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A Comparison of Relationship Development Activities on Group Interactions

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Abstract

Virtual teams are geographically distributed and communicate via computer-mediated communication systems. Trust and relational links among team members have been shown to affect virtual team communications. However, most virtual team members do not receive training on how to effectively promote the development of relational links or trust. This study investigated the effects of both face-to-face relationship development activities and relationship development training on group interactions. Training on relational development in teams was derived from previous literature and administered to 13 selected teams. Twelve teams had initial face-to-face meetings and engaged in face-to-face relationship development activities but received no other training. Twelve additional teams received 'passive' trust development training.

Introduction

Trust is a basic feature of social situations that require cooperation and interdependence (Jennings, 1971), and also plays a critical role in problem solving (Zand, 1972), organizational performance (Hart, et al.,1986), organizational communication (Roberts and O'Reilly, 1974), and acceptance of feedback (Earley, 1986). According to Jarvenpaa (Jarvenpaa and Leidner, 1998) media richness theory (Daft, et al., 1987) and social presence theory (Short and Christie, 1976) question the possibility of relationship development and subsequent trust development in virtual teams. These theories suggest that Computer Mediated Collaboration Systems (CMCS) may eliminate the type of communication cues that individuals use to convey trust, warmth and attentiveness. However, CMCS studies have found that computer-mediated teams do share relational information and can develop high levels of trust over time (Beranek, 2000; Jarvenpaa and Leidner, 1998; Walther 1997; Chidambaram, 1996; Adler, 1995).

Past research on relational development has indicated that computer-supported groups, given adequate time, will exchange enough social information to develop strong relational links (Chidambaram, 1996; Burke and Chidambaram, 1995). Training methods of improving the interactive experience among virtual team members have been investigated and devised (Beranek, 2000; Warkentin and Beranek, 1999). Recent research has suggested that teams given training develop relational links faster than teams without relationship development training and that these teams are more satisfied with the virtual team experience (Beranek, 2000).

Methodology

Teams

The participants in this study are undergraduate students, in three separate sections of the same course. They were administratively placed into 12-13 groups within each section in such as way that no two members who met face-to-face in other course projects would be virtual partners. The subjects were provided sufficient grade incentives to ensure that they were motivated to contribute to the team's success. Thirteen teams were given training on relationship development. Twelve teams met face-to-face prior to virtually solving the task and engaged in team building activities. The remaining 12 teams received written information on working in teams but received not training, these represented the 'passive training' teams.

Tasks

During the course assignments 3 team tasks were assigned, all teams were given the same tasks in the same order. The subject matter of each of the tasks paralleled material covered in the class and required the teams to collaboratively solve a problem. To communicate with their teammates students were required to log in to an

asynchronous Web based communication tool and click onto their team-page. The system permits group members to communicate by "posting" messages in a hierarchical manner, termed a "threaded discussion" which appears as a familiar outline format, making it easy to follow the 'flow' of the conversation. A "comment" (message) can be posted as a new "topic" (leftmost in the hierarchy), as a reply to a topic (indented under that topic), or as a reply to a reply.

Training

Relationship development training was based on a number of previous studies (Beranek, 2000; Warkentin and Beranek 1999; Jarvenpaa and Leidner, 1998; Niederman, et al. 1996; Nunamaker, et al. 1991; Steiner, 1972). Teamwork, meetings and CMCS were discussed along with team dynamics and the stages of the meeting process were introduced. Participants were informed of possible drawbacks to electronic communication, called process gains and losses, (Nunamaker, et al., 1991; Steiner, 1972) such as information overload and 'free riders,' along with possible mechanisms for addressing these problems. Teams were also introduced to member and team behaviors which are associated with high trust levels (Jarvenpaa and Leidner 1998).

Face-to-face relationship development included activities such as the identification of a team leader, defining task roles, definition of the objective of the meeting, assessment of agenda items, identification of appropriate members, and the establishment of a team leader (Jay 1976; Niederman et al., 1996). Teams were also encouraged to develop team norms, communication planning and establish the team's purpose, mission, and goals (Duarte and Snyder, 1999).

4. Data Gathering

A survey was administered before students engaged in the first task and after performing each task. The surveys tracked relational and group performance variables, measurements of trust levels and group evaluation measures, over time. The three relational variables measured were: Group Cohesiveness, Perceptions of Group Interaction Process, and Satisfaction with Group Outcomes The survey was based on a number of sources (Jarvenpaa and Leidner, 1998; Chidambaram, 1996; McCroskey, 1966; Pearce, 1974; Seashore, 1954).

A second source of data from the study will be a log of all comments made by all groups. These comments will be analyzed and categorized into comment type. Three comment types have been identified from past literature (McGrath, 1991): inter-relational comments not necessarily dealing with the task (comments introducing oneself, asking names of other members etc.), comments dealing with performance of the task (answers, questions about other's answers, analysis of the task etc.), group organization comments (asking for comments from other team members, inquiring about consensus on answers, etc.).

5. Data Analysis

Two major areas will be investigated through data analysis. The first area will compare the use of training with face-to-face relationship development activities. The second area will compare the use of 'passive' training with active training. These results will be compared with the results of the analysis of the comments collected. Repeated measures MANOVAs will be used to reflect the change over time.

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