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# Toward Contextualized Theories of Trust: The Role of Trust in Global Virtual Teams

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Although trust has received much attention in many streams of information systems research, there has been little theorizing to explain how trust evokes sentiments and affects task performance in IT-enabled relationships. Many studies unquestionably assume that trust is intrinsically beneficial, and dismiss the possibility that the effects of trust may be dependent on the situation (or conditions) at present. This paper theoretically and empirically examines outcomes of an individual's trust in global virtual teams under differing situations (or conditions). In Study 1, we find that early in a team's existence, a member's trusting beliefs have a direct positive effect on his or her trust in the team and perceptions of team cohesiveness. Later on, however, a member's trust in his team operates as a moderator, indirectly affecting the relationships between team communication and perceptual outcomes. Study 2 similarly suggests that trust effects are sensitive to the particular situation or condition. Combined, the studies find that trust affects virtual teams differently in different situations. Future studies on trust will need to consider situational contingencies. This paper contributes to the literature on IT-enabled relationships by theorizing and empirically testing how trust affects attitudes and behaviors.

*Key words*: global virtual teams; trust; trust development; strength of situational structure; moderation effects; longitudinal study; team communication
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The relationship between information technology (IT) and trust is gaining increasing attention from information systems (IS) researchers. For example, trust is in models addressing IT-enabled change, business processes, intra- and interorganizational relationships, and buyer-seller transactions (e.g., Barrett et al. 2001, Culnan and Armstrong 1999, Grabowski and Roberts 1999, Hart and Saunders 1997, Jarvenpaa and Tractinsky 1999, Scott 2000). In virtual teams, where members rely on IT-mediated interactions, successful collaboration depends on trust (Jarvenpaa et al. 1998, Jarvenpaa and Leidner 1999). Trust can be defined as the "willingness to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al. 1995, p. 712).

The relationship between technology and trust is important because information technology can change the context of human relationships. The Merriam-Webster Dictionary defines context as interrelated conditions or situations in which something exists or occurs. Technology can change conditions in terms of their physical infrastructures, tasks, and social dimensions. Changes in context can lead to differing levels of trust. Trust may not reach the same level in IT-enabled relationships that are adhoc and temporary, and therefore void of prior social history and not tied to a known physical location as those based on face-to-face interaction that takes place in known physical infrastructures and with shared social history (Kramer 1999).

The context may also change the role of trust (Kramer 1999, Rousseau et al. 1998, Tyler and Kramer

1996). Here we limit our theorizing of context to situations that vary in the strength of the structure (weak, moderate, or strong structure). Structural strength varies by the level of uncertainty or ambiguity present in which an event occurs or, in our study, a team operates. After reviewing a large amount of organizational science literature, Dirks and Ferrin (2001) propose two alternative roles for trust—either direct (main) or moderation (indirect)—depending on the degree of structure present: (1) direct effects of trust prevail under situations (or conditions) of low structure, and (2) moderation effects prevail under situations (or conditions) of moderate structure. They suggest that trust has no effect in situations of strong structure.

The prevailing view of trust in the IS literature contends that trust has direct positive effects on cooperation and performance (e.g., Iacono and Weisband 1997, Jarvenpaa et al. 1998, Jarvenpaa and Leidner 1999). Little theoretical attention has been directed toward examining how trust may have moderation effects on attitudes and performance, despite empirical evidence of such effects (e.g., Li 2003, Pavlou 2003). Understanding the role of trust in different contexts is both theoretically and managerially significant because different theoretical models may be appropriate for different situations, and these different models may suggest different managerial interventions. In situations where trust has a direct effect on outcomes, attitudes and behaviors are direct manifestations of trust. In situations where trust has a moderation effect, trust guides individuals to selectively perceive and interpret factors that have a direct effect on behavior. For example, high trust in another party may keep a trustor from developing negative attitudes toward another party, even if that party does not promptly respond to a previous communication. Trust can thus affect the way people interpret nonresponsiveness.

In this paper, we advance a model of trust for the research question: "How does trust affect the attitudes and performance of people engaged in IT-enabled relationships?" We theorize and empirically test the model with global virtual teams. A virtual team is "a self-managed knowledge work team, with distributed expertise, that forms and disbands to address a specific organizational goal" (Kristof et al. 1995, p. 230). Such teams engage in dispersed global work and, because of large time and space differences, communicate via e-mail and the Web.

Specifically, we examine the consequences of initial trust (an individual team member's trust in the team before the team interacts) on early trust and cohesiveness before the midpoint of the team's life and the consequences of early trust (trust before the midpoint) on satisfaction, perceived quality of business plans, and performance of business plans at the end of the team's life. Dirks and Ferrin (2001), in their theoretical paper on the alternative roles of trust, speculated that the roles of trust may vary by the strength of the structure in a given situation because of the existence or lack of other information available to provide guidance for how to interpret events and behavior. They suggest that virtual teams are an ideal context in which to test their theories because of the limited amount of contextual information available in virtual work. We use Gersick's (1988) punctuated equilibrium theory to theorize about structural strength and how it changes for individuals during the life of a team. We advance testable hypotheses in the context of virtual teams and empirically examine them via two global virtual team studies.

The next section reviews these theoretical foundations and advances a research model and hypotheses. We then report on the two empirical studies. The paper concludes with the discussion, implications, and limitations.

## Conceptual Foundations

Our theorizing of trust in IT-enabled environments draws primarily from three theoretical models: (1) the McKnight et al. (1998) model on initial trust formation, (2) the Dirks and Ferrin (2001) model of the role of trust in organizational settings, and (3) Gersick's (1988, 1989) punctuated equilibrium model.

### The McKnight et al. (1998) Model on Initial Trust Formation in New Organizational Relationships

McKnight et al. (1998) developed the initial trust model to explain the presence of high initial trustworthiness and trust in newly formed relationships, such as temporary virtual teams. Trustworthiness is a belief that comes before trust; trust is an intention or willingness to depend on another party (McKnight

et al. 1998). The conventional developmental view of trust maintains that trust starts low and increases as two parties interact (e.g., Butler 1991, Lewicki and Bunker 1995, Zand 1972). Yet, high initial trust has been observed in new face-to-face and virtual work relationships—even in the initial phases *before* members have a chance to interact (Iacono and Weisband 1997, Jarvenpaa et al. 1998, Jarvenpaa and Leidner 1999, Knoll and Jarvenpaa 1995, Kramer 1994, Meyerson et al. 1996).

McKnight et al. (1998) propose that individuals do not make inferences about teammates, but instead use their own preexisting dispositions, institutional expectations, and cognitive processes such as social categorization and illusions of control to make attributions about the other person's initial trustworthiness. This means that a trustor develops beliefs of others' initial trustworthiness based on factors related to the situation and the trustor himself, rather than the trustee's behavior.

The McKnight et al. (1998) theory views trust development as an attributional process. Attribution theory addresses social perceptions that arise as people try to explain the past or future actions of other people or themselves (Kelley 1967, 1973). People may attribute causes to either the other person or to situational factors. The causes may also reside in the trustor himself. When faced with constraints of limited information, time, or motivation, a trustor takes shortcuts and may commit attributional errors or have biases that maintain cognitive consistency. Prior preexisting expectations (e.g., disposition to trust and institutional factors) will bias one's information processing so that only information consistent with the expectations is attended to. For example, a member with high trusting disposition may interpret the silence of others as due to a technical problem and not to other's unreliability. A member with a negative trusting disposition may in turn interpret the same silence to other's intentional nonparticipation. Research on global virtual teams has observed such attribution errors (Cramton 2001, Piccoli and Ives 2003).

### Dirks and Ferrin's (2001) Role of Trust in Organizational Settings

Dirks and Ferrin (2001) also base their trust model on attribution theory. As in the McKnight et al. (1998) model, the Dirks and Ferrin model rests on the assumption that trust reduces ambiguity and uncertainty in social perceptions so cooperative or productive activity can take place. The Dirks and Ferrin model complements the McKnight et al. (1998) model. Whereas the McKnight et al. model focuses on the antecedents of trust, the Dirks and Ferrin model addresses the consequences of trust, advancing two alternative models for the role of trust in attitudinal and behavioral outcomes—the direct effects model and the moderation model. The direct effects model suggests that one's trust in another directly affects attitudes. High levels of trust will cause the trustor to hold positive attitudes, such as high satisfaction, or perceive good performance. Likewise, low levels of trust will yield low satisfaction and low perceived task quality.

The moderation model suggests that trust does not directly elicit any particular behavioral outcomes, but influences how people interpret or evaluate information related to attitudes and behavior. Dirks and Ferrin (2001) identify two explanations for the moderation effect: (1) "trust affects how one *assesses the future behavior* of another party with whom one is interdependent (or who may take action that affects oneself)," and (2) "trust also affects how one *interprets the past (or present) actions* of the other party, and the motives underlying the actions" (p. 456, italics original). Attribution theory suggests that causes of actions are attributed to *internal* characteristics of the other person when the behavior of others is consistent with prior expectations, and causes are attributed to *external* situational characteristics when the behavior is *in*consistent with prior expectations (Jones and Nisbett 1971).

For example, one factor that may be relevant is the communication responsiveness of the other party, such as the amount of time it takes for the other party to reply to an e-mail message. As that time increases, the individual who is waiting for the reply will seek explanations for the slow responsiveness. The moderation model suggests that the interpretation of slow response time and its resulting effect on attitudes will be influenced by the level of trust between the parties. If the team member who sent the original message trusts the team, he or she is likely to attribute the delay to an external factor (e.g., technical failure).

In this situation, attitudes may change very little, if at all. However, if the sender has a low level of trust in the other party, the person is more likely to interpret the response time as noncooperative behavior, negatively affecting attitudes and perceived collective performance of the team.

Dirks and Ferrin (2001) suggest that the role of trust is contingent on the "situational strength" present (p. 461). Trust operates as a direct effect in situations or conditions with weak structure, where individuals lack clear guidance or other powerful factors of how to interpret others' behaviors. Trust fills in the gaps and has a direct effect on outcomes. Trust plays a moderating role in situations or conditions with moderately strong structure where there is some guidance and information to assess the behavior of others, but still some ambiguity about what the other party's behavior means. Factors are present to influence attitudes and behaviors; trust is the lens through which these factors are interpreted. In situations (or conditions) with strong structure, external cues such as norms and rules "over determine" how others will behave. Such situations involve little uncertainty and ambiguity, and there is little role for trust to help make sense of others' behavior.

### Gersick's (1988, 1989) Punctuated Equilibrium Model

The strength of the structure in a situation is likely to vary across different IT-enabled relationships, and also within relationships depending on their developmental stage. Gersick (1988) developed a punctuated equilibrium model of change as a result of observing work teams longitudinally and found that the teams change how they approach their work in midstream. A team's transition is triggered by the temporal midpoint, and marks a change in the structure of the situation.

Before the transition point, the team conditions represent a situation with weak structure (Gersick 1988, 1989). Each individual has his own understanding of the goals and external expectations. There tends to be little discussion and clarification on goals and plans along with little consensus building, rendering a situation in which the team operates as one of uncertainty and ambiguity. In the first part of the team's life, members tend to generate ideas, learn, and gather information, but because there are no shared goals and plans, there is little actual execution of the work tasks. The behaviors of the team members are influenced by their initial expectations of each other, the task, and the context. Individual members form these initial expectations before the team has had a chance to interact (Gersick and Hackman 1990).

After the transition, the team situation becomes moderately strong in structure (Gersick 1988, 1989). The team members have used a significant part of the available time, yet the members feel there is still enough time left to make substantive progress. After having gained experience with the task and the other members, the team members discuss their expectations and form shared goals. Shared goals help introduce structure to the situation in which a team operates. Structure facilitates the team to direct its behavior toward the execution of the required work.

## Global Virtual Teams and Trust: Model and Hypotheses

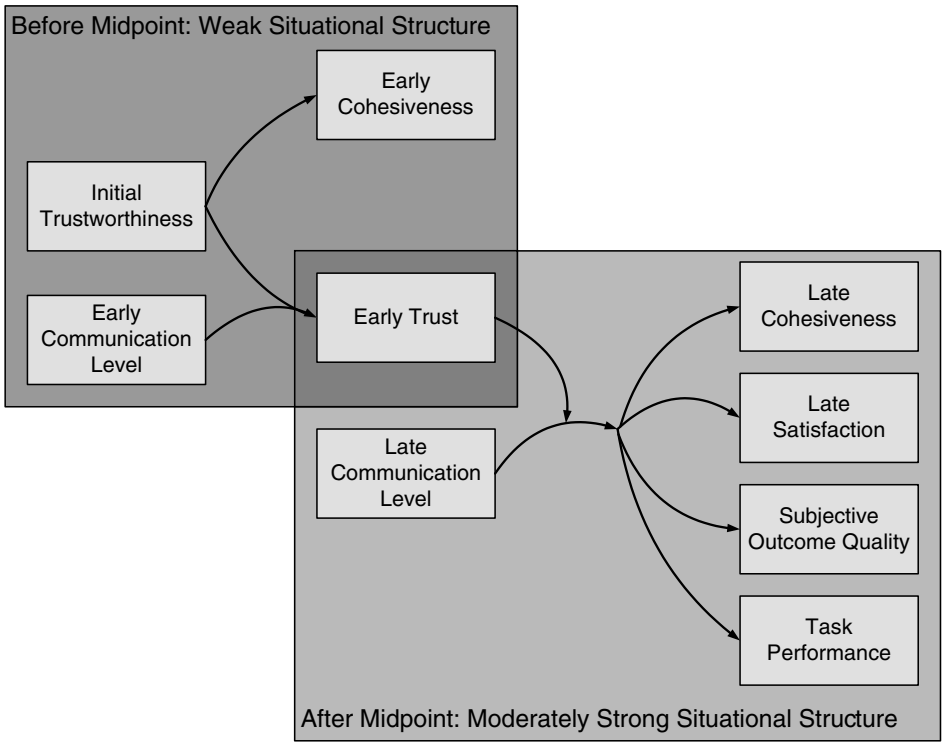
To examine the direct and moderator effects of trust, we chose our dependent variables consistent with Hackman's (1989) definition of team effectiveness in which he identifies three components: task performance, team process, and individual satisfaction. We assess task performance both objectively and subjectively. We assess cohesion as a dimension of team process, and we assess individual satisfaction with the team.

Below, we theorize how the initial trustworthiness of one's team members affects subsequent trust before the team's midpoint (i.e., early trust) and how this early trust affects attitudes and performance at the end. We argue that before the transition point, trust has a direct effect on attitudes because the situation (or condition) is weak in structure, but after this point trust has a moderating effect on attitudes and performance because the situation (or condition) is moderately strong in structure. We advance hypotheses and summarize them in a research model (see Figure 1). The model and hypotheses are at the individual, or trustor, level of analysis.

### Before the Transition Point: Direct Effects of Trust

We conceptualize the situation before the team's transition point as weak in structure (Gersick 1988). Trust has a direct effect on attitudes and behavior in weak

**Figure 1 The Research Model**




situations because people may refer only to their own preexisting psychological dispositions (Dirks and Ferrin 2001). A member's initial trustworthiness of the team captures his trusting belief of the work team before it has started to interact. Attributional processes suggest that initial trustworthiness of the team directly results in increased early trust (trust before the transition point). Initial trustworthiness biases the overall view of the other party unless there is distinctive information available that contradicts the view. We propose that in a new, heterogeneous virtual team facing a novel task and context, the initial trustworthiness beliefs of the team's members affect the level of each person's early trust on the team (trust engendered through early team interactions).

Hypothesis 1a. *Initial trustworthiness has a direct, positive relationship with early trust.*

Attributional processes also suggest that initial trustworthiness of others will become self-reinforcing by the behavior of others. The parties will use the communication behavior of others to substantiate their initial beliefs and attitudes in the early phases of the team's life. In face-to-face situations, Meyerson et al. (1996) emphasize that members must observe behavioral evidence—others acting in a trusting manner—to maintain their trust in the team. Because in a virtual setting members cannot see each other, such evidence comes through communication. Communication behavior within the team assures a member of the others' existence—proof that "someone else is out there" (Jarvenpaa et al. 1998). Therefore, we would expect the level of communication by other members in the team (i.e., not including communication initiated by the individual member) to affect positively a member's early trust.

Hypothesis 1b. *There is a direct, positive relationship between the level of early communication by other members on the team and a member's early trust.*

Besides the self-fulfilling effect on early trust, we also expect initial trustworthiness to affect a member's attitudes about the team's cohesiveness. Cohesiveness refers to a person's subjective impressions of attractiveness to the group, including resistance to leave (Shaw 1980). It has also been framed as morale and motivation, as seen in a team member's willingness to exert effort for the collective benefit (Shaw

1980). Initial trustworthiness should evoke perceptions that other members are attentive and concerned about the team, and committed to the task. Hence, high initial trustworthiness of the team should lead to perceptions of high cohesion.

Hypothesis 1c. *A member's initial trustworthiness in the team has a direct, positive relationship with the member's early perceived cohesiveness of the team.*

**After the Transition Point: Moderator Effects of Trust**

According to the punctuated equilibrium model (Gersick 1988), after the transition point, the situation strengthens in structure. In situations with moderately strong structure, we expect early trust levels to moderate the relationships between others' communication and a member's attitudes and perceptions of task quality (Dirks and Ferrin 2001). In high early trust situations, the relationship between others' communication and a member's attitudes will be weak because the member is likely to devote more attention and effort to the execution of tasks regardless of the level of others' communication. Lapses in communication are attributed to situational factors (e.g., a temporary technical problem) and are less likely to result in a negative assessment of others. A member with low early trust is more concerned about the commitment of others and will appraise the team based on the level of others' communication. In low early trust situations, more communication leads to more positive attitudes (i.e., positive relationship between others' communication and attitudes). A member with low early trust is likely to look for, find, and remember others' communication, so high levels of communication will increase a member's satisfaction and perceived cohesion of the team. For those with low early trust, the communication level will have a greater influence on a team member's attitudes than for those with high early trust.

Hypothesis 2a. *Early trust moderates the relationship between the level of communication by other members on the team and perceived satisfaction with the team.*

Hypothesis 2b. *Early trust moderates the relationship between the level of later communication by other members on the team and perceived cohesiveness of the team.*

Dirks and Ferrin (2001) theorize about the trustor's perceptions of performance, not actual performance. Trust influences the way others' communication activity is interpreted, and this affects judgements about the work outputs. A member who trusts others expects the rest of the team to be at work on deliverables—with or without frequent communication and interaction. In a high trust situation, we expect a weak relationship between others' communication level and a member's perceived quality of team outcomes. However, one who is anxious or concerned about others' potential behavior (i.e., a low trust condition) will find it more difficult to work toward the goal without frequent assurances of others' efforts or monitoring of others' work. Only if others frequently communicate regarding their work efforts will the person perceive the task quality as high.

Hypothesis 2c. *Early trust moderates the relationship between the level of communication by other members on the team and perceived quality of a team's outcome.*

The effect of any single person's level of trust on the actual collective outcome is diffused or limited (Dirks and Ferrin 2001), and empirical studies have observed weak and inconsistent effects of trust on work performance. Although some virtual team researchers (Kanawattanachai and Youngjin 2002) have found trust to be positively associated with performance, Aubert and Kelsey (2003) failed to find any such positive relationship between trust and performance in a research task. They explained the lack of relationship between performance and trust by distinguishing efficiency from effectiveness. Trust reduces process losses or wasted effort to get the team to work together. However, on a creative task such as research, trust does not make a capable team incapable, nor an incapable team capable. Low trust means that team members must work harder to produce the same quality product compared to a team with high trust. Besides spending time to coordinate efforts, the members also spend effort in monitoring others. "Although some low trust teams might have delivered high quality results, they may have expended significantly more effort to do so than did high trust teams" (Aubert and Kelsey 2003, p. 605). Hence, although trust is likely to increase the efficiency of work, a team member's trust in the rest of the team does not necessarily increase the actual quality of task performance.

Hypothesis 2d. *Trust has a negligible effect on the quality of task performance.*

### The Role of Trust in Situations with Strong Structure

Both the role and observable effects of trust are contingent on the structure of the situation (Dirks and Ferrin 2001). As structure becomes strong due to communication within the team about goals, processes, and expectations, the observable effects of trust for individuals, both direct effects and moderator effects, will weaken. In such situations where there is a strong structure that provides information and cues about how others are likely to behave and why, trust is likely to play a weak role: "as cues to behave in a particular way become very strong, concerns related to trust in the other party are likely to be set aside, and therefore trust will not facilitate or hinder the effects of the cues as described in the [moderating or direct proposition]" (Dirks and Ferrin 2001, p. 461). The moderator effects of trust are also unlikely to occur, because team members do not need trust to interpret others' actions. When information is available to help one assess and predict others' behaviors and actions, trust presumably has fewer gaps to fill, and hence would have a reduced impact on the attitudes of the members.

Hypothesis 3. *The effect* (*either direct or moderation*) *of trust on attitudes of team members is weak in a situation with strong structure*.

## Methodology

We conducted two studies of global virtual teams (GVT) to test the hypotheses. Study 1 did not involve any intervention. Study 1 was designed to operationalize a situation of weak and moderate structures. Study 2 involved socialization exercises in the first half of the team's life that served to operationalize a situation with strong structure by decreasing uncertainty and ambiguity. These differences in situational strength are necessary to test Hypothesis 3. The teams in the two studies participated at different times, separated by a few weeks. The teams were assigned to the two studies depending on the academic calendars of the participating universities. Because of conflicting schedules, it was not possible to start and finish everyone at the same time. Time differences helped to mitigate possible sharing of information about the socialization exercises across the two studies.

The socialization teams completed one personal/biographical exercise on the seventh day of the study and another exercise focusing on team dynamics on the fourteenth day (see Appendix A for more details). The socialization exercises were designed to help the team members understand and discuss each others' differences and develop consensus on the team process (including goals).

We assigned all participants to six-person teams, making sure that no two members were from the same university or the same home country. These two conditions were intended to ensure both the virtual and global nature of the teams. The assignment procedure also attempted to maximize demographic heterogeneity within teams, based on each member's sex and nationality, and to equalize this demographic heterogeneity across teams.

There were 94 students from 11 universities in 8 countries (16 teams) who participated in Study 1, and 150 students from 13 countries (26 teams) who participated in Study 2 (see Table 1). The average age of participants in Study 1 was 30 years (ranging from 21 to 50), and 30.8% of the participants

**Table 1 Universities Participating in the Studies**

| Participating university | Study 1 | Study 2 |
|---|---|---|
| Aarhus School of Business (Denmark) | X | |
| Agricultural University Wageningen (Netherlands) | | X |
| Bar-Ilan University (Israel) | X | |
| Chalmers University of Technology (Sweden) | | X |
| Copenhagen Business School (Denmark) | X | |
| Fundacao Getulio Vargas (Brazil) | X | X |
| Helsinki School of Economics and Business Administration (Finland) | | X |
| Helsinki University of Technology (Finland) | | X |
| Indian Institute of Management, Bangalore (India) | | X |
| Melbourne Business School (Australia) | | X |
| Richard Ivey School of Business, University of Western Ontario (Canada) | | X |
| Stockholm School of Economics (Sweden) | | X |
| Swinburne University of Technology (Australia) | X | |
| Tilburg University (Netherlands) | X | |
| Turku School for Economics and Business Administration (Finland) | | X |
| University College Dublin (Ireland) | X | X |
| University of Berne (Switzerland) | | X |
| University of Canberra (Australia) | X | |
| University of Sao Paulo (Brazil) | X | |
| University of Southern Queensland (Australia) | X | |
| University of Texas at Austin (USA) | | X |
| University of Western Australia (Australia) | X | |

were female. In Study 2, the average age of participants was 28 (ranging from 21 to 42), and 21.4% were female. Participants were primarily at the master's level, though some undergraduate seniors who had enrolled in advanced classes along with the master's students were also included. We included respondents in the analysis only if they completed all three questionnaires (described below) to ensure measures for the constructs, and only if their team completed the final assignment.[1] Due to attrition and missing values, the resulting sample size used in the analyses for Study 1 was 52 and for Study 2 was 84.

In both studies, apart from the socialization exercises, the teams worked on the same set of task deliverables during an eight-week period. For the first task, members researched the critical success factors for enterprise resource planning (ERP) software packages in the countries in which team members resided. The deliverable for this task was a single team document, integrating the research from each team member. This document was due in the third week. For the second task (*business plan*) teams were required to write a business plan for a global virtual consulting company, specializing in the implementation of ERP systems. The business plans were due at the end of the eight-week exercise. We provided no feedback or grade on the first task.

The business plan task comprised 25% to 50% of the participants' course grades. The individual instructors assigned a final score. Because different instructors used different scales for the final score, we standardized the scores and averaged them for each team. The average score represented the team performance. The individual instructors had no knowledge of the details of the studies or the hypotheses. We offered a monetary prize for the best business plan.

We supported team collaboration in several ways. A website provided the task schedule and instructions to all participants, as well as additional collaboration resources (e.g., links to websites that explained how to prepare a business plan). One of the authors served as a coordinator for all teams, a role that involved answering questions, resolving technical problems, and providing general announcements as well as reminders about approaching deadlines. Each team had its own listserv so that every e-mail message sent to the team's listserv was distributed to all members of that team. Other means of team communication were not offered or encouraged, and the coordinator reminded participants that only the communication through the listserv provided a record of member participation that would be shared with instructors.

[1] Out of 42 teams, only 2 failed to submit the business plan.

### Data Collection and Measures

**Communication Level.** *Communication level* is the number of e-mail messages sent through the listserv by an individual's teammates over a specific period of time. *Early communication level* is the number of messages sent during the first three weeks of the exercise, at the end of which time the teams turned in their Task 1. *Late communication level* is the number of messages sent during the remaining four weeks of the exercise (i.e., after the midpoint of the life of the team),[2] at which point teams submitted their business plans.

**Task Performance.** Task performance is measured by the grade the team received on their business plan, using a standardized grading scheme. This provides an objective, independent measure of team effectiveness, beyond the perceptual measures described below.

We measured the remaining constructs in the research model via surveys at the beginning, before the midpoint, and at the end of the project. We assured the participants that their responses were confidential, would be seen only by the researchers (and not by their instructors), and that their survey responses would in no way influence their grade on the project. All items on all the questionnaires focused on the individual's perceptions of his or her team. In many cases the items had to be reframed at the team level, because the original source focused on either

[2] We tested the sensitivity of our findings to using different communication timeframes and found the results robust. The results were very similar to those reported in the paper when we used three weeks for early communication and five weeks for late communication, as well as splitting the communications at 4 and 4 weeks. Therefore, we chose to present our findings based on the timeline that corresponds most closely to Gersick's (1988, 1989) model, such that we defined *late communications* as being after the midpoint of the team's life.

dyadic or organizational relationships. Only participants who completed the first questionnaire were assigned to teams. The first questionnaire also asked for demographic and team experience data, as well as for the individual's description of the perceived trustworthiness of his or her team (prior to any interaction with teammates). We administered the second questionnaire immediately after the first task was completed (at three weeks). We administered the third questionnaire after the business plan was completed (at eight weeks). To enhance reliability and construct validity, we used scales to measure each of the constructs in the questionnaires that were based on previous research. Details can be found in Appendix B.

**Control Variables.** We examined several factors to eliminate alternative interpretations of the effects of trust. We examined the effect of controlling for cultural values based on each member's home country using Hofstede's (1980) uncertainty avoidance and individualism dimensions of culture. These dimensions were used because the values they reflect are likely the most relevant to team behavior. These control variables were not statistically significantly related to the endogenous variables, so they were not included in the main analysis. We also checked for potential biases in the composition of the groups in Studies 1 and 2. We computed group heterogeneity scores comprised of each participant's nationality (i.e., home country), sex, and age. We used Blau's (1977) heterogeneity index to compute a nationality heterogeneity index and a sex heterogeneity index, and used the coefficient of variation to compute age heterogeneity. To control for the potential difficulties that time zone differences might cause, we also included a heterogeneity measure for the members' time zones (based on Greenwich Mean Time). Unpaired *t*-test analyses found significant differences between the two studies of respondents on two of the variables, age heterogeneity and time zones heterogeneity, so these variables were controlled for in the analysis by including them in the model.

### Analytical Procedures

We chose partial least squares (PLS), a structural equation modeling (SEM) technique, for analyzing relationships between variables in the research model (for more information on PLS, see Barclay et al. 1995, or Hulland 1999). The minimum sample required is calculated by identifying the endogenous construct with the most paths leading into it. The minimum sample size is 10 times the number of paths leading into this construct, so our sample size is adequate (Chin 1998). We modeled constructs with reflective indicators.

The interaction effects between the early trust and late communication levels constructs were modeled consistently with the approach described by Chin et al. (1996) and Aiken and West (1996). That is, we first centered the indicators for the direct and moderating constructs. We then created pairwise product indicators by multiplying each indicator from the direct construct (i.e., late communication levels) with each indicator for the moderator construct (i.e., early trust). We used these new product indicators to reflect the interaction construct and to test the research model.

When two different groups exist to be analyzed, there are two possible approaches with SEM. A dummy variable can be introduced to represent the different conditions or the groups can be analyzed separately and the results then compared. The use of dummy variables is appropriate when the path coefficients between variables other than those directly linked to the dummy variable are expected to be equal for both groups (Joreskog and Sorbom 1989). That is not the case here. The socialization exercise potentially changes the situation's structure for the life of the team, and as such the intervention would be expected to affect the whole model (i.e., not just the results in the first few weeks). In this situation, where the manipulation influences the theoretical relationship among the endogenous variables, analysis of the groups separately is appropriate (Bagozzi et al. 1991).

## Analysis Results

With PLS, structural equation modeling involves two steps: assessment of the measurement model and then assessment of the explanatory and predictive power of the model (i.e., the structural model). Details of each step are below.

### Measurement Model Results

Table 2 reports internal consistency values for each of the constructs in the research model using the

**Table 2 Internal Consistency of the Constructs**

| | | Study 1 | | | Study 2 | | |
|---|---|---|---|---|---|---|---|
| Construct/scale | Number of items | Internal consistency[1] | Cronbach's alpha | Average variance extracted | Internal consistency[1] | Cronbach's alpha | Average variance extracted |
| Initial trustworthiness | 6 | 0.87 | 0.80 | 0.53 | 0.85 | 0.79 | 0.49 |
| Early cohesiveness | 4 | 0.89 | 0.84 | 0.69 | 0.81 | 0.67 | 0.52 |
| Early trust | 4 | 0.85 | 0.77 | 0.58 | 0.87 | 0.80 | 0.64 |
| Interaction of early trust and late communication level | 4 | 0.86 | 0.79 | 0.62 | 0.93 | 0.84 | 0.76 |
| Late cohesiveness | 4 | 0.92 | 0.89 | 0.75 | 0.91 | 0.87 | 0.72 |
| Late satisfaction | 4 | 0.93 | 0.89 | 0.78 | 0.91 | 0.86 | 0.70 |
| Subjective outcome quality | 4 | 0.96 | 0.94 | 0.87 | 0.95 | 0.93 | 0.82 |

[1]Calculated using the Fornell and Larcker (1981) method.

Fornell and Larcker (1981) internal consistency formula (we also include Cronbach's alpha for comparative purposes). The internal consistency scores should exceed 0.7, and they do for all scales in Table 2, indicating adequate reliability. Table 2 also reports the average variance extracted. The square root of this measure is used in the diagonal elements of Table 3 to assess discriminant validity (Table 3 also contains mean scores and standard deviations for each construct). For discriminant validity, these diagonal elements should be larger than any of the intercorrelations between the latent variables (Barclay et al. 1995), which they are. We also examined the loadings of each individual item to ensure that adequate discriminant validity existed.[3] All the items, with one exception, loaded highest on their target construct. The one item was kept because it was felt that the meaning of the question represented an important aspect of the construct, the construct validity at the construct level was adequate, the item did load highest on its target construct in Study 2, and there was no relationship hypothesized or tested between the constructs that this item cross-loaded on. Overall, the results suggest the measurement model is adequate, so the structural model can now be examined.

### Structural Model Results

The evaluation of the structural model also involves two steps. First, we analyzed the strength of the hypothesized relationships among the constructs to test Hypotheses 1 and 2 (see Table 4), and second, to test Hypothesis 3, we assessed the predictive power of the model for both studies by examining the $R^2$ values on the endogenous variables (see Table 5). Table 4 summarizes, for both studies, the path coefficients obtained from the PLS analyses and associated hypotheses, and $t$-values for each path obtained through bootstrapping. Although not included in Table 4 because there were no associated hypotheses for these, the direct effects for early trust and late communication level constructs on the perceived outcomes were included in the analyses, consistent with standard interaction testing techniques (Aiken and West 1996). To test Hypothesis 2d, we examined the possibility of trust having either a moderating effect or direct effect on (objective) business plan performance.

We found strong support for the research model in Study 1 (no socialization teams). The hypothesized direct effects in the early part of the model were supported (Hypotheses 1a, 1b, and 1c), indicating that trust has a direct effect on attitudes in situations that are weak in structure.[4] The three hypothesized interaction effects were also found to be significant (Hypotheses 2a through 2c), supporting the position that trust moderates the relationships between communication levels and the attitudinal and perceptual task quality outcomes in situations

[3] Cross-loading matrices are available from the authors.

[4] Although not hypothesized because theory suggested direct effects in weak structural conditions, we did examine the possibility of initial trust moderating the relationship between early communication level and early trust. We found the interaction term was not statistically significant in either study.

**Table 3 Discriminant Validity Analysis—Study 1**[1]

| | Mean | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Initial trustworthiness | 3.968 | 0.598 | **0.728** | | | | | | | | |
| 2. Early cohesiveness | 3.020 | 0.680 | 0.437 | **0.831** | | | | | | | |
| 3. Early communication level | 27.71 | 14.13 | 0.023 | 0.215 | — | | | | | | |
| 4. Early trust | 3.630 | 0.711 | 0.508 | 0.676 | 0.297 | **0.762** | | | | | |
| 5. Late communication level | 73.69 | 77.82 | −0.010 | −0.013 | 0.626 | 0.236 | — | | | | |
| 6. Interaction of early trust & late communication | — | — | −0.297 | −0.246 | 0.372 | 0.103 | 0.406 | **0.787** | | | |
| 7. Late cohesiveness | 3.385 | 0.948 | 0.204 | 0.538 | 0.086 | 0.549 | 0.231 | −0.287 | **0.866** | | |
| 8. Late satisfaction | 3.928 | 0.962 | 0.246 | 0.470 | 0.251 | 0.618 | 0.367 | −0.208 | 0.705 | **0.883** | |
| 9. Subjective outcome quality | 3.553 | 1.091 | 0.267 | 0.454 | 0.072 | 0.491 | 0.143 | −0.428 | 0.707 | 0.702 | **0.933** |
| 10. Task performance | 2.077 | 0.763 | 0.049 | −0.022 | 0.124 | 0.147 | 0.511 | 0.036 | 0.102 | 0.222 | −0.053 |

[1]The bold diagonal elements are the square root of the variance shared between the constructs and their measures (i.e., the square root of the average variance extracted). (No such measure exists for the single-item constructs.) Off-diagonal elements in the nine right-most columns are the correlations between latent constructs. Due to space restrictions, only the intercorrelation matrix for Study 1 is included in the paper. The matrix for Study 2 is available from the authors, and it shows similar results.

**Table 4 Summary of the Path Coefficients Results**

| | Study 1 | | | Study 2 | | |
|---|---|---|---|---|---|---|
| Hypotheses and corresponding path(s) | Path coefficient | *t*-value | Path statistically significantly different than zero? | Path coefficient | *t*-value | Path statistically significantly different than zero? |
| $H_{1A}$: Initial trustworthiness to early trust (direct effect) | 0.514 | 5.435*** | YES | 0.167 | 1.444 | NO |
| $H_{1B}$: Early communication level to early trust (direct effect) | 0.368 | 3.249** | YES | 0.341 | 3.115** | YES |
| $H_{1C}$: Initial trustworthiness to early cohesiveness (direct effect) | 0.437 | 4.835*** | YES | 0.408 | 6.247*** | YES |
| $H_{2A}$: Moderating effect of early trust on the relationship: • Late communication level to late satisfaction | −0.283 | 2.190* | YES | −0.003 | 0.034 | NO |
| $H_{2B}$: Moderating effect of early trust on the relationship: • Late communication level to late cohesiveness | −0.299 | 2.832** | YES | 0.114 | 0.298 | NO |
| $H_{2C}$: Moderating effect of early trust on the relationship: • Late communication level to subjective outcome quality | −0.501 | 2.962** | YES | 0.040 | 0.886 | NO |
| $H_{2D}$: Early trust to task performance (direct effect) | 0.024 | 0.178 | NO | 0.067 | 0.660 | NO |
| Moderating effect of early trust on the relationship: • Late communication level to task performance | −0.090 | 0.680 | NO | 0.147 | 1.413 | NO |

*Notes.* *t*-statistics were calculated using bootstrapping, using 500 samples.
*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$ (2-tailed test).

**Table 5 The Predictive Power of the Model**

| Endogenous constructs | Study 1 Variance explained (%) | Study 2 Variance explained (%) | Variance ratio test $F(51, 83)$ |
|---|---|---|---|
| Early cohesiveness | 19.1 | 16.7 | 1.144 |
| Early trust | 37.0 | 14.3 | 2.587* |
| Late cohesiveness | 45.3 | 24.0 | 1.888* |
| Late satisfaction | 52.3 | 40.8 | 1.282 |
| Subjective outcome quality | 43.9 | 14.8 | 2.966* |
| Task performance | 62.2 | 28.5 | 2.182* |

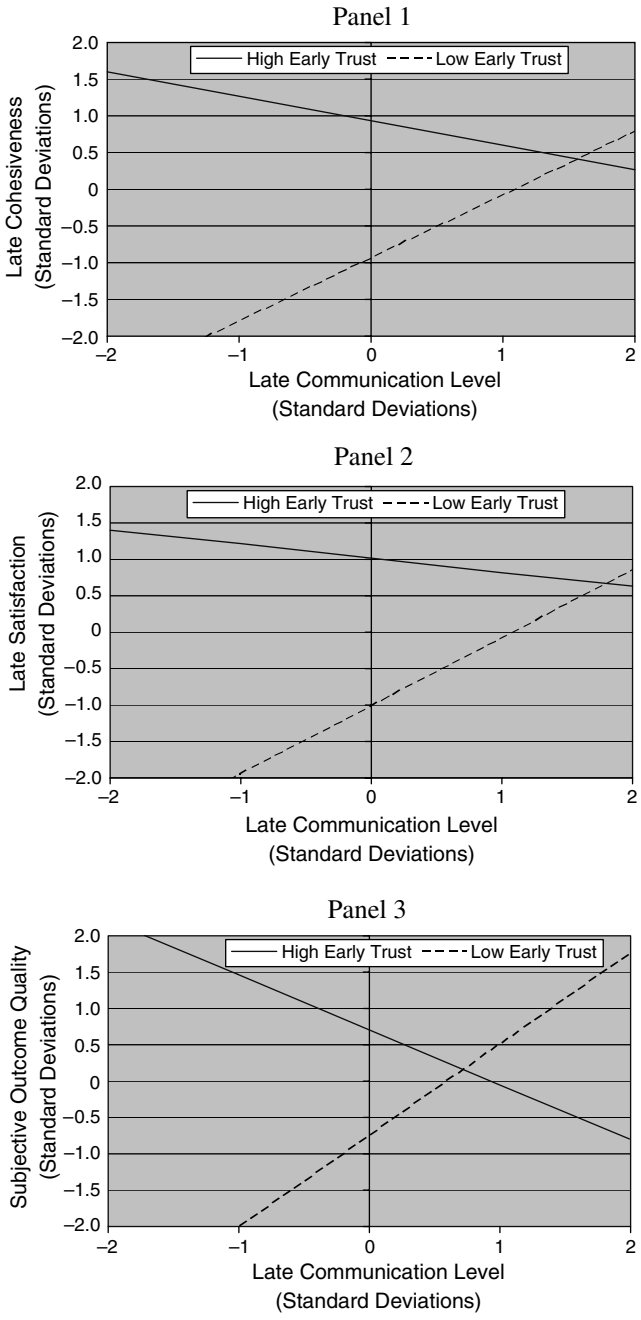
*Statistically significant difference (i.e., $p \leq 0.05$, one-tailed test).

with moderately strong structure (i.e., after the transition point). Trust was not found to moderate the relationship between late communication level and task performance, and the direct relationship between early trust and task performance was not significant. These findings are consistent with Dirks and Ferrin's (2001) suggestions that trust does not necessarily have a strong relationship with actual performance, supporting Hypothesis 2d.

The existence of a significant interaction implies that the relationship between two constructs changes depending on the level of a third (i.e., in our case, early trust). Graphical analysis is a standard technique for examining interactions (Aiken and West 1996). We examine these interactions in charts (Figure 2) that illustrate the moderating effects of early trust on the relationships between the level of communication and the three outcomes (cohesiveness, satisfaction, and perceived outcome quality). The range used for the $x$-axis is plus/minus two standard deviations. The units on the graphs are standard deviations, and the values are all standardized. Two regression lines are plotted on each chart—one for a high value of the moderator variable early trust (i.e., two standard deviations above the mean) and one for a low value of initial trust (i.e., two standard deviations below the mean).

As can be seen in all the panels in Figure 2, there is a strong positive relationship between the level of communications in the last four weeks and the attitudes and perceived task quality under low early trust conditions (i.e., in this situation, more communications will be associated with more positive attitudes and higher perceived task quality). However, under high early trust conditions, the relationships between communication level and the outcomes are markedly different. The relationship with communication level is moderately negative. This implies that under high trust conditions, a higher level of communication will not be associated with more positive attitudes about the team or perceived task quality.

**Figure 2 Analysis of the Moderation Effects of Early Trust Under Moderate Structure**



The results from Study 2 are strikingly different from those found in Study 1. We found no support for early trust having a moderating effect on the relationship between communication levels and any of the three outcome variables (attitudes and perceived task quality). Because we found no interaction effects, we went on to examine the direct effects between early trust and the outcomes. We found several of these direct relationships to be statistically significant: early trust to late cohesiveness, late satisfaction, and subjective outcome quality. These three direct paths were also statistically significant in Study 1 (all also had larger path coefficients), although they cannot be interpreted directly due to the existing significant interaction effects. Support was found again for Hypothesis 2d, in that the relationship between early trust and task performance was not statistically significant.

Hypothesis 3 proposed that trust effects are weak in situations with strong structure. To examine this hypothesis, we assessed the variance explained by the model in the two studies. The predictive power of the model (i.e., variance explained) was quite high in Study 1, explaining approximately one-third to over one-half of the variance in the outcome variables and 37% of the variance in early trust. The predictive power of the model for Study 2 was considerably less, explaining on average only 54% of the variance that the model did in Study 1. The variance explained is larger for all endogenous variables in Study 1 than in Study 2, and a variance ratio test (Anderson and Sclove 1978) found that four out of the six differences were statistically significantly different (Table 5). Therefore, Hypothesis 3 is supported in that the proposed trust model explains much more variance in most of the dependent variables in the situations or conditions with weak and moderate structure (Study 1) than it did in the situation with stronger structure (Study 2).

## Implications of the Findings and Research Directions

The theory and results have several implications for research and practice.

### Implications for Research

We see six important implications for research. First, and perhaps the most significant implication of the results, is that trust effects depend on the situation's structure. Many have speculated the likelihood of such effects (e.g., Kramer 1999, Rousseau et al. 1998), others have theorized such effects (Dirks and Ferrin 2001), and some have provided anecdotal evidence (e.g., Becerra and Gupta 2003). This study provides systematic empirical evidence using a relatively large number of global virtual teams. According to Dirks and Ferrin (2001), trust is likely to have the greatest effect in situations or conditions with weak structure, some effect in situations with moderately strong structure, and little effect in situations with strong structure. Our observations are consistent with this contention. We found that the trust model explained more variance in the conditions with less structure: those teams that did not participate in the socialization exercises. The effects were less evident in the conditions with strong structure (i.e., socialization teams). The intervention that was intended to reduce uncertainty weakened the role of trust. When there is less uncertainty, the interpretation process itself becomes unnecessary, reducing the role of trust. Findings suggest that future research should refrain from general theories on trust because trust effects are highly situation specific. This paper used situational structure as an exemplar of context. Future studies should seek finer-grained understanding of the effects of trust in varying contexts (e.g., dimensions such as physical, task, social, etc.).

Second, the findings show that trust effects are not necessarily direct and linear. Studies of the direct effects of trust have dominated research on virtual teams and technology-mediated interactions. This paper provides insight into alternative roles of trust and how roles vary by the situation. We agree with Dirks and Ferrin's (2001) suggestion that trust researchers should examine both direct and moderating effects in their empirical work. Otherwise, research leaves the possibility of erroneous interpretations of the role of trust. The magnitude of the direct effect can be easily misinterpreted, particularly in situations where both direct and moderator effects exist, but only direct effects are tested.

Third, the current results suggest that trust provides important benefits for IT-enabled relationships. For example, high early trust buffered members from the leaky, incomplete, unpredictable, and at times

chaotic processes that are characteristic of global virtual team interaction. Those with high trust appeared to be willing to dismiss lapses in communication or reduction in others' communication, possibly attributing these to external factors. However, the research points out that we should not assume that among the benefits associated with trust is improved task performance. No relationship between trust and task performance was found. Although trust can eliminate various process losses, trust does not necessarily result in an improved task outcome. Prior virtual team studies have been inconsistent on the relationship between trust and performance results and the alternative roles of trust may allow us to better understand these mixed results.

Fourth, the results also support the critical link between communication early in the life of a virtual team and early trust. Members' frequent communication in the team provides reassurance that others are attending to the task and increases a member's early trust in the team and feelings of cohesiveness. However, under high early trust conditions, more communication is not associated with more positive attitudes or performance. In fact, our findings suggest a mild negative relationship. It is possible that the high levels of communication might cause a member to become suspicious that others are monitoring him/her, and hence his/her satisfaction with the team decreases. In this situation, a high level of communication could be seen as a nuisance, getting in the way of task completion. In a low trust situation, frequent communication is necessary to provide constant confirmation that teammates are still there and still on task. Communication is not a distraction to the low truster, but instead provides important information that will lead him or her to think the team is committed and will produce a high quality report. We encourage additional examinations on the relationship between communication and trust.

The fifth implication is that the study highlights the relationship between time and trust. Others have encouraged studies that examine the role of time and its dynamics (Hinds and Bailey 2003). Maznevski and Chudoba (2000) found that face-to-face meetings provided important time markings and transitions, helping the team to shift gears and renew its enthusiasm and energy. In Study 1, time marked the transition at midpoint from a situation with weak structure to a situation with moderately strong structure. Time is important because it is a critical part of context. Because it appears that the role of trust varies with the structure in place, and structure varies with time, the time when trust is examined is an important factor to consider when studying theoretical relationships between trust and other factors.

Finally, the results suggest that attribution theory is useful for studying contextualized views of trust because the theory recognizes the importance of situational factors in affecting people's social perceptions of others and themselves (Kelley 1973). In this article, we used the logic from attribution theory to theorize about the effects of trust under situations of differing structure. We encourage richer applications of attribution theory where several attribution errors are studied simultaneously (e.g., Ferrin and Dirks 2003). Future research should also empirically test attributional processes to more fully understand the mechanisms via which trust effects operate. The data available in the current studies did not allow us to directly test these mechanisms.

**Implications for Practice**

Dirks and Ferrin (2001) argue that the differing roles of trust have significant managerial implications. Our results echo the suggestion that ways of using trust as a managerial intervention depend on the situation and conditions present. In situations with weak structure, managers may attempt to change the level of trust. Increases in trust are likely to have a direct, positive impact on a team member's attitudes and perceived outcomes. In situations with moderately strong structure, increases in trust are likely to have contingent impacts through other factors. In situations with strong structure, increases in trust are likely to have little or no effect on work outcomes.

What is the right amount of trust and structure a manager should target for a virtual team? A low amount of trust is clearly a disadvantage in all settings. In a situation with low structure, low trust is directly associated with negative attitudes and low future trust. When trust is lacking, managers can change this situation by turning the weak situation into a more structured situation through socialization, planning, and coordinating activities. Low trust

in a moderately strong structural situation implies that more structure is needed (to communicate, coordinate, and monitor) for positive outcomes. In a situation with moderately strong structure, perhaps a moderate level of trust is the most effective. If trust is too high, communication may negatively impact attitudes and outcomes because people feel they do not need to engage in these activities. All in all, managers need to balance the levels of trust and the degree of structure within a team. Monitoring the level of trust of team members would provide managers with an indication of a team's need for more or less structure and trust.

Interestingly, the moderation effect suggests that trust can have unpleasant consequences. That is, increases in trust do not necessarily imply increases in positive organizational outcomes. Both Dirks and Ferrin (2001) and Kramer et al. (1996) note that high levels of trust may not always be justified because of the risk that others will take advantage of the situation. Under high levels of trust, the trustor is more likely to cooperate, put oneself at risk to the other party, and perceive the other party's actions in a positive light. This is because trust affects how the member interprets the past behavior of others, and a member with high initial trust may miss how partners are taking advantage of him or her, misinterpreting others' behavior. This can further fuel opportunistic behavior. Overly trusting members may be turned into "virtual slaves," where peer workers place ever-escalating demands under the banner of "what is in the interest of our team." Ironically, the promise of virtual organizational forms was to free workers from the constraints of time and space (Boden and Molotch 1994). Virtual forms can make it more difficult to understand the true motives of others on whom one is dependent.

### Limitations

The implications must be considered in the light of the study's weaknesses. The theory advanced in the current paper considered only one aspect of context: the strength of the structure. Moreover, the context was treated as static, not dynamic. The empirical parts of the studies face limitations. The two studies presented different situations (no socialization and socialization); however, the studies did not directly measure the strength in structure. We relied on Gersick's (1988) work on team development that was developed with face-to-face teams. Future research should empirically validate this model in a virtual context. In all teams, the members were limited to virtual interaction without any face-to-face contact. While this provided a consistent communication environment across groups, the results cannot necessarily be generalized to mixed communication environments. The technological environment was limited to asynchronous e-mail, Web technology (pre-Netscape/Internet Explorer Versions 4.0), and for a handful of teams synchronous chat rooms, none of which took advantage of videoconferencing. One might question whether student groups are appropriate for studying global virtual teams and the generalizability of the sample. In the study's defense, the average age of the sample was 28, and the majority of the students were working full- or part-time or had significant prior work experience. Also, the exercise had real consequences for the students. Admittedly, the study did not incorporate a field setting of naturally occurring teams. The current teams were also limited to one group size (five to six members). The generalizability of the findings to groups of different sizes and types are not known at this point, offering opportunities for future research.

### Conclusion

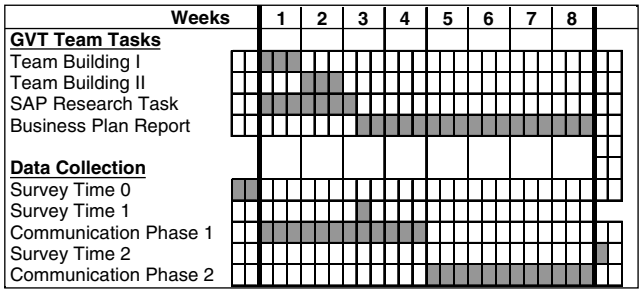
In conclusion, this paper contributes by increasing our theoretical and empirical understanding of the consequences of trusting beliefs and trust in IT-mediated relationships. The importance of trust has been increasingly recognized in the IS literature, and the prevailing assumption of trust is that it engenders direct, positive organizational consequences. This paper illustrates that moderator effects of trust in IT environments are also possible. The theory and results posited in this paper call for contextualized views of trust in global virtual teams. Virtual teams have been identified as particularly fruitful ground for gaining an understanding of how trust moderates, rather than directly affects, outcomes (Dirks and Ferrin 2001, p. 461). Although the global virtual team was the context for theorizing and empirical testing, the research model may be more broadly applicable to IT-enabled relationships between two parties that represent either individuals or collective entities.

## Appendix A. Socialization Exercise Details

**Team Building Exercise 1**
This exercise required each member to send a message to the rest of the team describing him/herself. Paragraphs that were to be included for each sender provided: (1) a personal description, (2) a professional description, (3) the sender's learning objectives for this project, (4) the sender's skills and capabilities contributing to the objectives, (5) perceived challenges in working in an international environment, and (6) perceived challenges in working in a virtual environment.

**Team Building Exercise 2**
Participants had to discuss the importance of the following nine factors to ensure a successful global virtual team experience: (1) members are committed, (2) good results come from conflict, (3) members listen (i.e., provide detailed feedback) to one another, (4) everyone participates, (5) members can disagree without fear, (6) members like each other, (7) the group discussed goals, (8) members help each other, and (9) each member takes responsibility. The team was asked to provide a plan describing how it would make sure that the important factors happened in their team.

**Timeframe of Participant Tasks and Data Collection**




## Appendix B. Questionnaire Items

All of the items were measured on five-point Likert scales.

**Construct: Initial Trustworthiness.** Item Source—Pearce et al. (1992).

- We will have confidence in one another on this team.
- I will be able to rely on those I work with in this team.
- There will be a noticeable lack of confidence among those I will work with.
- Overall, the people will be very trustworthy.
- We will usually be considerate of one another's feelings in this team.
- The people in my team will be friendly.

**Construct: Cohesion.** Item Source—Chidambaram's (1996) cohesiveness scale, which was adapted from Seashore's (1954) index of group cohesiveness

- I feel that I am a part of the team.
- My team works together better than most teams on which I have worked.
- My teammates and I help each other better than most other teams on which I have worked.
- My teammates and I get along better than most other teams on which I have worked.

**Construct: Early Trust.** Item Source—Schoorman et al. (1996)

- I feel comfortable depending on my team members for the completion of the project.
- I feel that I will not be able to count on my team members to help me.
- I am comfortable letting other team members take responsibility for tasks which are critical to the project, even when I cannot monitor them.
- I feel that I can trust my team members completely.

**Construct: Satisfaction.** Item Source—Valacich et al. (1992)

- How satisfied were you with your team's process?
- How satisfied were you with the outcome of your team's project?
- How satisfied were you with the other members in your team?
- Overall, how satisfied were you with participating in this global virtual team collaboration?

**Construct: Subjective Outcome Quality.** Item Source—Items were context specific for this study, but consistent with those developed by Maurer and Tarulli (1994) for a different task.

- The business plan my team developed will earn a high grade from my professor in this course.
- The business plan my team developed would convince a banker or venture capitalist to finance our new consulting firm.
- The business plan my team developed would convince experienced consultants to join our new consulting firm.
- The business plan my team developed would convince prospective clients to hire our new consulting firm.

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