

Transactive Memory in Virtual Teams: The Role of Trust Networks from a Social Exchange Perspective

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Abstract

The development of transactive memory facilitated by trust relationships and social exchanges is of emerging importance in virtual environments that is characterized by a lack of rich social presence. Situated at the nexus of research on distributed teams, this study examined the effects of trust networks and social presence on transactive memory in an experimental setting. Teams with either dense or sparse networks of trusting ties completed a hidden profile task, and communicated either face-to-face or via computer technologies. The results indicated that dense trust networks helped to develop greater transactive memory than sparse trust networks. The degree of social presence was found to moderate the impacts of trust networks on transactive memory. Participants in dense trust networks developed greater transactive memory when social presence was low than when social presence was high. Conversely, participants in sparse trust networks developed better transactive memory when social presence was high than when social presence was low. Teams with dense trust networks also had greater reciprocal exchanges, whereas teams with sparse trust networks had greater negotiated exchanges. As both reciprocal and negotiated exchanges were associated with greater transactive memory, the results suggested that transactive memory could be influenced by the form of social exchange adopted by teams with different trust networks. Implications for enhancing transactive memory from a social exchange perspective were discussed.

Keywords: transactive memory, trust networks, social presence, virtual teams