04*	.12*	.34*	1.00					
(11) Living alone	.13	-.09	.04	.09	.16	.06*	.08*	-.05*	-.03	-.42*	1.00				
(12) Age	.18	-.10	.04	-.09	-.23	-.05*	.04*	-.01	.13*	.16*	.28*	1.00			
(13) Physical difficulty	.14	-.10	.09	.38*	.15	-.28*	-.41*	-.16*	-.08*	-.01	-.11*	.00	1.00		
(14) Male	-.09	.10	.03	-.06	.14	-.04*	.02	-.05*	.12*	.12*	-.15*	-.02	.07*	1.00	
(15) Informal care	-.05	.01	.12	.02	.08	-.07*	-.16*	.01	-.05*	.11*	.21*	-.07*	.27*	.01	1.00
(16) Received support (number of hours)	-.08	-.04	.13	.21	-.01	-.10*	-.19*	-.07	.02	.12*	-.21*	-.15	.38*	.03	.27*

*Note:* Mean value of client-level variables used for correlations with municipal-level variables.

*Data Source:* Netherlands Institute for Social Research (SCP).

\* $p < .05$ .

**TABLE 4**  
Multilevel Structural Equation Model of Social Participation; Unstandardized Coefficients  
(Robust Standard Errors) Reported; Average Group Size is 46 SSA Clients

<i>Variables</i>	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>	
	<i>(only direct effects)</i>		<i>(+ indirect effects)</i>		<i>(+ control variables)</i>	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
<i>(Y1) Social participation</i>						
Professional networking	-.064*	.033	-.064*	.033	-.044*	.026
Client-interest networking	.051	.043	.051	.043	.033	.038
Physical self-reliance	.289**	.032	.289**	.032	.127**	.034
Social capital	.315**	.019	.315**	.019	.283**	.018
<i>(Y2) Physical self-reliance</i>						
Professional networking			-.011	.016	-.002	.018
Client interest networking			.052**	.023	.037*	.022
<i>(Y3) Social capital</i>						
Professional networking			-.017	.021	-.019	.022
Client interest networking			.028	.030	.030	.030
<i>Variance (municipal level)</i>						
Social participation	.487	.107	.487	.107	.450	.102
Physical self-reliance	.528	.118	.501	.112	.404	.083
Social capital	.251	.075	.244	.073	.210	.067
<i>Variance (client level)</i>						
Social participation	9.800	.287	9.800	.287	9.044	.376
Physical self-reliance	3.292	.199	3.291	.199	3.292	.199
Social capital	9.045	.375	9.045	.376	9.044	.376
<i>n</i> (municipal level)	71		71		71	
<i>n</i> (client level)	3,257		3,257		3,257	
LR test (df)	450.1**(13)		4.5 (4)		255.3**(17)	
BIC	46,612.8		46,640.7		46,522.9	

*Note:* All variables grand-mean centered; robust standard errors reported. Constants and coefficients for control variables not reported (see Figure 1). Likelihood ratio tests based on estimations of the models without robust standard errors (comparison to preceding model).

*Data Source:* Netherlands Institute for Social Research (SCP).

\* $p < .10$ ; \*\* $p < .05$ .

to perform daily tasks and have substantial levels of social capital, while, at the same time, they do not participate very often in social activities. Not surprisingly, we can classify the group as “vulnerable”: their level of education is low, their modal household income is between 1,000 and 1,500 euros net per month, and their mean age is 68.

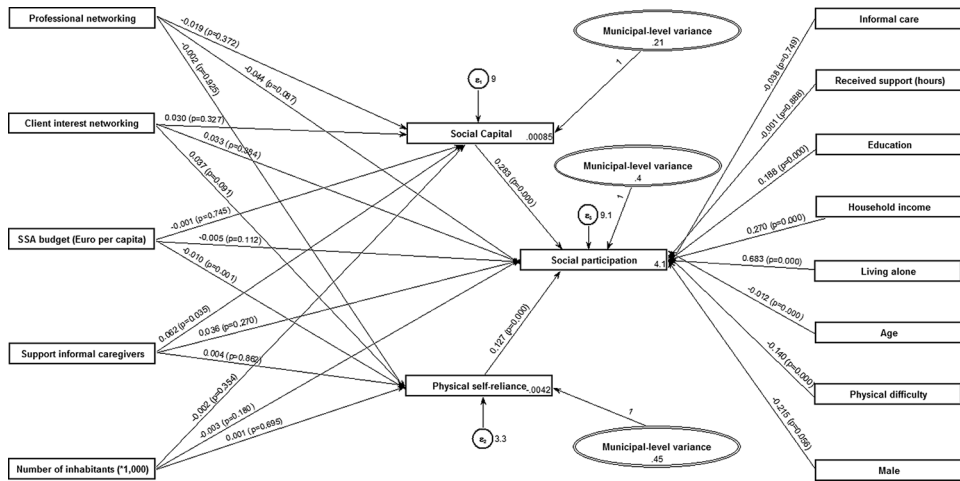
To what extent can client-level outcomes be attributed to systematic variation across municipalities? To examine this, we first look at the intra-class correlations

to determine the decomposition of variance between and within municipalities. The intra-class correlation (not shown in Table 4) for social participation is a modest .05, but significant ( $p < .05$ ), indicating that social participation varies between municipalities, but—likewise—we should not overstate how much management can matter for local government performance outcomes at the client level. The (significant) intra-class correlations for physical self-reliance and social capital are 0.14 and 0.03, respectively. Hence, inter-municipal variation exists in both variables, though much more in terms of physical self-reliance.

We now turn to the multivariate analysis. First, we evaluate Hypothesis 1. From Table 4, we learn that, of the networking variables, only professional networking significantly, and negatively, affects social participation directly ( $b = -.064$ ;  $p < .10$ ). The effect is consistent across all three models. Thus, Hypothesis 1 must be rejected. The unstandardized coefficients in Table 4 can be interpreted as the unit-increase in the dependent variable when the independent variable increases by one unit, while all other variables in the model take their mean value. So, a unit increase in professional networking reduces the social participation of an average SSA client in an average municipality by .064. Substantively, this means that the difference between a public manager who maintains relations with all 20 types of professional organizations and a public manager who does not network at all is 1.28 (that is,  $20 \times -.064$ ) points on the social participation scale. Overall, this is a modest effect; considering the mean value of 4.1 of social participation, it is substantial, but compared to the standard deviation of 3.4, less so. Even so, the effect is only significant at the .10 level, so the generalizability must certainly be studied in other empirical settings and treated with caution.

When we consider the indirect effects in Model 2, it becomes clear that client-interest networking positively affects physical self-reliance ( $b = .052$ ;  $p < .05$ ), but not social capital. This effect remains when we control for the other municipal- and client-level variables. Professional networking, on the other hand, does not affect either endogenous variable. At the same time, social capital ( $b = .315$ ;  $p < .05$ ) and physical self-reliance ( $b = .289$ ;  $p < .05$ ) have the expected positive and significant effect on social participation. An additional point on the physical self-reliance scale for an average SSA client in an average municipality increases social participation by .289 points. Thus, we reject Hypothesis 2b and confirm Hypothesis 2a. Even though there is no direct effect of client-interest networking on social participation, the indirect effect through physical self-reliance is robust and positive across the models.

Finally, when we evaluate the models as a whole, it can be concluded that the final model is the best-fitting model, based on the likelihood-ratio and BIC tests. Also, Model 2 does not improve the model fit compared to Model 1. This means that there is no overall mediation effect of networking. Rather, the mediation effect is manifested solely in the indirect effect of client-interest networking through physical self-reliance. The full model, including all coefficients in Model 3, is presented in Figure 1.



**Figure 1.** Full multilevel structural equation model of managerial networking and client-level social participation.

## CONCLUSION

By differentiating managerial networking behavior along two dimensions and relating them to indicators of local government performance at the client level, the analysis provided shows patterns that would otherwise have been left unnoticed if a unidimensional conceptualization of managerial networking were upheld (cf. Meier and O'Toole 2003). Networking behavior can be disaggregated in different types of networking relations and can have different effects on different aspects of local government performance (Walker et al. 2010; Walker, Boyne, and Brewer 2010). The important message that arises from these findings is that managerial networking is not a one-dimensional activity and should not be treated as such. In practice, public managers strategically differentiate between functional or task-related groups of external partners (Akkerman and Torenlvlied 2013; Torenlvlied et al. 2013). Moreover, if this notion is reflected in the operationalization of networking concepts, such differentiation in networking behavior can be shown to systematically impact local government performance outcomes.

For the SSA policy specifically, the results firstly show that investing in relationships with client interest organizations is more beneficial for service outcomes in terms of the attainment of formulated policy goals. Although a direct effect of bilateral client-interest networking on social participation was not found, an indirect positive effect through physical self-reliance proved robust. A possible explanation for this effect is that client-interest networking supports a client's personal network of family and friends and helps them to fulfill their envisioned role as informal caregivers. However, this explanation does not hold for the indirect effect through social

capital, for which client-interest networking apparently does not make a difference. In that sense, we should perhaps not overstate how much management can matter for local government performance outcomes at the client level, particularly when less straightforward policy goals, such as establishing social capital, are concerned.

Secondly, the effects of professional networking remain somewhat unclear. Its influence on service outcome is negative and a possible explanation for this counter-intuitive finding is that maintaining relationships with multiple stakeholders is already a costly endeavor (Provan and Sydow 2008), and new market configurations complicate the process of organizing and coordinating negotiation even further (Agranoff 2006). The gains public managers get out of network collaboration may not equal the costs of achieving consensus between widely differing and competing (professional) organizations (Van Houten et al. 2010).

However, we do not intend to disqualify professional networking for the context of social care, but merely observe that current governance arrangements increasingly complicate the collaboration process of involving these types of actors. Considering that public managers are limited in terms of time and resources—particularly in the context under study—they are perhaps best advised to invest in client interest organizations for which the barriers to successful collaboration are seemingly lower. In dealing with the difficult situation in which local governments are confronted with fewer resources and more responsibility, this networking strategy may provide an outcome in establishing successful policy implementation. However, an important insight of public management research is that management variables that are positively related to one performance indicator may be negatively related to others (Boyne, Brewer, and Walker 2010, 271). Future research should thus assess to what degree this might be the case, as the inclusion of different performance indicators than the ones chosen here may yield different results.

In terms of conceptualizing and measuring networking behavior, much work remains to be done. The effects on performance are complex, and depend on multiple characteristics of local networks. For example, differences may be found for different *managerial clusters* (Walker, O'Toole, and Meier 2007, 753). In this study, we have only addressed the networking behavior associated with one particular managerial function, while dissimilar patterns of interaction can be expected across functions, depending on the specific organizational or hierarchical niche with which the manager is concerned. Also, the actual *organizational form* of interactions matters. For example, in an earlier study, Schalk (2015) found that the collective involvement of client interest organizations in formal platforms did not matter for performance, whereas bilateral managerial networking with these organizations in the current analysis does. Finally, other organizations in the networked environment will not merely be passively subjected to the networking activity of the public manager under study, but also actively pursue their own strategies and networked interactions (Provan and Sydow 2008). The resulting *whole network structures* are likely to impact the effectiveness of each individual managerial tie. Future research on managerial networking should thus pay closer attention to the interplay of these factors.

In disentangling these complexities, the importance of *contextualization* is once more emphasized. It can not only help us understand study-to-study variations in

the management-performance linkage (O'Toole and Meier 2015), but also the effects of context as a shaper of the meaning of management concepts themselves (Johns 2006). Types of organizations and organizational actors with which a network or networking behavior is concerned will vary across contexts. Rather than restricting ourselves to functionally similar settings (e.g., United States and Danish schools), empirical research should then be conducted in widely differing contexts to gain more understanding of how and why various aspects of context might predictably and systematically modify the relationship between management and performance in some settings, and not in others (O'Toole and Meier 2015, 239). This also helps us to better understand the occurrence and meaning of networking behavior itself; for instance, by relating it to the functional setting in which it takes place. In terms of practical relevance, this will allow for more authentic and authoritative communication with the audiences of public management research; that is, managers and other potential consumers of our research who actually do care about context (Johns 1993).

On a final note, the same conceptual scrutiny that we have now applied to the managerial networking concept should also be applied to that of public performance (Boyne et al. 2006; Walker, Boyne, and Brewer 2010). This would allow for a better modeling and estimation of the effects on local government performance by specifying which dimensions of managerial networking are beneficial to which dimensions of performance, and under which conditions. A challenge for explanatory research tackling these issues is then to strike a balance between networking concepts that provide an acceptable range of explanation and adequate accuracy of description (Sartori 1970).

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## NOTES

1. Few applications (8%, including multiple applications for a single client) were rejected. The dominant type of service applied for is household support (43% of clients), followed by adjustments to homes (25%), and applications for a wheelchair (12%) or some other form of transportation, like a mobility scooter or adapted bike (13%). Very few clients (fewer than 2%) directly applied for a service relating to social participation or informal care. This indicates that clients primarily apply for the costly, physical services that might facilitate independent functioning, whereas informal care is provided through other means, if at all. Thus, we can be quite confident that the register of formal applications covers the target population of the SSA; namely, those who are at risk of social isolation and not being able to function independently in the community.

2. These studies likewise stress the importance of controlling for past performance when evaluating the effectiveness of managerial networking. Unfortunately, our client data are not panel data—client conditions were not measured for 2007 or earlier—so the actual *change* in client conditions cannot be assessed. At the same time, the SSA was enacted only in 2007. Hence, within the SSA as a policy framework, there is no past performance of local governments to take into account.

3. Unfortunately, the survey question does not allow us to assess whether these networking relations for professional organizations are strictly bilateral, or are also embedded in a voluntary collective platform.

4. In addition, to evaluate the robustness of the networking scales, we also performed a Mokken scaling analysis (Torenvlied et al. 2013) on the 20 and 11 items for the professional and client interest networking scales. The two scales each have highly satisfactory H-indexes (.63 and .56, respectively). Subscales within each scale likewise show satisfactory indexes, indicating that empirically meaningful networking dimensions can also be distinguished *within* each of the two scales. However, because the main theoretical distinction in this article is between professional and client interest organizations, we use the two scales as initially developed in the PS questionnaire.

5. It is important to note that the networking question for client interest organizations deliberately excludes collaboration in the SSA Council (“WMO-Raad”), which is a *collective* advisory body (or platform) that most local governments have instituted.

6. Although the maximum likelihood estimation of parameters is more likely to be biased when estimating the models without robust standard errors, the significance of the main effects of interest (the networking variables, physical self-reliance, and social capital) did not change in any model compared to the estimated Models in Table 4, except for the client interest networking effect on physical self-reliance in Model 3. This result, combined with the fact that the BIC indexes provide very clear results across the models, makes us confident that the likelihood-ratio tests support the interpretation of the BIC comparison, and adequately capture relative model fit.

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## ABOUT THE AUTHORS

**Machiel van der Heijden** ([m.j.a.van.der.heijden@fgga.leidenuniv.nl](mailto:m.j.a.van.der.heijden@fgga.leidenuniv.nl)) is a PhD candidate at the Institute of Public Administration at Leiden University. His research interests include public management, inter-organizational networks, and transnational regulatory networks.

**Jelmer Schalk** ([j.schalk@fgga.leidenuniv.nl](mailto:j.schalk@fgga.leidenuniv.nl)) is an assistant professor in the Institute of Public Administration at Leiden University. His fields of interest are public management, social network analysis, and inter-organizational networks, with a focus on organizational effectiveness and government performance.

## APPENDIX 1

### Variable Construction

**TABLE A1**  
Social Participation (Dependent Variable)

<i>Item</i>	<i>Observed Range</i>	<i>n</i>	<i>Mean</i>
Total scale (sum)	0–18	3,257	4.1
Could you please indicate how often you engage in each of the following activities?	<i>Categories</i>		
1. Visit a church, synagogue, or mosque.	0. Never		
2. Visit voluntary associations where you can meet other people (e.g., related to sports, singing, music, theater, hobbies).	1. Less than once a month		
3. Cultural activities like visiting a theater, a performance, a concert, a movie, a lecture, an exhibition.	2. At least once a month		
4. Going out to a bar or restaurant.	3. At least once a week		
5. Visit a community center in your neighborhood.			
6. Follow a course (which requires attendance).			
7. Volunteering.			

**TABLE A2**  
Physical Self-Reliance (Endogenous Variable)

<i>Item</i>	<i>Observed Range</i>	<i>n</i>	<i>Mean</i>	<i>Cronbach's Alpha</i>
Total scale (sum)	0 – 12	3,257	8.1	.71
	<i>Categories</i>			
1. To what extent are you able to run a household?	0. Highly insufficiently			
2. To what extent are you able to take care of yourself?	1. Insufficiently			
3. To what extent are you able to move in and around your house?	2. Sufficiently			
4. To what extent are you able to move around in your neighborhood?	3. Highly sufficiently			

**TABLE A3**  
Social Capital (Endogenous Variable)

<i>Item</i>	<i>Observed Range</i>	<i>n</i>	<i>Mean</i>	<i>Cronbach's Alpha</i>
Total scale (sum)	0 – 14	3,257	10.9	.73
Could you please indicate to what extent the following statements apply to you?	<i>Categories</i>			
1. There are people I can easily talk to.	0. No			
2. I feel isolated from other people (recoded).	1. Sometimes			
3. There are people I can go to.	2. Yes			
4. There are people who really understand me.				
5. I am part of a group of friends.				
6. My social contacts are superficial (recoded).				
7. I would like to be visited more often (recoded).				

**TABLE A4**  
Physical Difficulty (Exogenous Variable)

<i>Item</i>	<i>Observed Range</i>	<i>n</i>	<i>Mean</i>	<i>Cronbach's Alpha</i>
Total scale (sum)	0 – 16	3,257	6.1	.91
Can you say for each of the following activities whether you are physically able—without help—to perform them without difficulty, with some difficulty, or not at all?	<i>Categories</i>			
1. Dressing, putting on shoes.	0. No difficulty			
2. Washing yourself.	1. Some difficulty			
3. Using the lavatory.	2. Only with help			
4. Going from one room to another on the same floor.				
5. Climbing the stairs.				
6. Leaving your home.				
7. Moving around outside your house.				
8. Walking for 10 minutes at a time.				

**TABLE A5**  
Support Informal Caregivers (Exogenous Variable)

<i>Item</i>	<i>Observed Range</i>	<i>n</i>	<i>Mean</i>
Total scale (sum)	0 – 12	71	7.1
Does the local government offer each of the facilities for informal caregivers mentioned below?	<i>Categories</i>		
1. Respite care at home.	0. No		
2. Respite care elsewhere.	1. Yes		
3. Child care/day care.			
4. Facilities (parking cards, discounts, etc.).			
5. Exemption from job application efforts.			
6. Provide caregiver-friendly policy as employer.			
7. Agreements with local employers.			
8. Follow-up care.			
9. Guidance.			
10. Activities aimed at stress reduction.			
11. Activities with other informal caregivers.			
12. Information point for informal caregivers.			
13. Courses.			
14. Other.			