Network leadership: Defining its continuum

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Introduction

The leadership field encompasses a fundamental and crucial component in organizational

science. Over time, a vast amount of research established leadership's linkage with outcomes

as organizational effectiveness, employee job satisfaction, and voice behaviors (e.g., Braun et

al., 2013; Detert and Burris, 2007; Bass and Avolio, 1994). That research for long focused on

the perspective that leadership is only executed by single persons (Pearce and Manz, 2005).

However, during the mid-eighties a research interest emerged for post-heroic leadership in

which collectiveness and collaboration are stressed (Crevani et al., 2007). This is backed by

practice in which sharing of leadership was already present before Christ (Sally, 2002).

In addition to the developments in the leadership field, inter-organization theory

increasingly received scientific interest. That line of research focuses on the relationships

between organizations, the transaction of resources between organizational bodies, and

arrangements developed to ensure coordination (Kickert et al., 1997; Levine and White,

1961). Developments in society as well as the economy underline the importance of not only

understanding leadership in organizations, but also within broader contexts (i.e., networks).

Based on the above, a multitude of fields around intra- and inter-organizational

leadership in collaboration started to flourish alongside an ongoing focus on the hierarchical

leader. Within this leadership literature, an area called network leadership emerged. Whereas

Bryson et al. first acknowledged this 'network leadership' in 1978 in their exploratory work

"A political perspective on leadership emergence, stability and change in organizational

networks", the field experienced a quick increase in interest after 2005. The growing interest

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in this topic is emphasized by the leading journal "Leadership Quarterly", which devoted a special issue on network leadership in 2016 (issue 2, volume 27). Also practice shows an increasing focus on networks and sharing of the leadership equation, with relationships between companies (i.e., inter-organizational networks) becoming more and more important. Phenomena such as the globalization of the economy, specialization, and the growth of mutual dependencies have led to an increasing amount of value being created outside the company and thus in their networks (Schumacher et al., 2008; Levine and White, 1961). Many firms are even present in multiple networks concurrently, with the growing complexity in the workplace demanding leadership that is to some extent divided between different actors (Uhl-Bien et al., 2007). A high amount of ambiguity is present in the upcoming field, which stresses the importance of further research.

This study aims to contribute to the literature in several ways. First, this study adds to the research stream in general by providing a comprehensive literature review. With this, a better understanding of the field and its many facets is gained. Due to the dynamic nature of the workplace (Lappiere and Carsten, 2014) (inter-organizational) network forms in business are increasingly needed, and with that network leadership research. Second and related to the above, this study fills appointed research gaps by establishing an overview of both the antecedents and outcomes of network leadership configurations (e.g., Carter et al., 2015; Hiller et al., 2011; Zaccaro, 2007). Lastly, it offers structure and clarification within the evolving field by developing categorizations and presenting a definition of network leadership as based on the analyzed literature (n = 148). As ambiguity is high such clarification is urgently needed.

Resulting from the above highlighted research gaps in and calls from the literature, the following main research question has been formulated: "What defines network leadership and

do specific types of network leadership exhibit a good fit with certain contexts (as shaped by both antecedent conditions and desired outcomes)?"

Network effectiveness: the importance of network leadership

Since O'Toole's (1997) call to "treat networks seriously", an increasing scholarly focus is present on networks and the adoption of the term (Hwang and Moon, 2009; Robinson, 2006; Borgatti and Foster, 2003). An abundant number of studies have been published on networks, their characteristics and effectiveness criteria, both in the public and private sector. However, as networks are difficult to measure, they are often assessed as a conceptual scheme, metaphor or management technique ("networking") (Bergenholtz and Waldstrøm, 2011; Provan and Kenis, 2008; Milward and Provan, 1998). As this study limits to network leadership, the latter 'networking as management technique' is beyond scope and therefore excluded from further analysis. Networks on their own are moreover often assessed as a distinct organizational form, next to hierarchies and markets (e.g., Kickert et al., 1997; Powell, 1990). However, this three-fold division is too superficial as networks themselves might represent complex forms of hierarchies (Klaster et al., 2017). Inter alia due to those different perspectives, a vast number of definitions have emerged over the years. Whereas several studies focused on the relationship patterns between individual actors or so-called "nodes" (e.g., Carter et al., 2015; Wasserman and Faust, 1994), other studies defined networks as consisting of organizations (e.g., Westerlund and Rajala, 2010; Provan and Kenis, 2008; Tsai, 2001; Benson, 1975). This study defines networks as entities consisting of three or more actors, being either inter- or intra-organizational with the existence of shared goals or interests. Various network classifications have been established and examined within the broader definition of networks, with at the highest level the general distinction between public and private sector networks. Public sector research again often employs a differentiation on the basis of policy (governance) networks and collaborative (service implementation) networks (Isett et al., 2011; Rethemeyer 2005). Other discriminations have been established on the basis of intra- vs. inter-organizational networks (e.g., Colombo et al., 2011) or the presence of a focal internal or external leader (e.g., Carson et al., 2007).

Whereas a multitude of classifications is present, a widespread agreement is about the importance of effectiveness (e.g., Turrini et al., 2009; Provan and Kenis, 2008; Provan and Milward, 1995). Evaluation of network effectiveness is essential since resources are scare (Provan and Milward, 2001; Levine and White, 1961). However, effectiveness is generally labeled as hard to measure and define in detail, something that is found especially accurate in the context of networks (e.g., Provan and Kenis, 2008). As a result, and although an abundant amount of literature is available on networks, surprisingly little attention has been devoted to network effectiveness (Vollenberg et al., 2007). The scarce number of studies that did examine network effectiveness typically focused on the organization (case) level, instead of the network as a whole (Provan and Kenis, 2008). As network effectiveness is contextdependent (Kenis and Provan, 2009; Sydow and Windeler, 1998), defining general conditions is moreover complicated. Networks also often constitute of many different stakeholders, which are unlikely to be in consensus about the criteria that define the effectiveness of a network (Klijn, 2007). Generally, distinctions within this large pool of stakeholders are conjectured on the basis of community, network, and participant (e.g., Fitzgerald et al, 2013; Provan and Milward, 2001). While network effectiveness is likely based on interactions between the different levels, effectiveness at one level does not ensure effectiveness at another level or even conflict might be present (Provan and Milward, 2001). Though, certain contingencies (Drazin and Van de Ven, 1985) and factors are argued to contribute to or dilute the effectiveness of a particular network (e.g., Turrini et al., 2009; Provan and Kenis, 2008). A classical division pertains to cost, time, and quality (Oisen, 1971). More recent research, however, added several additional effectiveness criteria such as network structure, trust, system stability, and integration mechanisms and tools (Powell, 1996; Turrini et al., 2009; Provan and Kenis, 2008). On top of this, leadership has been established as one of the precedents of network effectiveness (Turrini et al., 2009). The above outlined importance of network effectiveness and the explicit role of leadership in this clearly shows the significance of gaining a more in-depth understanding of network leadership. The subsequent research will focus on this network leadership, with which further discussion of networks in general and other effectiveness criteria is excluded.

Methods

The aim of this literature review is to provide a comprehensive overview of the available research on network leadership. In order to conduct this literature review, a grounded literature review method has been adopted (Wolfswinkel et al., 2013).

Define

First, the inclusion/exclusion criteria, identification of the fields of research, the adopted databases and the search terms are formulated (Wolfswinkel et al., 2013). 57 Initial articles provided the starting point of the literature review. The review's search was framed in various iterative discussions in the research team. This process also included the discussion and thereafter the establishment of the list of constructs being recognized. To be incorporated, a construct had to be 1) clearly focusing on leadership in network contexts; 2) discussing what this leadership implies; 3) repeatedly being cited and examined instead of seeming to be a one-off term; 4) scientifically related to the other constructs (i.e., the construct has to refer to network leadership in general or other constructs have to refer to the particular construct and vice versa). With this, the chance of missing or mistakenly including constructs was minimized. Nine different constructs resulted from the process. The search terms were then established on the basis of the included constructs, thereby also being coupled with adjectives (e.g., "effective") and specific areas of interest (e.g., "outcomes") so to aid in answering the

research questions. Based on initial exploratory searches, Web of Science, Scopus, ScienceDirect and Google Scholar were defined as electronic databases.

Search

Extensive search was conducted between January and March 2017. No limitations to publication dates were adopted in order to derive an overview of the development of the research stream. Research from fields differing greatly from public and private business and papers written in languages other than English were excluded. After this first search round, "snowball sampling" screening was adopted to further prevent the exclusion of relevant articles. An initial base of 1.741 articles resulted.

Select

The titles, abstracts and keywords of the identified literature were then assessed. Eligible research records had to refer to:

- The use of the term "network leadership" in the right form (i.e., the often found "networking" as activity of leaders building a social network was excluded in order to prevent impurity of the results)
- Devoting a passage relevant to the topic, and thus discussing aspects of network leadership (i.e., not solely mentioning it as keyword or "network leadership should be present")
- Research of sufficient quality. Lower quality literature (e.g. Bachelor theses or magazine articles) was excluded.

Analyze

The researchers then structurally screened the downloaded work, thereby consistently filling out a set up database. A special column was left blank for "open coding" in order to assure everything relevant to the research and the scope of the review was marked. Regular meetings

between the researchers took place in the Analyze phase. In these discussions, the content, implications and place of articles within the wider literature were discussed.

Synthesize

Lastly, the data has been put into groups of higher order categories by a combination of discriminatory coding processes and axial coding. The original articles were consulted when additional or in-depth contextual information appeared to be needed.

Analysis

The final database of search results comprised a wide range of study types (e.g., meta-analyses, conceptual studies, empirical studies, conference reports, book chapters, dissertations). Moreover, numerous different contexts in both the public and private sectors (e.g., consultancy, education, governments) and different foci (e.g., effects) were included. This aided in establishing the first comprehensive review on network leadership; enabled a thorough assessment of both the antecedents and outcomes of network leadership and revealed the current research gaps.

Results

The various forms of network leadership

Many different constructs or ways of executing leadership can be categorized under the heading of network approaches to leadership. Ambiguity is high as scholars often approach the constructs in a different manner, which has led to a diverse set of definitions and contradictions within the field. This underlines the urge of gaining in-depth understanding of network leadership.

Antecedents and outcomes

Networks in organizational settings often emerge with specific ambitions or goals in mind, independently from whether it concerns small networks, large inter-organizational or even

inter-cultural networks. With leadership being one of the components influencing network effectiveness in the network context (Hwang and Moon, 2009), the emergence of this network leadership is a critical factor to consider. The various constructs differ in terms of several indicators that might influence the establishment and results from the network. In order to establish network configurations that fit well with the context and aims of the network, interesting avenues of research are the antecedents and outcomes of the different constructs. Several questions arise in this respect: When an organization has specified its outcomes, which of the constructs fits best? Or: Are different antecedents predictors of the different constructs? Answers to these type of questions not only brings the field its much needed clarity, but also helps practitioners in shaping their networks optimally. Therefore, this section discusses the antecedents and outcomes discussed in the literature of the broad network leadership literature.

Antecedents of network leadership

This section examines network leadership as based on its antecedents. Overall, it appears that all types of network leadership as discussed in the scientific literature to some extent acknowledge the importance of capable actors within the network. Relational characteristics are also to some extent discussed, and all types of network leadership include at least one network factor as antecedent.

Not all types of network leadership appear to be assessed as thoroughly as others, and distinctions are present on the basis of Yukl's (2012) taxonomy consisting of relation-, task-, change- and externally-oriented within the factors.

Outcomes of network leadership

First, performance related outcomes are abundantly present in the literature. Though, in some types of network leadership performance-outcomes are not discussed. Again, more research has been conducted on certain types of network leadership. Differences can moreover be

made on the basis of the type of outcome, for example hard (e.g., profit) or soft (e.g., interrelational). Not all types of network leadership seem to all of the broad array of goals that organizations can set.

Discussion

The above literature review provided a first explicit in-depth analysis of the various network leadership types. The above analysis highlights that, among others, differences in context, nature and level exist between the different types of network leadership. It was revealed that some forms of network leadership exhibit a better fit with certain contexts or specific desired outcomes. With that, certain antecedents seem to prescribe the origin of the different types of network leadership. Similar results appear outcome-wise: varied factors seem to stem from the different roles that can be assigned to the network leader. For both academia and practice it is therefore hugely important to clearly define at first-hand what the specific ambitions and goals are that should be met by means of the network and consequently the network leadership role. Scientific research should by no means put all network leadership on a par and draw conclusions as network leadership itself appears to be a pluriform concept.

When taking the analysis to the broad network leadership level, and despite the differences in the incongruent field, most scholars seem to agree on four overall characteristics of why network approaches to leadership are highly relevant. Carter et al. (2015) in this respect provided an initial classification of network approaches to leadership in which the four characteristics are outlined. First, leadership is argued to be relational. Hollander and Julian pioneered in adopting a relational view by acknowledging leadership as a relational process and addressing problems of neglecting "the *process* of leadership" (Hollander and Julian, 1969, p. 389). The progression towards relation-centric views in the leadership literature shows an increasing focus on sharing the leadership equation. Second, leadership and how it is perceived is largely inseparable from the situation in which it occurs

(Hollenbeck et al., 2014). Therefore, leadership is situated in its context (Carter et al., 2015). Third, leadership is patterned and uniquely developed between different dyads due to experiences, processes and context (Carter et al., 2015; DeRue, 2011; Lord et al., 2001). Lastly, leadership can be both formal and informal. As argued above, leadership can be present in one designated leader, but it can also be collectively constructed in an informal manner (e.g., Follet, 1925). Concluding, and with that again emphasizing the importance of this research, network leadership comprises an important factor to be taken into account.

The biggest strength of this research is the fact that an explicit and thorough grounded literature review method (Wolfswinkel et al., 2013) was adopted aimed to ensure the inclusion of only relevant literature and types of network leadership. Besides, this study provided the first comprehensive review of the various network leadership forms and with that filled several research gaps and answered research calls. However, the adopted methodology in this research may have been subject to some limitations. First, due to only adopting general databases some publications may have been missed. Though, the overall procedure partly offset this risk. Second, the concepts in this research are not tested by empirical analyses within this research. The method of inductive analysis aims, as noted in the methodology section, at theory building rather than theory testing. Validation and perhaps further elaboration is therefore needed by future research.

Theoretical implications

The above outlined results gave rise to the following theoretical contributions. First, this study adds to the network leadership literature in general by providing a comprehensive literature review of network leadership. Only scant research includes more than one of the various network leadership types, thereby often falsely adopting the terms conversely. In contrast to prior research, this study provided thorough examination of the various types of network leadership and highlighted their individual characteristics. Second and concluding from the

above quoted analysis, this study pointed to the importance of recognizing the differences between the various constructs. The results with this build on the work of Carter et al. (2015). Third, this study aided in providing structure and clarification within the field. Fourth, the discussion of both the antecedents and outcomes of network leadership filled a research gap and answered calls from the field.

Practical implications

During the process of writing this paper, the researchers conducted several conversations with network practitioners in order to add a dimension that provides a practical view. Appendix 1 provides a short overview of the methodology adopted and practitioners spoken. All in all, three general conclusions came forward, which are shortly discussed below. First, the context in which the network is present highly influences the type of leadership that is found applicable. For example, the amount of power felt by both the leaders and assigned to by the other network actors appeared to be dependent upon – among others – the facts whether the network was mandatory or voluntarily constructed; whether the network activities represented primary or secondary activities for the organizations in the network on their own; and whether the leader was a formal leader or granted leader. Second, it came into view that the perceptions on leadership within a single network greatly differ due to the personal visions of the practitioners. This underlines the importance of context in network leadership (Carter et al., 2015). Third, the conversations made clear that many things are implicitly present within networks – both the current way of working as well as the factors that led to a certain configuration – and that networks always keep evolving.

In relation to the above, the research has particularly been found applicable to start the conversation with practitioners on the subject. It led to awareness about the network leadership role as adopted by the practitioners. Therefore, this study provides practical tools that aid practitioners in framing their thoughts and with that gaining deeper understanding of

the network and especially the network leadership role at hand. When such a deeper knowledge is gained and the network actors with that better understand the hows and whys of their particular network, the gained knowledge can also be applied to assess whether the current network leadership configuration is found effective or needs to be adapted. Then again, this research can aid in providing insights about the necessities for a specific goal.

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Appendix 1: Short overview of the conversations held

Design of the conversations

Several conversations with network practitioners were conducted in order to offer practical insights in the applicability and practitioners' need for scientific knowledge surrounding the network leadership topic. Therefore, it should be noted that those conversations were by no means an attempt to validate this research. Instead, semi-structured conversations took place with use of the results of this study. First, the practitioners were asked to introduce themselves (i.e., name, function, job tenure etc.) and the network (when founded, founded by who, with which ambition or goals in mind etc.). Then, the antecedent and outcome variables were presented to the practitioners, after which a discussion was held about the role of the network leader in the network. In this, particular questions were probed about the **why**, **how**, and **effects** of the leadership role at hand.

Participants

The conversations were held with six practitioners out of two different networks. Table 1 below provides an overview of the participants spoken and the networks they are in.

Table 1: Overview of networks and participants

_		Network 1	Network 2
Characteristics network	General	Network of municipalities in the Southern Netherlands.	Eastern division of a Dutch network comprising of schools and organizations around student- centered goals.
	Sector	Public sector	Public-private sector
Participants	Number	3	3
	Function	3 network leaders.	1 network leader, 2 network participants (one from a school and from an organization).
	Job tenure	Ranging from 1 to 3 years (with the latter being the full network's existence), with an average of 2.3.	Ranging from 1 to 14 years (with the latter being the full network's existence), with an average of 7.7 years.
	Sex	2 Men, 1 woman	3 Women
	Age	Ranging from 42 to 62 years, with an average of 52.	Ranging from 29 to 51 years, with an average of 41.3 years.

Procedures

The conversations were held individually and face-to-face at the location of the network participants, except from one conversation that was conducted via the telephone. Afterwards the recorded conversations were transcribed and the results discussed by the researchers. This led to the three lessons learned as discussed in the practical implications.