

## Leadership and Social Networks

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## Leadership and Social Networks

Leadership is one of the most examined concepts in the social science literature. While the study of social networks is also gaining interest in recent years, the intersection between leadership and social networks has received limited attention. This entry will provide an overview of the work that has been done to date in linking leadership and social networks.

The key notion underlying most leadership research is that the behaviors or attributes of a leader, typically a person in a formal position, matter for a variety of outcomes. While offering valuable insights in the role of an individual leader in enhancing outcomes, this dominant view of leadership behavior and attributes underestimates the impact of social network position and ties.

Scholars that examine leadership are increasingly recognizing the importance of social processes and relational linkages involved in leading. Leadership in its broadest sense has often been conceptualized as a process of influence toward an outcome. Social relationships therefore may provide leaders with the necessary infrastructure to exert social influence in achieving individual and organizational goals. A social network perspective brings to the fore the dependencies of actors within a social system, shifting the perspective away from individual attributes toward a focus on relational linkages, thereby placing leadership directly in the role of a social undertaking. Leadership from a network perspective emphasizes that the organizational interdependence of action that is reflected by a network of ties ultimately moderates, influences, and even determines the direction, speed, and depth of a planned activity. Research on the intersection of social networks and leadership supplements our knowledge of leadership as a complex and dynamic social process.

### Leadership, Social Capital, and Ties

Often organizational resources such as information, expertise, and innovation that reside in a system are a result of building human capital, which comprises the knowledge, skills, and abilities of individual actors in an organization. In addition to the resources that stem from human capital, organizational capacities can also be derived from the social relationships among organizational members. Social capital is concerned with the resources that exist in relations between individuals, often referred to as 'ties'. In essence, social capital theorists argue that it is the ties between individuals that create a social network structure, which in turn supports or constrains the distribution of resources. Connections and access, or a lack thereof, to available resources situates leaders in structural positions that enable more or less power, influence, and access to resources than other positions in the social network.

The transfer of resources in any system may be influenced by the quality of ties between actors. The content of the network creates a structure that defines the purpose of the network and in turn how well the resources flow between actors. For example, the social structure of a work-related knowledge network may differ significantly from the structure of a more normative social network, such as friendship. In both examples resources flow through ties (the first being knowledge, the second friendship), but the overall structure of the network may look quite different. A number of studies have indicated that leaders who have strong ties across an entire organization, often measured by quantity (how frequently does the interaction occur) or quality (how 'strong' is the interaction), have been found to be able to better transfer tacit, non-routine, or complex knowledge, facilitate joint problem solving, and stimulate the development of coordinated and innovative solutions. In contrast, through weak ties a leader may provide for brokering opportunities between actors and access to non-redundant, novel information.

Bonding and bridging are two specific types of ties that provide a leader with access to useful resources. Bonding ties generally refer to those ties between actors within a network that directly connect actors and as such form close-knit groups. Generally bonding ties occur within an actor's own network and as such tend to be stronger and more frequent. Bridging ties (or brokerage ties)

are those ties between actors, groups, organizations that are not well connected. Bridging ties span ‘structural holes’, or those areas of a network that are not connected, and as such provide access to novel information. Both types of ties, bonding for the transfer of complex information and bridging for novel information, have been shown to facilitate different types of action in meeting outcomes. Balancing the need for dense cohesive relations as in bonding ties with opportunities to connect diverse others as in bridging is an ongoing tension in the work of leadership.

### Leadership Perception and Position

Leaders’ perceptions and schemas of social networks are important as those cognitions affect leaders’ behavior and ultimately organizational outcomes. A leader’s cognitive schema of the importance of friendship and advice is often congruent with the ties they form within a network. For example, if a leader has a cognitive scheme of the importance of collaborative relations, it is likely that his/her social network will include collaborative relations. Leaders with greater social acuity have been associated with a stronger base of power, awareness and access to unique information, the ability to create and maintain strategic relations, manage perceptions of others, the ability to link disconnected others, and the identification of important strategic collaborations. Therefore, leaders with greater degrees of social acuity may have access to resources as well as the ability to marshal these resources in executing a course of action.

Biases can also form in leaders’ perceptions of the social field. Research suggests that leaders tend to see their own relationships as reciprocated as well as transitive. This means that relationships are interpreted to be mutual and friends of friends are considered to be friends as well. This suggests that leaders tend to see themselves as more popular than they actually are and as such, may limit their creation of new ties. In a related bias, leaders may perceive other central actors as more popular than they are in reality. This results in a perceptual oversimplification of the social network, which may inhibit successful action.

In addition to the acuity of network perceptions and its influence on network formation, leadership may also influence, and be influenced by, the social relationships in the larger system. The ability to accurately perceive, manage and strategically leverage not only one’s own relations, but also those across an entire social network appears central to the work of leadership.

In moving beyond leaders’ perceptions to the social networks, research suggests that a leader’s position within a social network has important consequences, as network position may provide better access and monitoring of resources. Not only do networks serve leaders in moving resources toward them, but also out to others. Network scholars have suggested the network of ties in which a leader is situated can provide, filter, and distort information coming in, but simultaneously the network also directs and concentrates information about the leader out to the system. Therefore, the social network in which a leader is embedded both diffuses resources in and disperses information out about that leader.

A key determinant of the structural advantage of a leader’s position in a social system is individual centrality in the network. Centrality is defined in terms of the relative number of connections that an individual has to others in the network. The more connections, or ties, a leader has to other actors in the network, the more central the leader is positioned in the network. Central actors play a major role in their social network, whereas peripheral actors play a much less dominant role. Highly central leaders have increased influence over the network due to access to multiple resources and the potential to create new linkages that may enhance social capital. Having more relationships increases a leader’s opportunities to access novel resources as well as amass those resources. Those leaders who are less central may receive fewer resources and do not have opportunities to benefit from the resources held by those in more central positions. Moreover, less

central leaders usually receive only the resources deemed necessary by those in centralized positions, thus restricting their perspective of the overall organization.

By occupying a more central position, a leader is more often sought for resources (friendship, expertise, etc.), and has easier access to information, knowledge, or support from the social network. This access to diverse resources provides a central leader with the possibility to guide, control, and even broker the flow of information and resources within a network. A leader may use the power and status attained through occupying a central position to direct certain knowledge and information as well as potentially 'block' the flow of resources.

Different types of centrality can be inferred from a leader's position relative to others in the social network. Leaders' network centrality can be calculated based on the number of employees who seek out the leader for a specific relationship, for instance, advice. The more 'popular' the leader is, the higher will be his/her in-degree centrality. A second type of centrality can be assessed by determining how 'close' a leader is to all organizational members. Closeness centrality indicates how 'close' a leader is to other network actors or how quickly a leader can reach others through the network. Closeness centrality can thus be interpreted as a measure of "reachability". The higher a leader's closeness centrality, the quicker information that is dispensed by the leader will reach all team members. In contrast to degree centrality, closeness centrality includes leaders' indirect relationships to all team members. Recent studies suggest that leaders with more direct and indirect ties in a network are in a better position to move resources, increase performance, and improve reputation and effectiveness.

Another often used type of centrality in leadership studies is betweenness centrality. Betweenness centrality refers to a leader's potential to 'broker' his/her relationships, thereby in effect controlling the flow of resources between two actors. Betweenness is assessed as the number of times an actor is positioned 'in between' two people in the network that are themselves disconnected. Actors with high betweenness are often perceived by others as leaders as they bridge otherwise disconnected parts of the networks. Leaders with high betweenness may benefit an organization by connecting unconnected groups, or cliques, but also have a very strategic, influential, and potentially disruptive position as they can 'choose' whether or not to diffuse resources such as information and knowledge between disconnected (groups of) individuals. High betweenness has also been conceptualized as representing a position of 'power' given the leader's ability to control the flow and content of resources. However, this network position of 'power' may potentially negatively affect the distribution of information, knowledge, and innovation.

Network studies have demonstrated that leaders' network centrality is related to organizational outcomes. For example, a leader's centrality in external and internal friendship networks has been associated with objective measures of group performance, effectiveness, and reputation. Recent research explored the role of a leader's social network position in relation to transformational leadership behavior and innovative climates in organizations. Findings indicated that the more often leaders were sought for advice the more the organization was characterized by an innovative climate. Related work also suggests that leadership is often distributed across multiple actors and as such informal leaders play important and expanding roles in meeting outcomes. The balance of this early work suggests that leadership that is distributed across formal and informal leaders may enhance the flow of information, knowledge, and expertise and as such facilitates organizational processes and outcomes.

### The Cost of Relationships

A leader's ability to access and leverage social networks has been associated with a variety of positive outcomes including access to information, power, and knowledge. Although the relationships between social networks and leadership are generally found to be positive, research has also

identified negative associations as social ties may constrain leaders within maladaptive situations or support undesirable behavior. Maintaining social bonds, though providing a leader access to resources, may contain obligations that in turn hinder access to additional resources. Therefore, while the ties within a leader's network may facilitate access to resources, those same ties may also constrain leaders from making additional ties or changing the nature of the existing relationship.

Occupying a central position offers potential in the form of status, power, and influence, but may also burden the leader with having to maintain and/or broker too many relationships. In general, having to maintain too many ties may be disadvantageous, as these relationships may drain a leader's own resources. This may especially be the case in friendship relationships that require more effort to maintain, and may distract from work-related matters. It may be difficult for leaders to burden, disadvantage, or reprimand actors with whom they are closely connected, or even make difficult decisions that might have negative consequences for that actor. Moreover, relationship patterns may also constrain leadership behavior to a distinct leadership role as defined by those relationships. Along the same lines, it might be very hard for a leader, who is embedded in a network of many friendship relationships, to oppose general opinions and interpretations of core organizational values and resist the social pressure resulting from these relationships.

#### Promising Directions for Leadership and Social Networks

A promising area that has not yet been extensively explored in relation to social networks and leadership is how organizations and formal leaders could capitalize upon informal leadership by strategically involving opinion leaders. Opinion leaders, that is, individuals who are perceived as informal leaders because of their social network position, can be used to specifically target and diffuse opinions as well as accelerate the diffusion of innovations. Early results in this leadership and social network area are promising, but additional research is required.

While the contrast between connectivity and cleavage, bonding and bridging, or closure and brokerage, permeates this entry and in fact, the leadership and social network arena in general, research that connects both viewpoints in relation to leadership is scarce. Many studies often focus on a single viewpoint, thereby limiting our knowledge on how leadership and social networks interact in relation to both bonding *and* bridging relationships. Although there has been some promising work suggesting how a leader may balance the potential of bonding and bridging more closely, examining the balance of the two is an important open area for examination.

The number of leadership network case studies is growing across multiple disciplines. Yet there is limited comparative and longitudinal scholarship examining leadership position, network structure and outcomes. Furthermore, given the increased globalization of the marketplace, studies that explore cross cultural differences in leadership and network position have the potential to provide additional understanding to how leadership is enacted in different settings.

Combining our understanding of leadership and network theory has the potential to supplement, not supplant, the existing work in leadership, which to date has been focused primarily on the individual attributes of leaders. Future work will push the discussion away from well defined and fortified positions in terms of attribute vs. relation and will explore leadership approaches that integrate cognition, personality, and relational linkages. There is a small but growing research line that attempts to do just that in terms of leadership development. This work is taking the best of leadership training and combining it with social network theory in an effort to intentionally develop leaders who are better able to examine, develop, and leverage social networks in support of larger outcomes.

See Also: Business Networks; Innovation Networks; Organizational Networks; Social Influence; Tie Strength

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