This research considers how different features of informal networks affect knowledge transfer. As a complement to previous research that has emphasized the dyadic tie strength component of informal networks, we focus on how network structure influences the knowledge transfer process. We propose that social cohesion around a relationship affects the willingness and motivation of individuals to invest time, energy, and effort in sharing knowledge with others. We further argue that the network range, ties to different knowledge pools, increases a person’s ability to convey complex ideas to heterogeneous audiences. We also examine explanations for knowledge transfer based on absorptive capacity, which emphasizes the role of common knowledge, and relational embeddedness, which stresses the importance of tie strength. We investigate the network effect on knowledge transfer using data from a contract R&D firm. The results indicate that both social cohesion and network range ease knowledge transfer, over and above the effect for the strength of the tie between two people. We discuss the implications of these findings for research on effective knowledge transfer, social capital, and information diffusion.

The ability to transfer knowledge effectively among individuals is critical to a host of organizational processes and outcomes, including the transfer of best practices (Szulanski, 1996), new product development (Hansen, 1999), learning rates (Argote, Beckman, and Eppe, 1990; Darr, Argote, and Eppe, 1995), and organizational survival (Baum and Ingram, 1998). According to some scholars, the ability to transfer knowledge represents a distinct source of competitive advantage for organizations over other institutional arrangements such as markets (Arrow, 1974; Kogut and Zander, 1992). In this knowledge-based theory of the firm, organizations are viewed as social communities specializing in efficient knowledge creation and transfer (Kogut and Zander, 1996). Informal interpersonal networks are thought to play a critical role in the knowledge transfer process. Our understanding of how informal networks affect knowledge transfer, however, remains unclear because the effect of networks on knowledge transfer has yet to be examined directly. Instead, researchers have inferred the association between informal networks and knowledge transfer from one of two observed effects—the association between network structure and organizational performance (e.g., Ingram and Roberts, 2000; Reagans and Zuckerman, 2001; Tsai, 2001), whereby knowledge transfer is presumed to be the causal mechanism responsible for this relationship, or between the strength of ties between people and knowledge transfer, whereby tie strength is used as a surrogate for network structure (e.g., Uzzi, 1996, 1997, 1999; Hansen, 1999).

Several studies exemplify the approach of inferring knowledge transfer from the association between network structure and organizational performance. Ingram and Roberts (2000) described how dense friendship networks affected the performance of Sydney hotels. Hotel managers embedded in friendship networks (i.e., managers connected to each other through a dense web of third-party friendship ties) shared customers and best practices, which increased the profitabili-