

Social Networks Within Sales Organizations: Their Development and Importance for Salesperson Performance

Although the study of salesperson performance traditionally has focused on salespeople's activities and relationships with customers, scholars recently have proposed that salespeople's intraorganizational relationships and activities also play a vital role in driving sales performance. Using data from 286 salespeople in a unique social network analysis, the authors explore the effects of salespeople's intraorganizational relationships on objective salesperson performance as well as the role of political skill in developing intraorganizational relationships. The results indicate that two types of social network characteristics (i.e., relational centrality and positional centrality) contribute substantially to salesperson performance. Moreover, salespeople's political skill is shown to be an antecedent to relational centrality but, surprisingly, not positional centrality. This finding demonstrates that researchers should not assume that all centralities represent similar underlying network characteristics. In light of these results, the authors discuss several implications for both managers and researchers as well as directions for further research.

Keywords: social network development, network centralities, sales performance, political skill, intraorganizational relationships

For decades, marketing researchers have attempted to understand the determinants of salesperson performance.

In addition to considering various salesperson characteristics, this effort has focused largely on customer-directed behaviors (e.g., Brown and Peterson 1994; Szymanski 1988). Overall, this research activity has been somewhat limited in terms of scholars' ability to explain variance in sales performance (Plouffe and Barclay 2007). In response, researchers have acknowledged the idea that salesperson performance (and that of frontline employees, more generally) may also be largely determined by the actions salespeople take to maneuver and influence those within their own organizations (e.g., Gonzalez, Claro, and Palmatier 2014; Ustuner and Godes 2006).

Not surprisingly, researchers in marketing have begun thinking about these intrafirm relationships using theories of social exchange, social capital, and social networks (e.g., Ustuner and Iacobucci 2012). Initial empirical ventures into

this area have discussed the development of new measures (e.g., Plouffe and Grégoire 2011) and the application of influence behaviors to an internal audience (e.g., Plouffe and Barclay 2007). Of particular interest is an increasing body of work that highlights the importance of social networks in quantifying internal dynamics for sales organizations (e.g., Ahearne et al. 2012; Gonzalez et al. 2014; Ustuner and Iacobucci 2012).

A social network is a complex pattern of interpersonal social ties whereby the presence of a tie between parties serves as a conduit for information and resource flow (Balkundi and Harrison 2006; Wasserman and Faust 1994). According to Lin (1999), there are four ways that investments into these types of social ties function as resources that can produce performance benefits for salespeople. First, the information flowing through social ties can provide what Burt (2010) terms a "vision advantage," which enables people to learn of nonobvious opportunities. Second, social ties exert influence on decision makers who shape the opportunities and constraints present in the network. For example, certain network connections may offer a salesperson the ability to provide a customer with terms, prices, or information that would otherwise be unavailable. Third, social ties can generate "social credentials" that function as assurance that a person has resources beyond his or her own personal resources to use for the benefit of others, including customers. Fourth, social ties reinforce identity and recognition, which furthers a person's perception that (s)he has access to, and is deserving of, important performance-enhancing resources.

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The salesperson's ability to create value by leveraging these internal resources and harnessing firm capabilities to address customer problems and needs can be an important differentiator in a crowded marketplace. Moreover, increasing complexities in the selling environment (e.g., longer sales cycles, technology changes, shifting customer demands; see Jones et al. 2005; Schmitz and Ganesan 2014) underscore the importance of better understanding internal influences on sales organization effectiveness. As buyers become larger, more sophisticated, and more powerful amid a large array of competitive offerings, the risk of commoditization has become increasingly relevant to the seller, giving rise to a more integrated sales approach that requires effort and cooperation from various members within an organization (Hughes, Le Bon, and Malshe 2012; Plouffe and Barclay 2007). This demands a look "inward" at salesperson connectivity to add to the vast research focusing on the external relationship between salesperson and customer.

However, few studies provide normative direction to marketing or sales managers on acquiring and leveraging advantageous network positions. Our understanding of the complex interplay between salespeople's specific interpersonal skills, attained social positions within a firm's network, and actual sales performance is limited, and insights for sales managers and marketing scholars remain scarce (Ryals and Humphries 2007). Given the link between access to resources and job performance (e.g., Seibert, Kraimer, and Liden 2001), social network perspectives provide potent insights into internal organizational dynamics and their impact on individual-level outcomes (e.g., Ahearne et al. 2012; Gonzalez et al. 2014).

We therefore aim to advance the field's understanding of internal drivers of sales performance—specifically, those that relate to intrafirm social networks—and, in the process, generate actionable implications for practitioners and suggest new avenues of exploration for researchers. To that end, we turn to our colleagues "down the hall" in management, who have been dealing with issues of intrafirm relationships for a long time, to provide useful insights that shed light on variables affecting relationship development in organizations. Of specific interest to our research is the concept of political skill (Ferris et al. 2007) because it has strong ties to interpersonal network development, in terms of social capital theory, and a decades-long history of effectively predicting important work outcomes such as job performance (see Ferris et al. 2012). However, this construct has yet to be examined in the marketing and/or sales literature.

Political skill is a multidimensional construct (i.e., composed of interpersonal influence, social astuteness, networking ability, and apparent sincerity; Ferris et al. 2007), whose dimensions are distinct yet moderately related. Political skill ultimately refers to a person's ability to understand the social dynamics of an organizational setting and apply that knowledge to influence others to enhance personal or organizational goals (Ferris, Davidson, and Perrewé 2005). Recent empirical work has demonstrated its consistently strong relationships with job performance (e.g., Munyon et al. 2015). This effect exists, at least in part, because of political skill's comprehensive nature and its expected relationship with internal social networks (Wei, Chiang, and Wu 2012); politically skilled

people are *expected* to hold desirable social network positions (Munyon et al. 2015). Despite this intuitive link, the role of network positions as the mechanism by which political skill affects job performance remains largely unstudied. Examining internal dynamics as a function of political skill promises to yield significant and unique insights into the relationship between intrafirm actions and salesperson performance.

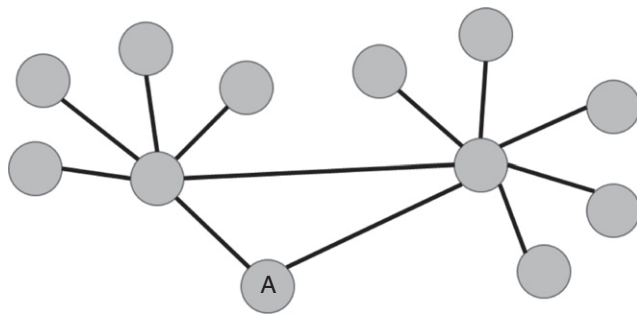
The purpose of the present study, then, is twofold. First, the fundamental premise of the article is that internal social network structures, and the implied social capital that occupying advantageous network positions provides, affect not only internal outcomes such as performance evaluations and job satisfaction for salespeople but also salespeople's ability to generate actual sales. We suggest two ways in which the social structure can enhance sales performance: through relational centrality or positional centrality. We expect both of these desirable network positions (described in detail subsequently), along with their unique benefits, to enhance salesperson performance. Although social network analysis has spurred a great deal of interest in the marketing and sales literature, to date relatively few empirical marketing studies have used network analysis (e.g., Ahearne et al. 2012; Gonzalez et al. 2014; Ustuner and Iacobucci 2012). Some of these studies have examined either positional or relational network characteristics, but rarely do they assess both. However, we expect each position to provide the salesperson with different types of valuable resources (reputational vs. informational resources; for a visual depiction, see Figure 1), each with a distinct way of influencing salesperson performance.

Second, the present study adds to this emerging body of work by exploring an important antecedent of network characteristics, a noted research gap in the sales and marketing literature (Flaherty et al. 2012). Specifically, we test for the effects of political skill, working through our two network attributes, on objective salesperson performance. In so doing, we deepen our contribution to this emerging stream of research by introducing political skill as a potential antecedent to these two important network positions that subsequently affect salesperson performance. This is perhaps particularly noteworthy given that political skill, along with the dimensions that compose it, represents a managerially actionable variable; understanding what political skill can and cannot enhance within the intraorganizational network will help define the specific skills managers can emphasize to help individual salespeople acquire desirable network positions.

Furthermore, although a litany of salesperson traits and characteristics could be reasoned to potentially affect social network development, Ferris et al. (2007) argue that political skill plays a key mediating role between individual characteristics and work outcomes. Indeed, recent research has demonstrated empirically that political skill mediates the relationship between personality traits (e.g., extroversion, active influence orientation) and important work outcomes (Ferris et al. 2007; Liu et al. 2007). In other words, political skill seems to be the variable through which these various traits take effect, making it an ideal variable for producing a model that is both complete and parsimonious.

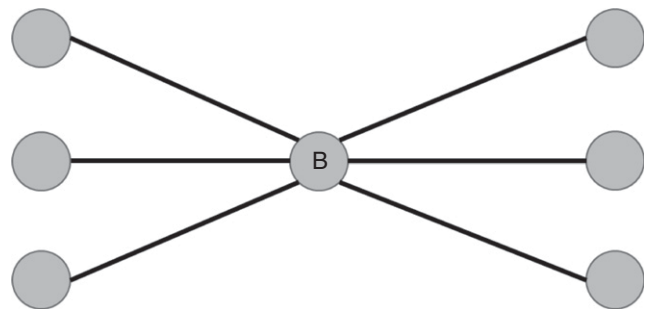
There are several important questions to be addressed through this process: Are both network attributes (i.e., relational

FIGURE 1
Contrasting Relational and Positional Network Centralities



Relational Centrality

- Salesperson A is connected to other individuals who are themselves well connected.
- His/her connections are influentially connected.
- He/she possesses “*reputational resources*” derived from access to powerful others.



Positional Centrality

- Salesperson B is connected to other individuals who are not otherwise connected.
- His/her connections are not connected, except through him/her.
- He/she possesses “*informational resources*” derived from access to unique information.

centrality and positional centrality) important contributors to sales performance? Is political skill equally useful in contributing to each network position? Is the effect of political skill completely or partially mediated by these network variables? How much of the variance in sales performance does each centrality explain? Finally, will the inclusion of intrafirm network characteristics help us explain additional variance in salesperson performance beyond the 10%–20% range historically found in customer-directed sales research (Plouffe and Barclay 2007)?

Using a unique data set that combines survey data, network scores, and objective sales performance in a social network analysis, our results show that both network characteristics significantly contribute to salesperson performance and that modeling these variables enables us to explain 26.6% of the variance in salespeople’s objective sales performance—exceeding the historical range detailed by Plouffe and Barclay (2007). This finding provides strong supporting evidence for the suggestion that intraorganizational factors can contribute greatly to sales performance (Ryals and Humphries 2007). Our results also show that political skill positively influences salespeople’s development of relational centrality, and because it takes time to develop this social network position, this relationship is strengthened by salespeople’s tenure in the organization. We also find that the interaction between political skill and organizational tenure has an impact on sales performance beyond that of the network characteristics.

Surprisingly, however, political skill does not affect salespeople’s development of positional centrality, and tenure with the organization does not serve to activate this relationship. In a post hoc analysis probing this unexpected outcome, we find that positional centrality is affected by salespeople’s personality (i.e., extroversion), which we initially included as a control variable. However, the impact of extroversion on positional centrality, while significant, is

small in magnitude, indicating that more work is needed to uncover the antecedents of positional centrality. Importantly, our findings regarding positional centrality emphasize the need for social network studies to examine multiple types of network attributes, as their antecedents and consequences should not be assumed to be equivalent. Altogether, these findings have important managerial implications, which we explicate as the article develops.

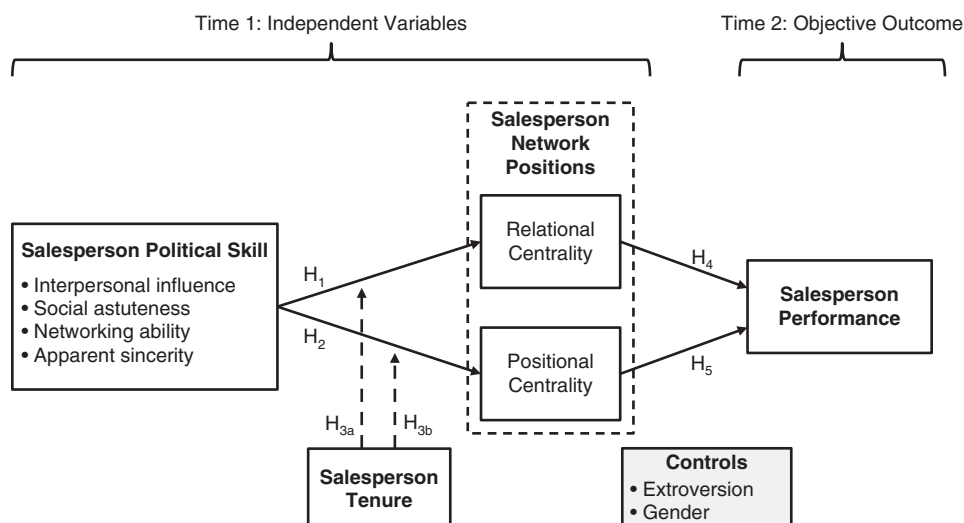
In the following sections, we review the research on political skill and relational and positional network attributes through the lens of structuralist social capital theory. Next, we discuss the conceptual model (see Figure 2), present the theoretical underpinnings, and develop the hypotheses. We then test the model and discuss the results. Finally, we outline implications for theory and practice and offer suggestions for further research.

Theoretical Foundations and Hypothesis Development

Social Capital and Network Attributes

Social capital theory (Lin 1986, 1999) stems from classical capital theory (Lin 1999), in which capital is the investment of resources into a marketplace with expected returns. The focus of social capital is on social resources and investment into the social marketplace and the returns generated from such investment in terms of helping people fulfill instrumental needs. The theory connects macro-level (structural) characteristics of the social fabric with micro-level (individual) actions, capturing the complex interplay between the structural and individual levels of social interactions. Social capital theory asserts that the social structure generates value through access to resources such as knowledge and authority, which are embedded within the web of social ties. These

FIGURE 2
Conceptual Model



resources can be transmitted to a person who, in turn, can apply the resources to a complex problem (Burt 1997). The structure of the network determines the opportunities and constraints in accessing the embedded resources (e.g., Hughes, Le Bon, and Rapp 2013). These opportunities and constraints drive individual action (Lin 1999).

Measuring social capital requires considering three elements (Lin 1999): (1) the number of people willing or obligated to help, (2) the strength of those relationships, and (3) the resources that the obligated people possess. From these elements, social capital research can be grouped into two general approaches: the social resource perspective, which is focused on the resources possessed by contacts within the network, and the structuralist perspective, which accounts for the number of ties and strength of relationships.

Scholars working from the social resource perspective of social capital are focused on analyzing the resources embedded in a network through the measurement of individual characteristics of social contacts (e.g., income, reputation, education) and how they are mobilized in the network. In other words, they measure the quantity of resources possessed by obliged contacts—the third element of social capital (Lin 1999). Conversely, structuralist scholars focus on the pattern of social ties and the resulting network topography to assess opportunities and constraints. The fundamental premise of this perspective is that the structure provides competitive advantage to people who occupy strategic positions in the network. Therefore, structuralists address the first two elements of social capital: the number of people willing to help a person and the strength of the relationship with them (Lin 1999).

The structuralist and social resource perspectives are intuitively intertwined, and research within each perspective serves to inform and enhance the other. One of the advantages of the present work is the combination of both individual data (political skill, tenure, extroversion, and gender) with structural network data. However, our focus is not on

measuring individual social resources. Rather, we focus our examination on the impact of structural characteristics on performance, aligning ourselves with and contributing to the body of work employing the structuralist lens (e.g., Borgatti and Foster 2003; Brass and Halgin 2012; Brass and Krackhardt 1999; Burt 1992). In summary, social capital theory suggests two key propositions relevant to the present research: (1) access to internal resources increases the effectiveness of selling efforts (as “instrumental actions”; Lin 1999) and (2) social position determines the constraints on a salesperson’s access to resources. Therefore, individual social capital, the value of a person’s social ties, can be understood by examining the social network characteristics of people within the network (Burt 2000).

To examine these network structures, one or more appropriate centrality measures must be identified. This is not a simple process, as there are multiple centrality measures that may be of interest when examining network positions. For example, previous research has used degree, closeness, and betweenness centralities (Freeman 1977), as well as eigenvector and beta centralities (Bonacich 1972, 1987), each capturing a different characteristic of a given person’s network position. Degree centrality, the number of ties a person has, is arguably the most well-known centrality. However, some controversy remains regarding whether it provides sufficient information about a person’s position in relation to the entire network, particularly given that the structure of the network is not needed to calculate it (Borgatti 2015). Closeness centrality is the sum of the distances between a focal person and all other people in the network, and it measures the time it takes for information to flow to or from the focal person. Clearly, this metric is important in understanding information flow but does not tie directly to our focus on explaining variance in salesperson performance. Finally, beta centrality is, under most common conditions, equivalent to eigenvector centrality or degree centrality, making the measure potentially redundant.

The remaining centralities—relational centrality (operationalized as eigenvector centrality) and positional centrality (operationalized as betweenness centrality)—represent two of the most advantageous and, importantly, nonredundant strategic network positions uncovered by the extant network research. These centralities have been shown to correlate with power, status, reputation, control, and access to information (e.g., Bonacich 1972; Burt 1992; Freeman 1977). What remains underexplored are the drivers of these advantageous positions and the distinctness and magnitude of their impact on performance outcomes. Therefore, in assessing individual social capital, these two advantageous network positions bear examination.

Relational centrality is defined as organizational status that is derived from social ties to powerful others (Bonacich and Lloyd 2004); the more influential a salesperson's connections are within the network, the more influential that salesperson is. Status is an intangible resource with subjective value, suggesting that it is a complex social resource that is difficult to quantify (Binning and Huo 2012). However, a salesperson's network position serves as a signal of organizational status (Bonacich and Lloyd 2004), which has been linked to such benefits as "greater access to desirable things" (Henrich and Gil-White 2001, p. 166) and, importantly, career success (Seibert, Kraimer, and Liden 2001). A salesperson with high levels of relational centrality possesses reputational resources derived from his or her access to influential others as well as the ability to influence those influential others in the decision-making process and receive feedback from high-status others. Therefore, we expect relational centrality to facilitate the manifestation of three benefits of strategic network positions: social influence, social credentials, and the reinforcement of identity and entitlement to resources.

Whereas relational centrality is a measure of organizational status, positional centrality is a measure of access to information made available by social ties to unconnected others (Burt 2000). This definition suggests that salespeople with high positional centrality have control over information flow and access to *unique* resources and information. Access to unique information is particularly relevant in examining variance in salesperson performance. Although many salespeople have information regarding best practices, we propose that those with positional centrality possess informational resources derived from unique sources. These resources enable them to develop more novel strategies than their less connected peers on the basis of the unique combination of distinct information (Taylor and Greve 2006). We therefore expect positional centrality to facilitate the manifestation of the fourth benefit of strategic network positions: informational benefits. Understanding the impact of these distinct network-based endowments on salesperson performance extends traditional performance models beyond customer-directed behavior to include intrafirm behavior.

It also warrants mentioning that social networks are dynamic in that social relations continuously form and dissolve (Holme and Saramäki 2013). Social relations take time to initiate, cultivate, and maintain, particularly when examining the transfer of complex knowledge (Singh 2005). We therefore examine the interplay between time (in the form of

tenure at the organization) and the development of social networks, providing insight into the dynamic nature of social networks and their impact on performance. Finally, to ensure managerially actionable implications, we aim to uncover specific skills managers can emphasize to help people acquire and exploit these advantageous network positions. To that end, in the next section, we continue to extend the social capital-based view of salesperson performance by examining the role of political skill in securing advantageous network positions.

Social Capital: The Role of Political Skill

At its core, social capital theory focuses on people's ability to capture value from the social context within which they operate. The value-capture process shifts between the individual (micro) and the social structure (macro) levels, in which a given social structure represents opportunities and constraints, and a person chooses actions taken within the social structure on the basis of these opportunities and constraints. Capturing value in the social network requires investment of social resources (time and effort) to connect and maintain ties with social contacts. Although some people may seem to fall into advantageous positions by chance or by virtue of static personality traits (Brancaleone and Gountas 2007; Goldsmith, Clark, and Goldsmith 2006), we assert that, for most people, securing advantageous positions in social networks requires certain skills—specifically, political skills.

Organizations are, in essence, political entities (Mintzberg 1983), so it follows that political skills are critical to successfully navigate the social fabric of the organization. Political skill is a multidimensional construct (i.e., composed of interpersonal influence, social astuteness, networking ability, and apparent sincerity; Ferris et al. 2007) that describes a person's ability to understand others in an organizational setting and apply that knowledge to influence others in pursuit of personal or organizational goals (Ferris, Davidson, and Perrewé 2005).

The skills captured by the political skill inventory explicate how people read, influence, and alter their social environment (Ferris et al. 2007). For example, people with higher levels of social astuteness are able to better read and translate the interactions with and between others, suggesting that they perceive the social network more accurately. The ability to read informal networks more accurately has been linked with increased perceived power in an organization (Brass and Krackhardt 1999). Similarly, the interpersonal influence dimension is a reflection of a person's adaptability in social situations to further one's own goals. Networking ability suggests that people are adept at identifying important, resource-laden contacts in the organization and making connections with them. They know how to make alliances, build friendships, and position themselves to take advantage of the resources their contacts control (Ferris et al. 2007). Finally, apparent sincerity is a measure of the perception of the person by others, which facilitates the transfer of resources because people with high levels of apparent sincerity are perceived as genuine and authentic, making them desirable to others as social ties.

In summary, political skill's four dimensions read like a list of core competencies for successful salespeople in virtually any industry. However, although they seem obvious as important skills for salespeople to possess in terms of customer interactions and relationships, their importance in terms of (1) the development of intraorganizational network positions and (2) the resulting impact on objective performance is far less obvious.

It should be noted that Plouffe and Barclay (2007) and Plouffe and Grégoire (2011) investigate a similar, but narrower, construct they call "intraorganizational employee navigation" (IEN) in examining salesperson effectiveness. However, their relatively new, and therefore less-tested, construct is not as comprehensive as political skill. Indeed, Plouffe and Grégoire even include two of the dimensions of political skill (i.e., social astuteness and networking ability) but omit two dimensions (apparent sincerity and interpersonal influence) in their scale-development study. They attempt to demonstrate that their IEN scale would show some correlation with the political skill dimensions but that the constructs would be able to demonstrate their discriminant validity. They conclude that an IEN correlation of .57 with networking ability and .34 with social astuteness is sufficient evidence to support this point. So, although we see value in future exploration of the IEN construct, political skill is our focal antecedent because it is better established, more comprehensive, and thoroughly vetted across multiple disciplines. Furthermore, its function as a mediator of the relationship between various individual variables and resulting performance benefits makes it an optimal variable to include to achieve the joint goals of completeness and parsimony (Ferris et al. 2007; Liu et al. 2007). As a result, we view political skill as a productive addition to the sales and marketing literature, especially in light of the changing and critical role of the salesperson as knowledge broker (Verbeke et al. 2011) and internal resource consolidator, as referenced previously.

Next, we use social capital theory to guide the development of a series of hypotheses. We then test the hypotheses and present the results. Finally, we discuss the implications for both scholars and practitioners.

Hypothesis Development

Political skill and relational network centrality. Politically skilled salespeople identify and leverage power, and they do so through their astuteness in adjusting their behavior to the perceived demands of different people and varied situations. Their behavior is perceived as authentic, genuine, and sincere and thus inspires trust and confidence from others in their organization. Furthermore, because of their own sense of efficacy, politically skilled salespeople reflect a calm sense of self-confidence that attracts others (e.g., Ferris et al. 2007, 2012).

Relational centrality is status that is derived from possessing social ties to powerful or influential others, whereby salespeople gain greater status and reputation through the status and influence of their connections. Politically skilled salespeople are particularly adept at identifying influential others and developing connections, relationships, and alliances with those influential others through their social

perceptiveness, adaptability, and networking ability, in addition to their sincere and genuine interpersonal style. In particular, social astuteness should lead salespeople to identify influential others early on and use their political skills to cultivate relationships with them. Thus, politically skilled salespeople should be effective at securing positions of relational centrality.

H₁: Political skill has a direct and positive impact on relational centrality.

Political skill and positional network centrality. Furthermore, because politically skilled salespeople are socially astute and recognize opportunity, they also recognize structural holes in an organization's informal network (Burt 2001). Structural holes separate people and groups from one another in an organizational network (Burt 2000). Unconnected groups and people are potential sources of unique information. These politically skilled salespeople have the capacity to effectively bridge existing structural holes through interpersonal influence to translate opportunity into effectiveness through opportunity capitalization (e.g., McAllister et al. 2015). Politically skilled salespeople are effective at relationship development not only in terms of forming relationships between themselves and others but also in terms of developing, fostering, and brokering relationships among disconnected others (e.g., Ferris et al. 2012). Recognizing the potential in filling a structural hole, politically skilled salespeople are expected to serve as a bridge more than their less politically skilled peers. Therefore, politically skilled salespeople should be more adept at securing positional centrality by deliberately bridging the links between unconnected others.

H₂: Political skill has a direct and positive impact on positional centrality.

Political skill × organizational tenure interaction. Though often included in organizational studies as a control, organizational tenure is known to influence performance and other organizational outcomes, such as core-task behavior; citizenship behaviors; counterproductive behaviors; and, importantly, in-role performance (e.g., Ng and Feldman 2010). Although we control for other potential outcomes of tenure on performance, we deliberately examine the interaction between political skill and tenure, proposing that one of the mechanisms by which tenure affects in-role performance is that longer tenure, combined with political skill, facilitates the development of network ties and, subsequently, advantageous network positions. Therefore, rather than treating tenure as a control variable, we examine it as the dynamic component in the acquisition of advantageous social network positions.

It takes time to develop social ties, even for politically skilled salespeople (e.g., Brass and Krackhardt 2012). Although we expect political skill to facilitate the development of relational and positional network centralities, we do not expect this relationship to appear overnight. A politically skilled salesperson still needs time to initiate contact with others and develop these newfound relationships into something of value. In short, relationship development—and therefore, social network development—takes time (e.g., Dwyer, Schurr, and Oh 1987; Möller and Halinen 1999). As a

result, we expect that, after controlling for the effects of tenure on the network positions and performance variables, a salesperson's tenure within an organization will strengthen the relationship between political skill and relational and positional network centrality. Therefore,

H_{3a}: There is a positive and significant interaction between political skill and organizational tenure on relational centrality, such that as organizational tenure increases, the effect of political skill on relational centrality increases.

H_{3b}: There is a positive and significant interaction between organizational tenure and political skill on positional centrality, such that as organizational tenure increases, the effect of political skill on positional centrality increases.

Relational and positional centrality and sales performance. Salespeople who have very active and far-reaching networks wield significant influence (Brass and Krackhardt 1999). The informal social network therefore represents a source of power that is tied to either reputational resources (in the case of relational centrality) or access to informational resources (in the case of positional centrality; Brass and Krackhardt 1999). Relational centrality, as a measure of influence through the status of a salesperson's social ties, is a measure of reputation in the social network (Bonacich and Lloyd 2004). The following excerpt from Cialdini (1989, p. 45) illustrates the impact of connections to well-connected or powerful others:

At the height of his wealth and success, the financier Baron de Rothschild was petitioned for a loan by an acquaintance. Reputedly, the great man replied, I won't give you one myself; but I will walk arm-in-arm with you across the floor of the Stock Exchange, and you soon shall have willing lenders to spare.

Connections to important others offer dual benefits as both a signal of influence to others and an indication of personal access to resources. Mehra et al. (2006) assert that connections are an excellent indicator of access to information. French and Raven (1959) note that expertise is a source of power because those who possess expertise are often sought out by others (a phenomenon known as "preferential attachment"). Thus, we can assume that highly connected people in an organizational network (1) have some measure of expertise beyond the average salesperson and (2) are relatively easily identifiable in sales organizations (in which performance and hierarchy are communicated regularly, such as when celebrating breaking personal records, monthly sales e-mails, etc.). Individual salespeople often require expertise and cooperation from others in the organization to adequately meet customers' needs.

Therefore, well-connected contacts are expected to have higher levels of expertise that salespeople can draw on to better meet customer needs and enhance their performance. Moreover, being perceived to have a prominent friend in an organization boosts a person's own reputation as a good performer, which in turn influences the actions of others, making them more willing to connect or share their expertise. Therefore, the ties to influential others increase a salesperson's ability to make things happen in the organization (Mehra et al. 2006).

In addition, the ties to influential others have been shown to increase perceived self-efficacy through feedback (Bandura 1982). In addition to required job skills, perceived self-efficacy is needed to successfully complete challenging tasks such as selling (Bandura 1982, 1986). Previous research has shown that an antecedent of self-efficacy is vicarious experience (Bandura 1986), suggesting that salespeople learn and develop self-efficacy by modeling others' behavior. If salespeople are connected to influential others, they are able to learn how to be influential themselves (Bandura 1982), which improves their ability to complete tasks such as successful prospecting and closing sales, thereby enhancing their performance. Therefore,

H₄: Relational centrality has a positive, significant effect on sales performance.

Individual interaction with a variety of outside influences has been linked to positive outcomes in organizational settings because interactions with outside influences allow for cross-fertilization of ideas (Perry-Smith and Shalley 2003). Positional centrality is a measure of individual opportunity for cross-fertilization of ideas, techniques, and approaches to sales-related problem solving. Bridging structural holes in the organization provides salespeople access to unique knowledge resources (Burt 2000). Specifically, although people on opposite sides of a structural hole are aware of each other, they operate in different information flows that are insulated by the structural hole (Burt 2000), which ensures that information from these sources is nonredundant and additive. The lack of redundancy increases both the volume and the uniqueness of the information available to salespeople who bridge structural holes (Burt 2002) and enables the bridging salespeople to combine the unique information into more creative solutions to complex problems (Perry-Smith and Shalley 2003), helping them deliver more value to customers and thus boost sales performance.

Positional centrality is indicative of the advantages a salesperson acquires from bridging the links between unconnected others, which suggests both control over information flow and access to *unique* resources. Access to unique information is particularly relevant in examining variance in salesperson performance because it serves as novel input for generating more innovative strategies, which in turn enables the salesperson to think beyond those strategies generated through the use of commonly shared knowledge. Moreover, new information exerts informational influence (Forsyth 1990) that prompts people to reinterpret or rethink key aspects of a challenging issue or problem and facilitates the use of more varied strategies and the creation of more innovative solutions to complex problems. It stands to reason, then, that if a salesperson has high positional centrality, (s)he will also have access to more unique knowledge resources embedded in the network that can be used to develop more novel and effective sales techniques and more compelling solutions to customer problems and needs. Therefore,

H₅: Positional centrality has a positive, significant effect on sales performance.

In summary, we suggest that salespeople's performance is determined in part by their ability to evaluate organization dynamics, develop relationships that place them in prominent social network positions and in contact with influential others, and leverage the resources afforded by their achieved network positions into elevated job performance (Ferris et al. 2007, 2012). We also suggest that these objectives take time to play out. This provides a distinct view of the process by which salespeople acquire and convert internal resources into performance outcomes. Although previous research has found that political skill predicts both employee and manager performance (for a meta-analysis, see Munyon et al. 2015), research to date has not explicitly investigated the performance of politically skilled *salespeople*. In the next section, we describe the procedure for testing the proposed hypotheses and subsequently discuss the results.

Method

Sample and Data Collection Procedure

Data were collected from the outside sales force of a U.S.-based company that sells high-end items directly to consumers (business-to-consumer). The context is similar to a sales force selling customized home technology packages (e.g., security systems, home automation) to owners of upscale homes in and around major metropolitan areas (e.g., Dallas, New York, San Francisco). Within these metro areas, there are no territory restrictions, as is common among direct sales organizations. Salespeople at this firm are paid solely through commissions based on their individual sales performance. However, given the degree of customization required for each individual sale, these salespeople require strong intraorganizational networks to ensure that customer solutions are implemented correctly and in a timely fashion. Accordingly, they strive to build valuable relationships with others in the company to exchange information, bolster their reputation within the organization by connecting with powerful peers, and so on. In this way, we expect intraorganizational networks to be important drivers of sales performance.

The survey was announced at the company's annual sales conference, where all employees were told about the development and intent of the project. Furthermore, they were afforded the opportunity to meet a member of the research team and were able to see firsthand that the project had the full support of the company's top leadership. There were several benefits from working within a single firm for this project. First, individual nodes can have significant impact on overall network measures (Wasserman and Faust 1994). Given that networks are, by definition, patterns of interactions, defining the boundary of the network is of critical importance in distinguishing relevant nodes from irrelevant ones. For example, misspecified network boundaries could result in the exclusion of critical nodes from the analysis, or conversely, the inclusion of irrelevant nodes. Therefore, such errors in boundary specification can result in inaccurate calculations of network measures. For the sake of network analysis, working within a single firm provides a clear network boundary (e.g., Ahearne, Lam, and Kraus 2014).

Second, and relatedly, working within a single company makes it easier to work with top leaders to ensure that employees are fully engaged in the survey. Because a strong response rate is critical for an accurate representation of the network, high engagement from employees is absolutely essential (Wasserman and Faust 1994). Third, focusing our study on one company enables us to control for a variety of external factors such as organizational culture, company size, industry competitiveness, and so on, which can confound the results of multifirm studies.

The participating company employed a total of 397 salespeople, all of whom were asked to respond to the survey; completed surveys were received from 286 salespeople (40% female). Response rates for social network analysis are calculated as nodal and as relational response rates. Relational response rates account for the fact that, for nondirected networks such as the one in this study, information regarding the social ties can be measured from either one or both members of the dyad (Knoke and Yang 2008). Specifically, for a complete, nondirected network of N actors with no alter reports from M actors, the response rate for a particular relation is calculated as follows:

$$R \begin{cases} = 100\% \text{ when } M = 0 \text{ or } M = 1 \\ = (1 - C_M^2/C_N^2) \times 100\% \text{ when } 1 < M < N, \\ = 0\% \text{ when } M = N \end{cases}$$

where $C_N^2 = N!/[2! \times (N-2)!]$ and $N!$ is the product of all the positive integers from 1 to N . The number of possible ties in the sales network, calculated as $[n \times (n-1)]$ for an undirected network (Wasserman and Faust 1994), is 157,212. With 286 responses (72% of total salespeople), we can account for 92% of dyads (Knoke and Yang 2008). Therefore, our data represent a relatively complete network for the focal sales organization. Furthermore, the relationships captured in this network are not limited to ties between members of the sales force. Indeed, there were 253 nonsalespeople named in the survey (i.e., nearly the same as the number of responding salespeople), representing 763 unique dyads within the social network. Our network measures therefore represent a robust view of this organization's intraorganizational relationships—both within and beyond the sales force.

Measures and Operationalization

Political skill. To assess salesperson political skill, we adapted the Political Skill Inventory (PSI; Ferris et al. 2005). The resulting adapted scale comprised 12 items, with 3 items for each dimension of political skill: social astuteness, interpersonal influence, networking ability, and apparent sincerity. We retained items from the trimming process because we believed them to best represent the core meaning of each political skill dimension. To ensure that this was the case, we consulted a developer of the PSI about all trimming decisions. Table 1 provides the specific items adapted from the PSI (Ferris et al. 2005).

Social network reporting. Rather than relying on self-reported measures of relational and positional centrality, which can be confounded by social desirability bias and other

TABLE 1
Political Skill Items

Abbreviated Political Skill Inventory (Significant at $p < .001$)		Loading on Political Skill Dimension
SA	I am particularly good at sensing the motivations and hidden agendas of others.	.775
SA	I understand people very well.	.903
SA	I have good intuition or “savvy” about how to present myself to others.	.794
II	I am able to communicate easily and effectively with others.	.759
II	I am good at getting people to like me.	.879
II	It is easy for me to develop a good rapport with most people.	.875
NA	I am good at building relationships with influential people at work.	.865
NA	I am good at using my connections and networking to make things happen at work.	.875
NA	I spend a lot of time at work developing connections with others.	.849
AS	I try to show a genuine interest in other people.	.809
AS	It is important that people believe I am sincere in what I say and do.	.831
AS	When communicating with others, I try to be genuine in what I say and do.	.823

Notes: We adapted this table from Ferris et al. (2005). SA = social astuteness; II = interpersonal influence; NA = networking ability; AS = apparent sincerity. All items were measured using a seven-point Likert-type scale (1 = “strongly disagree,” and 7 = “strongly agree”).

pitfalls, we calculated the measures from the network graph. Specifically, we employed a free-recall method rather than the roster method for constructing the networks. The roster method was not feasible given that the firm distributed the survey (so we did not know in advance the list of salespeople to whom the survey was distributed), the number of salespeople at the firm, and the desire to capture all ties to influential people, whether salespeople or support staff. In the free-recall method, respondents were asked to list as many people as they could (with a required minimum of two) who were influential in their work lives. We developed the network graph from these lists and calculated our centrality variables for each person. In other words, our relational and positional centrality measures were calculated from data provided by the entire sales force rather than any single individual report. We next discuss our relational and positional centrality calculations.

Relational centrality calculation. We operationalize relational centrality using eigenvector centrality. Eigenvector centrality is an objective measure of a person’s centrality in the social network, adjusted for the connectivity of their contacts. Unlike a degree centrality measure, which simply counts the number of direct ties to an actor, eigenvector centrality accounts for the fact that not all connections are equal;

connections who are themselves well connected are more influential than less connected contacts. Given that our objective is to measure organizational status on the basis of the status of a salesperson’s connections, the adjusted measure provides a more accurate depiction of an actor’s status in the social network (e.g., Treadway et al. 2013). Eigenvector centrality is proportional to the sum of the centralities of the nodes connected to a focal node i and can be calculated as follows for all $i \in I$:

$$(1) \quad C_E(i) = (1/\lambda) \sum_{j=1}^n m_{ij}x_j,$$

where

i = an individual actor in the network;

$C_E(i)$ = an eigenvector centrality measure for individual i ;

x_j = the degree centrality of actor j , which is defined as the number of edges incident on node j ;

m_{ij} = 1 if actor i is linked to actor j in the network or, conversely, 0 if the two actors are unconnected; and

λ = a constant representing the number of actors j that are linked to actor i .

Positional centrality calculation. We operationalize positional centrality using betweenness centrality. The degree to which a salesperson serves as a bridge to connect two otherwise unconnected nodes on a geodesic path can be assessed using betweenness centrality (Hanneman and Riddle 2005; Wasserman and Faust 1994). Therefore, it can be considered a measure of a salesperson’s access to unique informational resources embedded in the network (Brass and Halgin 2012). Betweenness centrality at the individual level, $C_B(i)$, is computed as follows for all $i \in I$:

$$(2) \quad C_B(i) = \frac{1}{g_{jk}} \sum_{\{j < k\}: i \neq j, i \neq k} g_{jk}^i,$$

where

i = an individual actor in the network;

g_{jk} = the total number of geodesic paths between individuals j and k in network matrix A , for all $1 \leq j < k \leq n$;

g_{jk}^i = the total number of geodesic paths between individuals j and k in network matrix A that contain individual i , for all $1 \leq j < k \leq n$ and $i \in I$: $i \neq j$ and $i \neq k$; and

$C_B(i)$ = a betweenness centrality measure for individual i .

Organizational tenure. We operationalized salesperson tenure with the organization as the number of days with the firm from the date of hire and captured this number through firm records.

Sales performance. The participating company’s salespeople work solely in large metro areas (e.g., Dallas, New York, San Francisco) and are not limited to an assigned territory. As a result, there are no concerns regarding differences in territory potential or performance expectations making raw “units sold” the ideal measure for individual sales performance. Individual sales performance data for the two months following the measurement of the social network structures were pulled from firm records. Temporal separation serves to address endogeneity as a result of

simultaneity. By separating the performance dependent measure from the calculation of network positions, we establish temporal precedence, permitting us to make causal inferences regarding the results (Hui et al. 2013). We looked at monthly “units sold” numbers (a company-specific transformation of sales dollars where each unit represents approximately \$417 in sales) to compute an average monthly performance variable.

Controls. To avoid taxing respondents, we included a short form measure of extroversion as a covariate using items from Gosling, Rentfrow, and Swann (2003). We included it because of its relevance to salespeople’s behaviors, attitudes, and performance (see Furnham and Fudge 2008). Specifically, we reason that extroversion is likely to play a role in salespeople’s network-building behaviors and competencies. Gender also was collected as a single-item survey question under the premise that a person’s gender may affect network-building behaviors and success as well as the resulting sales performance (Ibarra 1993). Table 2 lists the descriptive statistics for all study variables.

Data Analyses

The present work employs multiple methods to test the hypothesized model. First, we employ social network analysis (using UCINET) to calculate relational and positional centralities for the respondents. UCINET is a leading social network analysis package designed by Borgatti, Everett, and Freeman (2002) and is commonly used for social network analysis across disciplines. Next, we employed partial least squares structural equation modeling (PLS-SEM) to test the structural model (Ringle, Wende, and Will 2005).

We selected PLS-SEM as the appropriate method for four reasons. First, PLS is focused on predictive analysis. Specifically, the objective of PLS-SEM is to maximize the variance of the endogenous variables explained by the exogenous variables (Hair et al. 2014). The predictive focus is appropriate to meet the objectives of the current study. Second, PLS does not require meeting the assumptions of normality for the data

distributions (Hair et al. 2012). Network data distributions tend to be skewed and/or leptokurtic. Therefore, PLS-SEM is an appropriate method because results are not adversely affected by the nature of the data. Third, PLS is ideal for the estimation of complex models, particularly for higher-order or hierarchical component models (Hair et al. 2014; Lohmoller 1989). Although prior literature has established the multi-dimensional nature of political skill, many studies that include the construct do not model its hierarchical nature, but PLS-SEM permits the estimation of the hierarchical, second-order reflective-formative construct to provide additional information regarding the dimensions of political skill. Finally, PLS is preferred for testing interactions because it does not inflate measurement error (Chin, Marcolin, and Newsted 2003).

It is important to note that the results for covariance-based structural equation modeling (CB-SEM) procedures (e.g., AMOS, LISREL) and PLS-SEM analysis do not usually differ significantly; PLS-SEM results serve as good (and conservative) proxies for CB-SEM results (Hair et al. 2014). Although there are limitations to PLS-SEM (e.g., results tend to overestimate the item loadings [lambdas] and underestimate path coefficients and R-squares [structural relationships]), CB-SEM also has limitations (e.g., results tend to overestimate structural relationship and underestimate lambdas, suggesting that PLS-SEM actually offers a conservative test of the hypotheses). It is generally understood that PLS-SEM’s weaknesses are CB-SEM’s strengths and vice versa (Hair et al. 2012), and given the nature of our data (nonnormal) and model (which includes a reflective-formative higher-order construct), we believe PLS-SEM to be the appropriate methodological approach. It is important to note that concerns over data normality and higher-order, complex constructs are commonly cited as justification for using PLS in top marketing journals (e.g., Ernst, Hoyer, and Rubsaamen 2010; Hennig-Thurau, Houston, and Heitjans 2009).

For each construct, we assessed the reliability and convergent and discriminant validity of the measures. The results indicated that composite reliabilities were greater than .80 and all items load on their respective constructs. The square

TABLE 2
Correlations, Means, Standard Deviations, Construct Reliabilities, R-Squares, and Square Roots of AVE

	1	2	3	4	5	6	7	8	9	10	11
1. Political skill	.608										
2. Relational centrality	.127	—									
3. Positional centrality	.099	.325	—								
4. Sales performance	.040	.418	.271	—							
5. Tenure	-.127	.281	-.087	.330	—						
6. Extroversion	.418	-.033	.148	-.026	-.226	.921					
7. Gender	.133	-.235	.071	-.244	-.456	.179	—				
8. PS—Apparent sincerity	.607	.041	.083	-.121	-.176	.116	.247	.821			
9. PS—Interpersonal influence	.794	.095	.032	.068	-.038	.430	-.044	.283	.839		
10. PS—Networking ability	.787	.173	.131	.125	-.154	.354	.125	.342	.494	.863	
11. PS—Social astuteness	.703	.034	.037	-.008	-.008	.265	.100	.289	.457	.344	.826
M	5.925	5.351	.524	79.026	9.241	5.327	1.401	6.430	6.112	5.380	5.779
SD	.567	4.554	1.044	51.674	8.994	1.476	.491	.613	.677	1.051	.791
CR	.873	—	—	—	—	.918	—	.861	.877	.898	.865
R ²	—	.153	.034	.266	—	—	—	—	—	—	—

Notes: CR = construct reliability. The square roots of the AVEs for each construct appear in boldface on the diagonal of the correlation matrix.

root of the average variance extracted (AVE) for each construct exceeds the correlation with other constructs in the model, indicating discriminant validity (Fornell and Larcker 1981). Given that political skill is a multidimensional construct and each dimension represents a unique aspect of it (Ferris et al. 2005, 2007), we used a second-order, reflective-formative construct to model political skill (Hair et al. 2014). The average AVE for each dimension of political skill also exceeded the squared correlation with the other constructs in the model, indicating that each dimension of political skill exhibits discriminant validity.

In addition, for ease of interpretation (Echambadi and Hess 2007), we mean-centered all indicators before calculating multiplicative terms. Table 2 displays the correlations and AVEs (for political skill, as a hierarchical component model, we report the average AVE for each dimension). As a final step, we evaluate the predictive relevance of the model using Stone–Geisser’s Q^2 value (Geisser 1974; Stone 1974) and the blindfolding procedure in SmartPLS (Hair et al. 2014). When the model demonstrates predictive relevance, this indicates that it accurately predicts the items in reflective measurement models of multi-item and single-item endogenous constructs. Q^2 values for relational and positional centrality and sales performance were considerably above zero, indicating that the model has predictive relevance for the endogenous latent variable.

Results

Overall, the results of the structural model test support the proposed model while offering some surprising insights. Table 3 lists the direct effect of political skill on relational and positional centrality (H_1 and H_2 , respectively), the interaction effects of tenure on the political skill–social network relationship (H_{3a-b}), and the direct effects of relational (H_4) and positional (H_5) centrality on performance. We discuss the specific results of the analysis next.

Both relational (H_4) and positional (H_5) centrality directly and positively affect performance ($\beta = .262, p = .000$; $\beta = .209, p = .000$, respectively). Although the direct effect of

political skill on positional centrality is nonsignificant ($p > .05$; H_2 is unsupported), the results support the hypothesis that increased political skill results in a stronger relational network position (H_1 is supported); thus, political skill significantly and directly affects salesperson relational centrality ($\beta = .189, p = .002$). As we hypothesized, organizational tenure moderates the relationship between political skill and relational centrality ($\beta = .169, p = .027$; H_{3a}); however, counter to our expectation, it does not moderate the political skill–positional centrality relationship ($p > .05$; H_{3b} is unsupported).

In the final stage of analysis, we test the mediating role of social network centralities in the political skill–salesperson performance relationship. We test the mediation by using the Preacher and Hayes (2004) method to determine the significance of the indirect effect of the political skill–tenure interaction on salesperson performance through network centrality. The method uses bootstrapping techniques, which make no assumptions about variable distribution (Hair et al. 2014). Moreover, the Preacher and Hayes method has more power statistically than the Sobel test commonly used to test the significance of indirect effects (Hair et al. 2014).

Given that the political skill to positional centrality path coefficient was not significant, thereby indicating no mediation through positional centrality, we only tested the mediation effects on relational centrality. The preceding stages tested paths from the interaction to the proposed mediator, the mediator to the dependent variable, and the independent variable to the dependent variable in the *presence* of the mediator. To complete the mediation analysis, we analyzed the remaining path, the path from the independent variable to the dependent variable in the *absence* of the mediator. The path is significant ($\beta = .113, p < .05$, one-tailed) when the mediator is not included in the model. Although research has shown that this is not a necessary condition in cases of full mediation (Iacobucci, Saldanha, and Deng 2007), the presence of a direct effect makes interpretation of the mediation easier (Hair et al. 2014). The magnitude of the indirect effect ($\beta_{\text{indirect}} = \beta_{(IV \rightarrow M)} \times \beta_{(M \rightarrow DV)} = .058$) and the variance

TABLE 3
Total Effects on Performance

	Political Skill	Relational Centrality	Positional Centrality	Sales Performance
Political skill (PS)		.189**	n.s.	.058*
PS \times Tenure		.169*	n.s.	.062*
Relational centrality				.262***
Positional centrality				.209***
Tenure		.217***	n.s.	.284***
Extroversion		n.s.	.117*	n.s.
Gender		-.154**	n.s.	-.128*
PS—Apparent sincerity	.272***	.051**	n.s.	.016*
PS—Interpersonal influence	.375***	.071**	n.s.	.022*
PS—Networking ability	.400***	.075**	n.s.	.023*
PS—Social astuteness	.316***	.059**	n.s.	.018*

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Notes: One-tailed tests of significance. n.s. = not significant.

accounted for by the mediation is more than 20% but less than 80%, indicating a partial and significant mediation.

Control variables yielded significant effects on performance and salesperson network characteristics. Specifically, both gender and tenure had significant effects on relational position ($\beta = -.154, p = .002$; $\beta = .217, p = .001$, respectively), and tenure also had a significant and direct effect on performance ($\beta = .237, p = .000$). Notably, extroversion was the only significant predictor of positional centrality ($\beta = .117, p = .011$). In the next section, we explore the implications of the results and consider the insights they provide.

Discussion

This study applied social network analysis to a unique data set that combines survey responses of salespeople's network positions with objective salesperson performance data to address two important gaps in our current understanding of the determinants of salesperson performance. First, we address whether salespeople's intraorganizational social networks are useful in predicting objective sales performance. Second, we explore a possible antecedent of salespeople's intraorganizational social network development—specifically, we investigate the role of salespeople's political skill. We next address each of these key issues in more detail.

What Relationship Exists Between Intraorganizational Social Networks and Salesperson Performance?

We began our introduction by noting that most of the literature on the determinants of salesperson performance in marketing focuses primarily on customer-directed behaviors. Like Plouffe and Barclay (2007), we note that this research has been able to explain only 10%–20% of the variance in sales performance and assert that examining intraorganizational factors may enhance our ability to explain additional variance in sales performance.

Our results suggest that salespeople's intraorganizational networks, operationalized as relational and positional network centrality, significantly affect salespeople's performance. Moreover, our modeling of these network variables is capable of explaining 26.6% of the variance in sales performance—enhancing and extending prior models of customer-directed salesperson behaviors. These findings are consistent with some conceptual suggestions that relationships and behaviors within a salesperson's organization may be even more important for determining performance than those outside their organization (e.g., Ryals and Humphries 2007). Our study now provides empirical support for this discussion. Given that the academic literature has focused on customer-directed behaviors for decades, it seems that researchers may have mistakenly neglected the important role of intrafirm factors in the process.

What Are Some Antecedents of Intraorganizational Social Network Development?

Given that we have shown that positional and relational network centrality are both significant drivers of actual

salesperson performance, it is important to discuss how these network types are developed. As we expected, we found salespeople's political skill to demonstrate a positive relationship with relational network centrality. However, unexpectedly, political skill showed no relationship with positional centrality. In other words, these salesperson skills and behaviors affect relational centrality but not positional centrality. These results draw attention to the important notion that, contrary to the common assumption that different social network metrics are merely alternative (and therefore substitutable) operationalizations of a common underlying network characteristic, different network positions (i.e., centralities) have distinct antecedents and may offer unique benefits and effects on performance. Moreover, the surprising results regarding positional centrality support the claim that little is known about the antecedents of network positions and the process by which social networks of various types develop.

Diving deeper, we note that an interesting finding of this study is that extroversion is the only significant predictor of positional centrality. In retrospect, this makes some sense. Political skill represents a deliberate, strategic set of competences and behaviors (Ferris et al. 2007). As such, salespeople with high levels of political skill are able to choose to engage in actions that enable them to be effective at identifying and connecting with high-status others. In other words, it is obvious to politically skilled salespeople that making high-status connections represents a good strategy for approaching intraorganizational relationships and boosting performance. However, it is not as obvious to them that bridging disconnected parties within the organization is also a viable way to improve their social capital and, therefore, their sales performance.

Behaviors driven by being highly extroverted, in contrast, are not strategic, deliberate behaviors used to gain extrinsic rewards. Instead, they are intrinsically motivated because these people receive personal satisfaction from social engagement with others (Clark and Watson 1999). In other words, highly extroverted people build connections with others because of who they are—not because they are trying to gain a professional advantage. As a result, we suspect that these people somewhat accidentally stumble into desirable bridging network positions because they are intrinsically motivated to build relationships with the various people they encounter in their work (regardless of whether they judge someone to be a high-status, strategically desirable connection). This raises the following questions: Are there other skill- or behavior-based variables that could be useful in explaining variance in positional centrality? If political skill does not explain positional centrality, then what does? We discuss these questions in the “Limitations and Future Research Directions” subsection.

Managerial Implications

Network links are conducive to transferring complex knowledge that is not easily codified (Singh 2005). These networks provide a sustainable competitive advantage to members of the specific social network; the benefits of membership within the network can be leveraged to accomplish various goals and

outcomes (Burt 2001; Lin 1999). Therefore, salespeople's network positions, and the connectivity they represent, are inexorably linked to their performance outcomes. So what are sales managers to do with this information? First, managers should take notice of the value of intraorganizational networks. As boundary spanners, salespeople are encouraged to spend a great deal of time outside the office focused on establishing and nurturing external relationships (Fu, Bolander, and Jones 2009). Obviously, this is a fundamental and essential part of the sales job, but managers should also ensure that salespeople are allocating adequate time and energy to navigating and building relationships within their own organizations (Plouffe and Barclay 2007). This could be accomplished by coordinating company-wide events, including interdepartmental interactions during new salesperson orientation, or assigning salespeople to mentors in different departments or districts to encourage them to develop a variety of valuable connections. In addition, related activities could be built into the performance management system. In any case, effort should be taken to prevent salespeople from focusing 100% of their attention on parties outside the organization while inadvertently neglecting the social resources available to them from within.

Second, and relatedly, this research identifies a set of skills salespeople can learn that are useful in driving the development of relational network centrality—namely, the components of political skill (i.e., interpersonal influence, social astuteness, networking ability, and apparent sincerity). To help salespeople develop these types of skills, managers should emphasize knowledge other than that related to (product or firm) content. Specifically, managers should include political skill as part of a comprehensive, noncompetitive, and supportive new-hire training program (Ferris, Davidson, and Perrewé 2005). As part of such training, examples and exercises that have internal as well as external foci could be helpful in contextualizing learning and skill development and in raising awareness of the importance of internal social networks. Because training in interpersonal skills is challenging to execute in traditional lecture-/presentation-based training programs, experiential training techniques should be explored (Bolander, Bonney, and Saturnino 2014; Ferris, Davidson, and Perrewé 2005).

Third, because extroversion, rather than political skill, influences positional centrality, it is important for managers to consider that until additional antecedents to positional centrality are uncovered, they may need to consider the different personality types in recruiting and hiring practices and when setting their expectations of salespeople regarding their intraorganizational relationships. Moreover, they may also consider exploring interventions that might encourage and enable the less extroverted salesperson to forge these useful connections that occur naturally with his or her extroverted counterparts.

Limitations and Future Research Directions

As with all studies, the current research should be interpreted in light of a few limitations. First, we collected all data from a single firm. Although we believe that this provided some important characteristics that are required for network analysis

(e.g., bounded network, access to the complete network), further research is warranted to explore how these relationships hold up across multiple firms, industries, and so on. Are firms operating in business-to-business contexts more—or less—affected by network variables? Similarly, do firms selling complex, high-tech products have an easier or more difficult time building their intraorganizational networks? Research across a variety of firms and industries can explore these suggestions.

Second, although we use a lagged sales performance outcome, the present study primarily utilizes cross-sectional data, which limit our ability to draw causal inferences between political skill and relational network centrality or between extroversion and positional network centrality. In other words, we cannot empirically eliminate the possibility that, for example, it is actually the network position that leads to political skill. However, even in the absence of concrete, empirical support for the order of variables in our hypothesized model, there is still substantial conceptual grounding for the order we present. Consider that political skill is a construct of social effectiveness while network position indicates the salesperson's placement within an intraorganizational structure. It seems far more plausible that a person secures and maintains a position within a network on the basis of social effectiveness than that (s)he develops strong interpersonal skills because of some chance placement within the network. In other words, if the causality were reversed, how did the salesperson acquire the network position in the first place? Because a network position is not something a salesperson can be “dropped into,” it makes sense that the causality must flow from political skill (i.e., effectiveness) to network position (i.e., outcome).

Nevertheless, although we believe our proposed antecedents are justifiable on theoretical grounds, longitudinal network development studies should be undertaken to obtain a cleaner view of how, exactly, employees develop their networks over time. Some recent research using longitudinal growth modeling techniques has suggested a method of analysis that could be useful in this pursuit (Ahearne et al. 2010; Boichuk et al. 2014; Fu et al. 2010). Perhaps the largest barrier to such work would be the challenge of collecting network data across occasions.

Third, the finding that relational centrality seems to be driven by political skill whereas positional centrality is not suggests an avenue for exciting further research in differentiating network metrics and uncovering the drivers of network development and maintenance. Specifically, if political skill does not influence positional centrality, what about other skill- or behavior-based variables such as intraorganizational navigation (e.g., Plouffe and Grégoire 2011) and emotional intelligence (e.g., Kidwell et al. 2011)? Future researchers should try to identify something other than a fixed personality trait (i.e., which managers would perhaps best account for as a hiring decision) that can drive positional, as well as relational, centrality and other advantageous network positions. For managers, it would be useful to identify something actionable and trainable to help salespeople develop positional centrality as an important network position that can serve as a competitive advantage.

Fourth and finally, although we have shown that political skill is a powerful driver of relational network centrality for salespeople, it is important for further research to consider other issues for which political skill could prove useful. One increasingly popular topic comes to mind: interdepartmental

interfaces. Future studies should consider the role of political skill in improving effectiveness at a wide variety of departmental boundaries, including those marketing holds with research and development, finance, and so on (e.g., Ernst, Hoyer, and Rubsaamen 2010; Hughes, Le Bon, and Malshe 2012).

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