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## Workplace Relationships and Social Networks

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As described in Chernyak-Hai and Rabenu's (2018) focal article, the workplace has changed tremendously over the past few decades. These changes, undoubtedly, have affected how individuals interact and build relationships

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in the workplace. We live in a “networked society,” where the advances in technology and subsequent spread of communication and information have reorganized the way individuals are connected to one another (Castells, 2004; Wellman, 1999). In other words, we exist in complex networks, where underlying interconnections and interdependencies are the keys to scientific understanding. In their focal article, Chernyak-Hai and Rabenu highlight the need to adapt social exchange theories and research to incorporate the change in workplace relationships resulting from advances in technology and changes in the global market and workforce (e.g., freelancers, contract workers).

One way social exchange research could be adapted would be by changing the analytical approach to account for the fact that workplace relationships are embedded in complex networks. Specifically, we believe that applying a network framework to social exchange research would address many of the issues raised. As researchers, we often examine exchange relationships in isolation without taking into account the broader social environment’s impact on their existence and/or quality. Because individuals are embedded in a larger, more complex social network, social network theory is an analytical framework that can be applied to help our scientific understanding of social exchange relationships in an increasingly evolving workplace. Despite its prevalence in anthropology, biology, political science, sociology, and business, we believe network theory and analysis has been largely overlooked in industrial and organizational psychology research. As such, in this commentary we strive to provide an overview of social network theory and establish its applicability to social exchange theory as an alternative analytical approach.

### **What Are Networks?**

A social network can be defined as the ties (i.e., exchange relationships) among a set of individuals, directly or indirectly connected (Lin & Peek, 1999; Wasserman & Faust, 1994). The past several decades have seen a significant increase in the use of social network theory and methodology to address complexity and interdependence in relationships at multiple levels of analysis. The networks perspective is distinctive in that it embeds individuals in the larger social context (Perry, Pescosolido, & Borgatti, 2018). Rather than examine social exchanges at the individual-level or dyadic-level of analysis, network research focuses on the multilevel ties between network members, examining who comprises the network (e.g., coworkers, family members), the structure of the network (e.g., size, density), the resources shared by network members (e.g., information, emotional support), and the structural positions of network members (e.g., centrality).

Because network theory and research examine human behavior as part of a broader context, it inherently requires a different way of thinking about how individual action occurs. Network theory is based on the premise that social ties and interactions influence individuals' actions (Perry et al., 2018). In other words, we, as human beings, are not impervious to our social surroundings. Every day, our feelings, actions, and outcomes are shaped through consultation, suggestion, support, nagging, competition, and conflict with others. Further, the pattern of relationships within a social network (i.e., who is connected to who) is meaningful. It determines how information or resources flow through the network and which network members possess more power or advantage. At its core, social network theory is about connectedness and how that connectedness impacts both individual network members and the networked system as a whole.

### **How Can Networks Aid Our Understanding of Social Exchange in the Workplace?**

Our goal in this commentary is to bring awareness of network theory as it applies to social exchange relationships in the workplace. The following principles establish important considerations when applying network theory to social exchange research.

#### ***Interdependence***

As previously noted, interconnectedness is a mechanism for action. Network members, whether they be individuals, organizations, or communities, shape and are shaped by information sharing, support, and regulation (White, Boorman, & Brieger, 1976). As such, network members are seen as *interdependent*; they are neither puppets of the social structure nor completely independent of it. Instead, members are thought to both influence and react to the networks in their environment (Pescosolido, 1992; Wasserman & Faust, 1994). That being said, research on workplace relationships and social exchange would benefit from a closer examination of network structure and member agency, and their subsequent interdependency. When might an individual assume more agency (i.e., individual rational choice) in day-to-day interactions? When might an individual settle for habitual, network-driven interactions? Answers to such questions would help to illuminate when internal versus external social forces are most impactful on an individual's behavior.

#### ***Dimensions of Social Networks***

There are four distinct dimensions, or aspects, of social networks that are most commonly examined: structure, function, strength, and content.

Network *structure* reflects the architectural aspect of networks, including both network members and the presence or pattern of ties between them. Structure not only captures the overall shape and size of the network but also how tightly knit its members are. Although structure is important, and most frequently examined, network researchers should also be concerned with network *function*. Function captures the type of resources exchanged through network ties. Networks ties can serve to exchange various resources ranging from instrumental support, emotional support, appraisal, and monitoring (Pearlin & Aneshensel, 1986). The third dimension, *strength*, captures the intensity and duration (i.e., durability) of ties between network members (Shi, Shi, Chan, & Wang, 2009). Finally, network *content* refers to the substance of social networks, giving insight into what information and/or resources to which a network member has access. Network content is often tied to network function and strength, as these properties often determine whether network content (e.g., money, knowledge) is actually leveraged.

These four dimensions interact, often in complex ways, to influence individual behaviors and outcomes. For example, the amount of influence a social network has is partially determined by its size (i.e., structure) and density (i.e., strength). Likewise, the direction of a network's influence is a result of the attitudes held within it (i.e., content) and how much regulatory control it has (i.e., function). In other words, social networks are a function of the interactions among network structure, function, strength, and content, and their effects are best understood when examined together. We encourage social exchange researchers to think about (and examine) how these four network dimensions, in isolation and combination, influence the types of relationships formed in the workplace, as well as how they impact individual and organizational performance.

### ***Networks Are a Tool***

Social networks, like many other entities in the world, are not inherently good or bad. Rather, they are a tool that can be used to either provide resources or inflict harm. Social interactions can, after all, be both positive and negative, or even both at once (e.g., favoritism). Thus, it is important that social exchange researchers examine *both* positive and negative social interactions to better understand how they form and impact broader social networks. Network methodology can capture a variety of perspectives on the same pattern of exchanges, expanding beyond the reciprocal information provided by dyadic research designs, revealing a more detailed understanding of interactions in the workplace.

Further, individuals are part of numerous, coexisting networks that come from varying structures and strengths, as well as both positive and

negative content. Although it is important to examine individual networks in isolation, we argue that it is imperative to examine multiple networks (e.g., positive and negative, work and nonwork) in conjunction to deepen understanding of networks' impact on perceptions and behavior. To accomplish this, researchers need to examine how the network structure, content, and function of different social networks interact to affect individual, organizational, and societal attitudes, behaviors, and outcomes. Examining individuals' placements in the various network structures could further illuminate social networks' overarching influence at all levels.

Finally, network researchers stress that "more" is not necessarily better. Not all ties are created equal, and having too many may be burdensome or conflicting for network members. A network approach not only addresses functional questions such as this but efficiency questions as well, focused on identifying an "ideal type" of social network that maximizes positive outcomes and minimizes negative ones. In this way, social network analysis is useful in determining thresholds for effects, curvilinear relationships, and diminishing losses or gains—an analytical complexity that aligns with the complexities of the modern workplace. A social network perspective may also be useful in determining if and why the ideal network type changes along with changes to the larger workforce or market. Specifically, by combining social network analysis with longitudinal designs, researchers could also capture the dynamic nature of social networks and factors that contribute to meaningful change over time.

### **Conclusions and Recommendations**

As Chernyak-Hai and Rabenu (2018) point out, the cost-benefit aspect of relationships outlined by social exchange theory (Blau, 1964; Cropanzano & Mitchell, 2005; Homans, 1961) is still relevant today but attempting to apply the same theoretical framework to a changing workplace may lessen or muddy our understanding of today's workplace relationships. Through this commentary, it is our hope that researchers see the advantages of applying social network theory and measurement to their own research and thinking on social exchange in the workplace. The most pressing challenges of our time exist within complex systems where underlying interconnections and interdependencies are central to our understanding and development of real-world solutions. Below, we present several examples to demonstrate how many of the questions raised by Chernyak-Hai and Rabenu could be addressed using a social network framework. Finally, we will provide recommendations for researchers looking to incorporate social network theory and methodology into their work.

### ***Technology***

The focal article discusses increased digitization as a potential threat to support interactions, job security, and organizational trust (through increased monitoring) with no guarantee that this advanced technology will truly improve information transfer or communication efficiency. Researchers could use social network analysis to examine differences in digital versus face-to-face social networks to determine what network, contextual, and personal factors contribute to information transfer, organizational trust, and job uncertainty. Examining these networks for individuals with nontraditional work arrangements (i.e., teleworkers, workers with flex-time arrangements, freelance workers) would be particularly valuable.

### ***Diversity***

The focal article also places an emphasis on the social and organizational effects of diversity (e.g., demographic, working styles, social disadvantages) and how laws, policies, and procedures shape these relationships. Social network analysis can be directly applied to these issues by examining the impact of individual characteristics on network formation, structure, function, and strength, and how such network dimensions influence organizational performance and individual perceptions and behavior (e.g., inclusion perceptions, sexual harassment, discrimination). This approach may similarly address cultural differences, which were suggested as an area of future research. For example, network analysis could identify barriers to collaboration within multinational organizations. Finally, longitudinal examination of such questions may help determine which policies and practices are most useful in providing long-lasting solutions to these issues.

### ***Alternative Theories***

Finally, the focal article emphasizes the need for social exchange theory to integrate other theoretical perspectives such as person–environment fit (Dawis & Lofquist, 1984) and conservation of resources theory (Hobfoll, 1989). We believe that social network theory and methods promote and facilitate this integration. Using a social network perspective, researchers can develop a more nuanced understanding of which network characteristics influence person–environment fit and, reciprocally, how person–environment fit influences social exchange. Additionally, Chernyak-Hai and Rabenu point out that current resource theories do not clarify whether certain emerging work characteristics (e.g., flexible work arrangements) deplete or build employee resources. A network approach may be particularly useful in examining transfer of resources within a network to help determine which resources and transfer patterns are most beneficial to resource protection, replenishment, and building. With these questions, it is also important to

remember that resources can come from different networks. Networks of family, friends, or professional connections *outside* of the workplace should be examined to shed light on relationships and behavior *inside* the workplace. By examining work and nonwork social networks in isolation and combination, we are better able to shed light on issues like work–family conflict, recovery, and career development, which are of particular interest given the changes in the nature of work highlighted by the focal article.

By discussing the fundamentals of social network theory, we hope to encourage more application of social network analysis to social exchange research. In order to do so, however, researchers will need to learn additional methodology and statistical software that are beyond the scope of this commentary. For further study, there are several texts detailing the methodology and software needed to collect and analyze social network data (see Borgatti, Everett, & Johnson, 2013; Perry et al., 2018; Scott, 2017).

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