Chapter 5.7
Information Technology Supported Communication – Group Cohesion, Agreeability, and Performance:
The Role of Media Richness

Michael B. Knight
University of Wisconsin –Green Bay, USA

D. Scott Hunsinger
John A Walker College of Business, Appalachian State University, USA

J. Michael Pearson
Southern Illinois University at Carbondale, USA

ABSTRACT

Research over the past few decades has identified that organizations have been faced with social/economic pressure to utilize information technology and to facilitate communication via technological modes. These technology drive communications, under media richness theory, have been found to impact group cohesion and performance. The communications that are dependent on media richness are affected by individual user characteristics. Further group impacted by technology driven communication often experience varying levels of individual member agreeability, which further affect cohesion and performance. The individual users who participate in group projects must communicate, and ultimately can have different performance and cohesion outcomes based on the mode of communication used. This study identifies significant differences between groups, using specific media to communicate cohesion, the change in cohesion, agreeability and performance. Over the past few decades, organizations have faced increased pressure to utilize information technology (IT) to expand markets, to support increased communication between constituents, to streamline organizational decision making, and to improve employee productivity. Unfortunately, the results are contradictory as to the success IT has had in helping

DOI: 10.4018/978-1-60566-687-7.ch014

organizations achieve these goals. On one hand, several studies have reported beneficial returns on investment with the aforementioned implementation of information technology (Bourquard, 2004; Chienting, Jen-Hwa Hu, & Hsinchun, 2004; Dehning & Richardson, 2002; Hinton & Kaye, 1996; McGrath & Schneider, 2000; Violino, 1998; Willcocks & Lester, 1991). On the other hand, research also seems to suggest that technology can sink an organization when IT is not in alignment with the strategic goals of the organization *(*Arlotto & Oakes, 2003; Hinton & Kaye, 1996; PITAC, 1999; Violino, 1998; Willcocks & Lester, 1991). Adding to this dilemma, the marketplace has been turning to global expansion, becoming more demographically diverse, and relying more on the use of workgroups and teams (Stough, Eom, & Buckenmyer, 2000). These work teams historically have performed in homogenous settings and have met primarily face-to-face (FTF). These teams typically used little technology to interact. Lawler, Mohrman, & Ledford (1992) found that organizations that use teams more often have a positive outcome in decision making, employee trust and employee tenure. Considering the advances in communication media over the past twenty years, information technology has become a part of the everyday operations of most businesses. The requirement of the employee to use this technology has become essential to organizational success. With the organizational dependence on the employee to use information technology, plus the increased use of teams in the workplace, organizations may fail to provide workers with the support and training needed to develop cohesive groups resulting in improved performance and member satisfaction (Sarbaugh-Thompson & Feldman, 1998; Yoo, 2001). Several studies have concluded that teams that communicate successfully have had positive team performance (Rice, 1979; Tuckman, 1997; Zaccaro & Lowe, 1988). However, the independent variables considered in the aforementioned research vary greatly and seem to show inconsistency in identifying indicators that could be used to help with the implementation of technology that supports team performance. This study looks at face to face (FTF) and virtual teams, the personality trait of agreeability and the impact of specific communication technology on cohesion and performance. We use the media richness theory to facilitate our literature review and to guide the development of our hypotheses.

COHESION

Through a meta-analysis of the group dynamics literature, Forsyth (1990, 1999) suggested that the key to group processes was cohesion. In these two studies, Forsyth noted that cohesion was the "glue" that holds a group together and that cohesion was the "strength" that bonds and links groups together. Forsyth (1999) further suggested that cohesive groups possess the common characteristics of cooperation, satisfaction, and enjoyment.

Another meta-analysis by Bettenhausen (1991) suggested that group cohesion was one of the most studied constructs in group literature between 1986 and 1990 and that a consensus on the definition of cohesion was not found. Authors seemed to identify cohesion in terms that best fit their relevant study. For example, Frank (1997) and Langfred (1998) defined cohesion as an individual's feeling of belongingness to a group or the amount that members of a group like each other. Festinger (1950) stated that cohesion was the degree to which group members support each other and are motivated to remain together as a group.

According to Murdack (1989) and his review of literature, cohesiveness is simply attraction-to-group, while Evans and Dion (1991) interpreted cohesion as an individual's desire to remain in the group. Or as Tuckman (1997) suggested, cohesion is an outcome of the group development process. Cartwright and Zander (1968) stated that close and frequent interactions with group members would result in an individual's greater attraction to the group, while Bollen and Hoyle (1990) had