INITIAL TRUST FORMATION IN TEMPORARY SMALL TASK GROUPS: 
TESTING A MODEL OF SWIFT TRUST

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of Kent State University in partial fulfillment of the 
requirements for the degree of 
Doctor of Philosophy

by
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CHAPTER 1
INTRODUCTION

Trust has been conceptualized mainly as a process that develops over time (Blau, 1964; Rempel, Holmes, & Zana, 1985; Zand, 1972). However, considering the fast pace of work in many of today’s organizations, there is little time for trust to develop following “traditional” patterns: familiarity, shared experience, reciprocal disclosure, threats and deterrents, fulfilled promises, and demonstrations of non-exploitation of vulnerability (Meyerson, Weick, & Kramer, 1996). With numerous boards, teams, and meetings held daily in American businesses, scholars have focused their attention on the newly formed type of group—the temporary group—which requires a special type of trust, swift trust. Swift trust is “a unique form of collective perception and relating that is capable of managing issues of vulnerability, uncertainty, risk, and expectations” (Meyerson et al., p. 167). Temporary groups display behaviors that presuppose trust, although they do not have a history of trust development. According to Meyerson et al. (1996), this form of swift trust is real, not merely trust-like behavior.

There are numerous opportunities for naturally occurring temporary groups that need a fast development of trust. Examples of temporary groups and organizations are: cockpit crews, presidential commissions, firefighting teams, theater and architectural groups, construction crews, auditing teams, negotiation cartels, juries, film crews, election campaign organizations, newly formed cross-functional teams, organizations formed as a result of a merger, or new joint ventures (McNight, Cummings, & Chervany, 1998; Messik & Kramer, 2001). Other situations in which trust “has to” develop fast are: when a university committee is put together, when a group of students is assigned a class
project, when a board of directors starts working together, or when civil, social, and religious organizations with short-term goals are assembled. In short, temporary work groups are far from uncommon.

Goodman and Goodman (1976) were among the first researchers who conceptualized temporary systems. They defined them as a “set of diversely skilled people working together on a complex task over a limited period of time“ (Goodman & Goodman, 1976, p. 494). In organizations, temporary work teams or task organizations have become the norm, as mergers or acquisitions increase and as widespread corporate restructuring occurs.

Working together requires a level of initial trust. Moreover, whether or not trust is established in temporary work groups has a constraining effect on communication. To understand the mechanisms of initial trust formation and to be able to predict its effects on communication, performance, and satisfaction, scholars have argued that there is a need for an adequate model of how trust forms (McNight et al., 1998). In this study, I proposed such a model of trust formation in temporary small groups using attribution and uncertainty reduction theories as a theoretical framework.

**Statement of Purpose**

My purposes were threefold. First, I wanted to identify the mechanisms through which trust is established, highlighting the communication aspects of it in temporary task groups. In order to accomplish this goal, I drew from the literature of organizational studies, interpersonal relationships, and small group communication to propose an appropriate definition of trust for temporary task groups.
Second, I proposed to further the development of two relationship-development theories by testing their assumptions in initial trust formation situations. Attribution theory and uncertainty reduction both come from the same psychological perspective of information needs (Heider, 1958). Their common basic assumption is that, in situations where information about others is lacking, people make attributions about others’ behavior. By extending the realm of phenomena in these theories to trust in small groups, I tested their assumptions on trust formation and extend their scope.

Third, I proposed a theoretical model to explain the formation of trust in temporary work groups. The model highlights the mechanisms through which trust is established and the outcomes of trust formation in temporary work groups. The model was tested in temporary group settings.

Rationale

Although trust has been a topic of interest for a long time in scholarly and lay discourse alike, only recently have organizational researchers started to understand the significance of trust for organizational life (McEvily, Perrone, & Zaheer, 2003). Recent scholarly attention to issues of trust is due to several reasons. First, the predominance of theoretical models emphasizing efficiency and economic reasons for trust left out the importance of social fabric of work groups, in which trust is a central element. Second, changes in organizational life, such as mergers, collaborations, and short-term projects have brought to light new factors that contribute to the competitive advantage of an organization, social factors. Third, changes in technology have reconfigured the coordination of work across space and time resulting in more opportunities for non-
traditional work groups, in which the dynamics of relationship development have changed.

The role of trust in an organization’s life has been highlighted by numerous research studies. Several researchers analyzed the issue of trust in work groups in relation to new members (who were not fully accepted by the group) and the disclosure patterns of “old” members (Moreland & Levine, 2002). Group members who were more trusted also received a higher amount of self-disclosure. In virtual teams, trust formation was linked to ability and integrity, but it was not related to performance (Aubert & Kelsey, 2003). Trust does not influence performance directly; rather it has a mediating effect. Dirks (1999) found that trust was a mediating variable between motivation and group performance.

Trust also plays a role in social influence. Researchers found trust to be linked to influence strategies and dependency (Wells & Kipnis, 2001). Trusting subjects reported being more influenced by others than untrusting subjects in an ambiguous group setting (Heimovics, 1984). This influential role of trust makes it an important element of team building (Mendoza, 2001).

Organizations can benefit tremendously by understanding the mechanisms through which trust forms in groups. Although trust “binds and blinds” when it is misplaced, it can also generate efficiencies “by conserving cognitive resources, lowering transaction costs, and simplifying decision making” (McEvily et al., 2003, p. 99). These positive consequences of trust make it a valuable asset for organizations.

In this study, I applied two theories used in explaining initial interactions--attribution theory and uncertainty reduction theory--to not only help clarify the nature of
trust, but also provide insight into the mechanisms of trust formation. Trust is an element of social relationships. It is, partly, what holds a relationship together. It can also help people predict whether a relationship will develop or will stagnate. This is especially relevant in groups because of the complex dynamic of relationships among group members and their influence on group performance and satisfaction.

A significant body of knowledge from different research streams sheds light on how initial trust forms. In the next section, I review the conceptualizations of trust and propose a working definition.

Conceptualizations of Trust

Over the years, many scholars have studied trust from several disciplinary perspectives: anthropology, communication, economics, history, psychology, sociology, and political science. As we can expect with such a diversity of scholarship, researchers have offered many, and sometimes competing, definitions of trust, highlighting one aspect or another. In spite of the intellectual rewards from integrating such a diverse body of knowledge, only a few attempts have been made to articulate a coherent definition of trust (Lewicki & Bunker, 1996). Many approaches to trust lack a clear differentiation among factors that contribute to trust, trust itself, and the outcomes of trust (Mayer, Davis, & Schoorman, 1995). Without such differentiation, the difference between trust and similar constructs is blurred and the research findings are hard to compare.

Worchel (1979) proposed that the different approaches to trust could be categorized in three main groups. Personality definitions have focused on individual personality differences in the readiness to trust and the factors that influence this readiness; in this view, trust is defined as a belief or feeling within the trustor (e.g., a
general belief in a just world). Sociological and economical definitions have focused on trust as an institutional phenomenon; in this view, trust is defined as calculative choices based on rationally derived benefits and costs. Social psychological definitions have focused on the interpersonal transactions between individuals; in this view, trust is defined as the expectation of the other party in transactions, the risks associated with these expectations, and the external factors that influence these expectations.

McNight et al. (1998), from a psychological viewpoint, made the argument that initial trust between parties must be “based on an individual’s predisposition to trust or on institutional cues that enable one person to trust another without firsthand knowledge” (p. 474). They differentiated between trusting intentions (willingness to depend on the other person) and trusting beliefs (the other person is competent, honest, or predictable). Some researchers see trust as a personality trait (Rotter, 1980) and, therefore, examine the effects of trust on prosocial behavior or anti-social behavior (e.g., Leathers, 1970). In this view, people trust others because they have a general belief in a just world.

In the sociological and economical models, trust has been conceptualized mainly as a rational outcome of a relationship. People invest trust in a relationship the same way they make other investments, based on the perceived rewards of a relationship. In this view, trust can be influenced by characteristics of the situation and cognitive states (Pearce, 1974) or the rewards structure within an organization (Ferrin & Dirks, 2003).

For social psychologists, the concept of risk is central to most definitions of trust (Lewicki & Bunker, 1996). They study trust as positive expectations about another person’s behavior in a risky situation (Schlenker, Helm, & Tedeschi, 1973). Trust is also seen as an outcome of relational intimacy and control (Canary & Cupach, 1988).
Wheeless and Grotz (1977) found that individualized trust, as opposed to generalized trust, was related to self-disclosure and both are outcomes of communication in relationship development.

What distinguishes psychological and rationalist definitions of trust is the emphasis placed on the cognitive versus affective processes involved in trust formation. Rationalist models tend to rule out any emotions or affect, whereas psychological models incorporate affect in the definition of trust.

Social psychological definitions, moreover, add the factor of risk in the definition of trust. Trust presupposes a situation of risk and the possibility of disappointment. As Kee and Knox (1970) argued, to study trust appropriately, there must be some meaningful incentives at stake and the trustor must be aware of the risk involved. Mayer et al. (1995) clarified the definition of trust by distinguishing between willingness to take a risk and actually taking a risk: “Trust is not taking risk per se, but rather it is a willingness to take risk” (p. 712). In this investigation, I used a social psychological definition of swift trust that presupposes the existence of risk.

In temporary work groups “everything is risked, every time” (Meyerson et al., 1996, p. 179). Temporary groups often work on tasks with a high degree of complexity, depend on elaborate knowledge and skills, yet they lack formal structure and control. The potential for damaged reputations and failed investments is high, especially in certain industries, such as film crews or computer engineering teams. Therefore, it is appropriate to adopt a social psychological view of trust because of the salience of risk in temporary groups. However, temporary groups, due to their short life spans, experience a unique form of trust, one that will be the focus of the next section.
Swift Trust

Meyerson et al. (1996) introduced the concept of swift trust to characterize a unique form of trust found in temporary systems. They defined swift trust as “a form of collective perception and relating” (p. 167) that appears as a response to issues of vulnerability, uncertainty, risk, and expectations. Although the concept was introduced in a context of face-to-face temporary groups, it has also been used in analyses of virtual teams (Jarvenpaa, Knoll, & Leidner, 1998; Jarvenpaa & Leidner, 1999).

As Meyerson et al. (1996) pointed out, swift trust can appear in every type of temporary system that has several characteristics, inductive of swift trust formation. These conditions require that group members: (a) have diverse skills, (b) have a limited history of working together, (c) have a limited prospect of working together in the future, and (d) are part of limited labor pools.

Swift trust, as any other form of trust, is rarely relevant by itself for practical purposes. It is the behavioral manifestation of the willingness to take risks that matters. Following Mayer et al. (1995), it is necessary to introduce the concept of behavioral trust, which is “the behavioral manifestation of the willingness to be vulnerable” (p. 724). As Hardin (2001) noticed, “many ordinary-language statements about trust . . . seem to conceive it as a behavior, at least in part” (p. 7). For instance, one might trust another in various ways, but never have an occasion to act on that trust. In this case, trust will remain at the stage of belief, but the trustee might never know that he or she is the subject of trust (e.g., I trust X that he or she can run the company in my absence, but I was never absent).
To conclude, swift trust is an individual’s willingness to take risks in a temporary group and it has a behavioral manifestation that involves the actual act of risk-taking. Swift trust deals with issues of vulnerability, uncertainty, risk, and expectations, all characteristics of temporary systems.

Antecedents of Swift Trust

Scholars who proposed different theoretical models of trust often identified several factors that determine the formation of trust. Mayer et al. (1995) called these variables antecedent factors. The commonly accepted antecedent factors are the characteristics of the trustor or the trustor’s propensity to trust and the characteristics of the trustee (i.e., ability/competence, benevolence, integrity). Another factor that serves as a foundation for trust is affect (emotional bonds between individuals).

By differentiating between the trustor’s and trustee’s characteristics and by identifying them as antecedents of trust, rather than trust itself, researchers can clarify the definitional domain of trust and can isolate the mechanisms through which trust is established. One goal of this dissertation is to identify these mechanisms of trust formation in temporary groups, and one way to accomplish such a goal is to look at the antecedents of trust.

A trustor’s propensity to trust, also called generalized trust or disposition to trust, is proposed to be a stable factor that affects the likelihood of a person to trust in a specific situation. Rotter (1967) was among the first researchers to use a measure of generalized trust. In fact, Rotter conceptualized trust as a disposition to trust people in general. More recent scholars recognized that generalized trust is but one aspect of trust. Mayer et al. (1995) argued that propensity to trust should be included as part of a more complex set of
variables to explain variance in trust. Several researchers found propensity to trust to be related to performance (Davis, Schoorman, Mayer, & Tan, 2000; Dirks, 1999; Oldham, 1975), although the mechanisms through which propensity to trust relates to performance have not been identified.

The characteristics of the trustee were often equated with trustworthiness, which has been a main topic of research in interpersonal trust. Some authors only focused on trustworthiness as an indication of trust. Initially, trustworthiness was assessed as the motivation (or lack thereof) to lie (Hovland, Janis, & Kelley, 1953). If a person did not have a reason to lie in a particular situation, he or she would be seen as trustworthy. Recent researchers included attributes such as ability or competence, benevolence, and integrity (Lieberman, 1981; Mayer et al., 1995). According to Mayer et al. (1995), ability is a set of skills or competencies that allow someone to perform in a certain area. Benevolence is an other-oriented desire to care for the protection of the other. The perception of integrity refers to the belief that the other person adheres to a set of principles that the trustor finds acceptable (Mayer et al., 1995).

These three factors (ability, benevolence, and integrity) received empirical support as antecedents of trust. A number of theorists have considered ability as an essential element of trust (Cook & Wall, 1980; Sitkin & Roth, 1993). Others used similar concepts, such as competence (Rosen & Jerdee, 1977). Giffin (1967) suggested expertness as a factor that leads to trust. Finally, Gabarro (1978) identified nine bases of trust, including functional/specific competence, interpersonal competence, business sense, and judgment. All of these are similar to ability in the current conceptualization. Several authors have used the term benevolence in their analyses of trust (Larzelere &
Huston, 1980; Strickland, 1958). Others have considered intentions and motives, which have wider implications than the orientation toward the trustor (Cook & Wall, 1980; Kee & Knox, 1970). Integrity or very similar constructs have been used as antecedents of trust by various theorists. Lieberman (1981) used the term integrity as a trust factor, whereas Gabarro (1978) used the term character.

The notion of affect as an element of trust comes from the interpersonal literature, in which affect-based trust is differentiated from cognition-based trust (McAllister, 1995). Affect is considered to be emotional bonds between individuals (Lewis & Wiegert, 1985; McAllister, 1995). Cognition-based trust is often equated with reliableness, whereas affect-based trust is sometimes referred to as emotional trustworthiness (McAllister, 1995). Other researchers considered affect to be affective attachments and affective states (Williams, 2001) or relationship-related emotions (Young & Daniel, 2003). No matter what terms researchers have used, affect encompasses the array of emotions between individuals who establish trust relationships.

There is evidence to suggest that some of the antecedents of trust (i.e., perceived trustworthiness, affect) have an attributional basis. Larzelere and Huston (1980) clearly stated that attributions of benevolence and honesty are pertinent aspects of interpersonal trust. Rempel et al. (1985) based their analysis of trust on the notion that people attempt to understand their partners’ acts, dispositions, and motives. Feelings of trust become more rooted every time their attributions are verified. McAllister (1995) argued that affect-based trust is grounded in people’s attributions concerning the motives for others’ behavior. An overview of the attribution theory and the related uncertainty reduction theory is necessary, then, to understand how trust is based on attributions.
Theoretical Framework

*Attribution Theory*

Attribution theory was developed over time--based on the work of Fritz Heider (1958), Edward Jones and Keith Davis (1965), and Harold Kelley (1967) in social psychology--as a means of dealing with questions about social perception. It explains how lay people use the information about others to make causal inferences. Heider referred to this theory as “naïve” psychology, also labeled “the psychology of common sense” (as opposed to scientific psychology) to underscore the fact that lay people mimic the scientific methods of inquiry when they try to explain events. Attribution theory describes the processes of explaining events and the behavioral and emotional consequences of those explanations. In this respect, attribution theory falls under an information needs perspective (Heider, 1958). It can also be considered as meta-theory about naïve psychology.

There are two branches of attribution research. According to Forsterling (2001), *attribution* theories are concerned with antecedent conditions that lead to causal explanations, whereas *attributional* theories are concerned with the psychological consequences of causal attributions. Their goals differ.

Attribution theories examine questions about the type of causes an individual attributes to an event. An example of such a question is: Under what circumstances will a group member explain a bad group outcome as a lack of ability or as the result of a difficult task? The answer the group member gives to the above question would be considered an internal or external attribution. Attributional theories seek to answer questions about emotional consequences of causal explanation. For instance, members of
a temporary group will have positive emotions toward their group if they thought the excellent outcome of their work was due to the group’s abilities.

An important concept in Heider’s (1958) view is belief. He argued that people act on the basis of their beliefs. Therefore, behaviors can be explained only by looking at people’s beliefs about certain issues. He postulated a set of rules of inference by which an ordinary person might attribute responsibility to another person’s action. He identified internal and external attributions, that is, personality forces and environmental forces that balance to explain what might be responsible for a person’s actions (Lewis & Daltroy, 1990). In Heider’s (1958) view, for instance, a general belief in people’s trustworthiness would allow someone to trust people in initial interactions. This view is similar to that held by personality researchers.

Heider’s (1958) theory was developed further by Jones and Davis (1965), who emphasized the perspective of an “alert perceiver.” Still focused on the perception process, the correspondent inference theory (Jones & Davis, 1965) describes how an “alert perceiver” might infer the other person’s intentions and dispositions from his or her behavior. The perceiver makes inferences about personal dispositions that correspond to a behavior when, for instance, he or she infers that a person is trustworthy after witnessing an act of trust (e.g., lending money to someone who the trustee just met). In Jones and Davis’s view, the emphasis moves from the internal belief of the trustor based on the trustor’s personality characteristics to an internal belief based on the behavior of the trustee.

An important consequence of trust is that it reduces uncertainty in initial interactions. Because the whole group experience is affected by the degree of comfort
members have with each other, it is important to consider uncertainty as a condition of trust formation in small groups. In the next section I provide an overview of Uncertainty Reduction Theory.

Uncertainty Reduction Theory

Uncertainty reduction theory (URT), like attribution theory, is based on the belief that people tend to make sense of the world around them (Heider, 1958). According to Berger and Calabrese (1975), the sense-making activity is reflected by the desire to reduce uncertainty in the surrounding environment. Several assumptions of URT that are relevant to temporary work groups are: (a) people experience uncertainty in interpersonal settings; (b) uncertainty generates cognitive stress; and (c) when strangers meet, their primary concern is to reduce their uncertainty or increase predictability. Members of temporary groups have a limited history of working together and they are pressed to complete a task that requires interaction. These two conditions are very likely to generate uncertainty and cognitive stress. Moreover, as I will argue later in this paper, members of temporary groups reduce uncertainty and increase predictability by using swift trust.

Uncertainty has been conceptualized in terms of cognitive uncertainty (What does the other think?) and behavioral uncertainty (What will the other do?). The formal roles in which actors are placed reduce some of the cognitive uncertainty. In temporary work groups, members usually relate through their roles and expertise, which reduces cognitive uncertainty but does not answer behavioral uncertainty questions: Will my group members be willing to do their part of the project? How would they act if I am late for a meeting?
URT is an extension of attribution theory because it adds the notion of uncertainty to explain why people make attributions in the first place. In the process of reducing uncertainty and seeking information about the others, people use proactive and retroactive attributions. Proactive attributions are explanations of a future behavior based on past behavior. They are inferences of future attitudes and opinions based on early verbal interaction. In temporary work groups, proactive attributions may help members to set a positive tone and expect that they will work well together. Retroactive attributions are explanations of present behavior based on past behavior (Berger, 1975). Retroactive processes may happen as a result of either confirming or disconfirming the proactive attributions. In the retroactive attributional process, people re-interpret early information to make it consistent with the new explanation. Group members may attribute causes of poor or good performance to their own or others’ behavior.

Uncertainty depends on the number of plausible explanations one has for the other’s behavior (Berger, Gardner, Parks, Schulman, & Miller, 1976). The number of attributions will be higher at the more advanced levels of a relationship. In temporary work groups, which have, by definition, a short life span, the likelihood is that there will be fewer attributions, therefore, the uncertainty will be high.

Berger and Douglas (1981) suggested that the way in which we reduce uncertainty about others varies with the situation. In informal situations, people will prefer to observe others, while in formal situations, the verbal interactions may be predominant. Berger (1979; Berger & Bradac, 1982; Berger & Gudykunst, 1991) found three general strategies for uncertainty reduction, each differing in the degree of involvement a person has with another: (a) passive behaviors, which include observation
and collection of information without interaction (other types of passive behaviors are
social comparison and disinhibition search); (b) active behaviors, which include asking
other people questions about the target person; and (c) interactive behaviors, which
include engaging others in communication activities such as interrogation, self-
disclosure, or deception detection.

URT was designed to explain interpersonal relationship development, especially
the initial stage. Seeking information and explaining past actions are behaviors used in
the initial phases of an interaction. Trust formation also occurs in the initial stage of a
relationship, more like a byproduct of information seeking. Strangers seek information
about one another to reduce uncertainty and to be able to act in socially appropriate ways.
If a group members trusted another, then he or she will display behaviors that are deemed
appropriate, such as disclosing information, accepting opinions, etc.

However, in order to be able to act appropriately, one has to determine whether he
or she trusts the other person. Trust (or the lack of it) is the consequence of uncertainty
reduction, which enables people to fit others into certain formal roles and to respond to
their behavior appropriately. Thus, trust formation is an intermediate state from
uncertainty to certainty.

URT has seven axioms that link the concept of uncertainty with other variables,
such as, the amount of verbal communication, nonverbal affiliative expressiveness,
information-seeking behavior, intimacy level, reciprocity, similarity, and liking. One of
these axioms has been challenged by research findings that showed that high levels of
uncertainty did not cause increases in information-seeking behavior (Kellermann &
Reynolds, 1990). Tolerance for uncertainty, or wanting information, rather than
uncertainty, activated information-seeking behavior. The simple lack of information about a person is not enough to make us engage in information-seeking. We must be motivated and also want information about that person.

Another explanation for the missing link between high uncertainty and information seeking is trust. Emmers and Canary (1996) argued that in established relationships, “uncertainty acceptance” is a viable strategy for dealing with uncertainty. Accepting or trusting your partner, even when you are not completely certain about what is happening, has been shown to be an effective strategy in developed interpersonal relationships. Attributions that lead to trust about others’ behavior may inhibit or reduce the information seeking strategies because making trust attributions satisfies the need for information.

Uncertainty reduction theory operates under several conditions. First, there has to be an incentive in reducing uncertainty: we must be motivated to seek information about another person. Second, the behavior of the other person must be perceived as unpredictable. Third, there also needs to be an ulterior motive besides simply reducing uncertainty (e.g., asking to do a certain task, or self-disclosing). Fourth, we must perceive that there is a likelihood of future interaction with the other person in order for us to seek to reduce uncertainty.

In a temporary small task group, all these conditions are satisfied. When we work with several other members on a task on which we will be evaluated, we are motivated to know the other person to ensure a good performance on his or her behalf. Usually, when we are assigned to temporary groups, we are not familiar with the rest of the group members and, therefore, their behavior is unpredictable. When working on a group
project, seeking information about the other members has, almost always, a second purpose: to adjust our work style to the other’s so we can complete the project. In temporary groups, although group members do not go through a lengthy process of accommodation, they do meet several times to complete the project. Therefore, there is a likelihood of immediate future interaction with the rest of the group.

Studying trust in temporary groups under the tenets of URT is especially important because temporary groups are perfect examples of uncertainty situations. One goal of this study is to clarify the mechanisms of trust formation and to extend the domain of URT to group settings. By doing this, researchers can place the concept of trust under the appropriate theoretical framework.

Theoretical Model

The main purpose of this dissertation is to identify the mechanisms of swift trust formation in temporary work groups. Figure 1 contains the proposed model, which is further described in this section. The theoretical model proposed relies on several assumptions borrowed from URT and attribution theory.

The URT assumptions that are relevant to temporary groups refer to the state of uncertainty and the process of uncertainty reduction. First, people experience uncertainty in temporary groups. As with interpersonal settings, temporary groups are situations that put strangers into contact and generate a state of incertitude and uneasiness. However, because of the nature of temporary groups, which requires more role interaction rather than social interaction, uncertainty in temporary groups will be rather directed toward the group experience as a whole and the outcome of the group project than toward each individual member.
Figure 1. Model of swift trust in temporary work groups
Second, uncertainty is an aversive state, generating cognitive stress. In temporary groups, the stress is even higher than in dyads because of the larger number of possible dyadic interactions. However, members enter the group with different levels of dispositional trust. Some members will be more inclined to trust people in general and they will be less likely to feel uncomfortable with their groups, whereas others will be more likely to feel uncomfortable with their groups. According to URT, people use uncertainty reduction strategies in the movement from uncertainty to certainty. In the certainty stage, one person has enough information about the other in order to trust or distrust the other. In temporary work groups, trust or distrust can come earlier, substituting some uncertainty reduction strategies, or even as a result of “uncertainty acceptance” strategy. This uncertainty acceptance strategy may be a result of a higher level of generalized trust. When people have a predisposition to trust others, they may experience less uncertainty in initial interactions. The following assumption establishes the relationship between uncertainty and generalized trust:

Proposition 1: In temporary groups, uncertainty is negatively related to generalized trust.

Third, when members of temporary groups meet, their primary concern is to reduce uncertainty or to increase predictability. Temporary groups offer different means by which uncertainty can be reduced than interpersonal relationships. According to URT, in interpersonal relationships, conversational partners may use passive, active, or interactive strategies to reduce uncertainty. In temporary groups, Jarvenpaa and Leidner (1999) proposed the concept of social communication that covers communication used in
active and interactive uncertainty reduction strategies. The following proposition establishes the relationship between uncertainty and group communication behaviors:

Proposition 2: In temporary group, uncertainty is positively related to social communication.

Attribution theory rests on several assumptions that are also relevant to temporary groups. The first assumption states that *cognitions mediate stimuli and reactions*. As in other cognitive approaches, the focus of the attribution theories is the investigation of thoughts or cognitions. Researchers study how individuals select, process, store, recall, and evaluate information and how the information is used to draw causal inferences. Cognitive approaches, as opposed to behavioral approaches, put cognition as the center of their investigation. In temporary groups, people make assumptions about the trustworthiness of others. They decide whether other group members are trustworthy partly based on their own observations about the group members’ behavior (i.e., coming to group meetings on time as opposed to being late, contributing important ideas as opposed to waiting for others’ contributions) and partly based on their inherent tendency to trust. As a consequence, group members decide to trust (or not) based on the assumptions that they make about each other.

The second basic assumption of attribution theory affirms that *people attempt to develop a realistic understanding of the causes of events*. Attribution theorists believe that people come to causal conclusions by following a pattern similar to that followed by scientists: forming hypotheses about the causes of events, testing these hypotheses, and searching for supplemental information when there is no ground to form reasonable hypotheses. In this respect, attribution theorists assume that people are rational beings or
 naïve scientists. Similarly, group members will try to understand the causes of good or bad performance by testing their assumptions about the trustworthiness of their group.

The third central assumption is that it is functional to make attributions. A naïve theory, like a scientific theory, serves the function of understanding, predicting, and possibly controlling behavior and events (Forsyth, 1980). When people do not understand the events in which they are involved, they often feel uncomfortable, vulnerable, and “out of control.” Knowing the causes of events gives an impression of order and makes the world seem more predictable. For instance, if a group member determines that a positive group outcome (such as excellent performance) is caused by a stable cause (such as ability), he or she can predict that the positive outcome can be attained again in the future. Causal explanation can also be used to control behavior. When several group members decide that the cause of a bad performance is one member’s lack of ability, they can control the outcome of future projects by excluding the member who lacks the ability.

Based on the above assumptions, I proposed the following proposition, which explains the relationship between proactive attributions and uncertainty in temporary groups. The proposition combines the assumptions of URT and attribution theory:

Proposition 3: The more uncertainty members of temporary groups have, the more proactive attributions of trustworthiness they will make.

Under this model, trust is the consequence of uncertainty reduction. Trust replaces the state of incertitude, ambiguity, vagueness, or uneasiness and suspicion. It is not a state of certainty, because people in newly-formed groups do not have enough information about each other to predict each other’s behavior. Thus, it can be thought of as a more or
less conscious strategy that people choose (‘‘leap of faith’’) in order to reduce the uncomfortable initial uncertainty. The following proposition establishes the relationship between uncertainty and swift trust:

Proposition 4: Members of temporary groups move from a state of uncertainty to a state of certainty by developing a willingness to take risk and by performing trusting behaviors.

Uncertainty is reduced differently in groups than in dyadic interpersonal relationships. Although people may use three types of strategies to reduce uncertainty about each other in dyadic relationships, there is little time for relationship development in temporary work groups. Trust appears as an easy way to reduce uncertainty. Group members will reduce uncertainty by making attributions of trustworthiness about their group and by showing positive affect. One of the URT axioms links uncertainty reduction with liking. The more conversational partners like each other, the less uncertainty they feel toward each other. In temporary groups, this axiom will take the following form:

Proposition 5: Uncertainty in temporary groups is negatively related to affect.

The model depicts three mechanisms through which swift trust forms in temporary work groups: dispositional, cognitive-affective, and behavioral. The dispositional mechanisms include the generalized feeling of trust with which each individual group member enters the group experience. Generalized trust or predisposition to trust is a relatively stable characteristic of individuals and is based on their beliefs in a ‘‘just world.’’ It can lead to swift trust directly or through other variables.

Cognitive-affective mechanisms refer to people’s perceptions of group members’ trustworthiness and their affective reactions toward group members. These are converted
into attributions group members make in a temporary group. Based on Williams’ (2001) observation that people frequently use their “feelings as information when making judgments about others” (p. 386), I argue that people use their apparent affective reactions when making attributions of trustworthiness.

The behavioral mechanisms include observations about other members’ behavior that lead to increase in trust. Swift trust manifests at the behavioral levels through several risk-taking behaviors or trusting behaviors, including communication behaviors. Jarvenpaa and Leidner (1999) suggested that group communication behaviors that help build trust are social communication and communication of enthusiasm. Social communication includes communication that is unrelated to the group’s task (i.e., members’ hobbies, life outside school, etc.); communication of enthusiasm includes encouragements, positive comments related to the group’s project, etc. By seeking personal information about each other, group members attempt to increase their level of comfort in the group.

The level of uncertainty in temporary groups is assumed to be high because members do not usually have prior interaction with each other. Therefore, they need to build trust quickly. However, uncertainty prevails over the ways in which they will accomplish this task. Will members make more attributions in order to reduce uncertainty about each other or will they invest more emotionally?

Research is inconclusive about the best predictor of trust. Several researchers found that dispositional trust predicts whether actual trust develops or not (Rotter, 1967). Others gave more weight to situational factors, such as group behavior (Jarvenpaa &
Leidner, 1999). The following research question is intended to clarify the role played by each of the antecedents of trust in predicting swift trust in temporary groups:

RQ1: Which of the antecedents of trust (generalized trust, proactive attributions of trustworthiness, and affect) best predicts swift trust?

Several studies have pointed toward the attributional processes involved in trust development (Jones & George, 1998; Simons & Peterson, 2000; Wells & Kipnis, 2001; Williams, 2001). However, very few studies have used attribution theory directly to explain trust development (see Kruglanski, 1970; Strickland, 1958; Ferrin & Dirks, 2003). Attributions are central to this model in that they form the basis of swift trust in temporary groups along with affect, generalized trust, and group communication behavior. The model tests how each variable predicts group members’ swift trust. Proactive attributions, by predicting the outcome of the group experience, influence the group members’ willingness to take risk and encourage or discourage the risk taking behavior.

Attributions may also help to explain group members’ perceptions of the group experience at the end of the group work. Several outcomes of group work, such as satisfaction and performance, may influence the content of retroactive attributions. Also, the model proposes that trust influences how members explain performance through retroactive attributions. Satisfaction, as an outcome of the group experience, serves as information for making judgments about the group experience. These judgments translate into retroactive attributions of trust. If the group members are satisfied with the group experience, their retroactive attributions will reflect the positive feelings toward group. If they are not satisfied, their retroactive attributions will reflect their attempts to identify
causes of dissatisfaction. Thus, the model tests the relationship between satisfaction, performance, and retroactive attributions. A review of prior research will help uncover research questions and hypotheses to be tested in this research project.

Review of Literature

First I review the interpersonal, organizational, and social-psychology literature on trust, drawing on the pertinent conclusion that might apply to swift trust. Then I review the literature on swift trust and its behavioral components--knowledge sharing and suspending judgment. Next, I turn to the variables that I proposed to influence the establishment of trust in temporary groups: group communication behaviors and several antecedents of trust: generalized trust, affect, and proactive attributions of trustworthiness. Lastly, I review studies on the proposed group outcomes that might be influenced by the presence or absence of swift trust: retroactive attributions of trustworthiness, group performance, and group satisfaction.

Trust

Trust models usually depict trust formation as a process that has certain antecedents or initial conditions and certain outcomes. For instance, Lewicki and Bunker (1996) proposed a three-stage model of trust development: calculus-based, knowledge-based, and identification-based trust. In Lewicki and Bunker’s model, the outcome of the three types of trust is relationship formation. They recognized that trust has a cognitive and emotional basis, but they reserved the cognitive dimension for calculus-based trust and the emotional dimension for identification-based trust, “because feelings of personal attachment toward the other increase” (p. 129).
Emotions and moods are included as fundamental aspects of the experience of trust in Jones and George’s (1998) model. They argued that, in a presence of a trusted person, people usually experience a positive affect, feeling excited and enthusiastic. Moreover, experiencing positive moods or emotions may cause one to have more positive perceptions of others, or more positive attributions. Their model is among the first to point toward attributions as a basis of trust.

McNight et al.’s model (1998) suggested that personality variables (such as disposition to trust) affect trusting beliefs and trusting intention, but are too distal from behaviors and, therefore, do not predict trust. This model was developed to explain the high initial trust paradox in which there is a high level of trust in initial interactions, and this contradicts the view of trust as a gradual process that develops over time. McNight et al. (1998) offered the explanation of disposition-related trust, which, they proposed, is salient in initial ambiguous interactions. McNight et al. developed their model for long-term groups, following Lewicki and Bunker’s (1996) idea of stage-like trust. They did not address the temporary systems, ideal for the understanding of initial trust formation.

Davis (1999) tested the Mayer et al.’s (1995) model of interpersonal trust that defined ability, integrity, and benevolence as the most significant characteristics for the trustee and the propensity to trust for the trustor. She found that integrity accounted for the most variance in trust, followed by ability and benevolence.

Although useful in their suggestions of the trust components, none of these models actually explained the mechanisms of trust formation. They either focused on different types of trust or trust stages, or studied trust as a part of relationship
development. More relevant are the models of trust in work groups, which are reviewed next.

In a theoretical study of the influence of group membership on trust development, Williams (2001) argued that affect influences trust development through multiple paths: cognitive, motivational, and behavioral. The cognitive path refers to people’s perceptions of group members’ trustworthiness. People frequently use their “feelings as information when making judgments about others” (Williams, 2001, p. 386). Positive feelings put people in a positive mood that encourages positive judgments or perceived trustworthiness.

The motivational path refers to people’s desire to view group members as “trustworthy enough.” People who want to maintain their relationships may be motivated to find group members as “trustworthy enough,” because showing trust in others is one way to keep a relationship. Therefore, they do not show suspicion or reluctance to trust. Directed affective states, such as liking and admiration, influence motivation to trust by enhancing people’s desire to approach and form connections with the admired group members. The desire for interaction and the need to belong are, then, powerful motivators for trust.

The behavioral path through which affect influences trust formation is the least developed in this model. It attempts to explain how affect leads to cooperative behavior when trust is present. Positive affect has been shown to influence pro-social behavior, such as picking up scattered papers. In the presence of trust, positive affect may contribute to a positive mood that fosters cooperative behavior, like information sharing.
Williams’ (2001) model, although it focuses on group membership as a main influence of trust development in long-term groups, provides a valuable indication of the different paths through which trust may be established. Motivation to belong to a group, although salient in inter-group interaction, may not be salient for in-group interaction in temporary systems. Also, the behavioral path of trust formation does not explain how trust is formed through different behaviors, but rather it argues that trust is a necessary link between affect and cooperative behavior. Last but not least, affect influences perceived trustworthiness, rather than trust, as it is defined in this dissertation.

Williams (2001) also recognized the role of attributions in people’s affective responses to trust-related interactions. Because different emotions are associated with different patterns of cognitive appraisals, the attributions people make after trusting someone may influence their affective response to that person’s behavior.

The reviewed studies pointed to different variables salient in the formation of trust, such as disposition to trust, affect, attributions, and perceived trustworthiness. The salience of each variable was emphasized differently, according to the definition of trust adopted by different researchers and with the context in which trust was studied. The model proposed in this dissertation suggests that all of the above variables (disposition to trust, affect, and attributions of perceived trustworthiness) and the relationships among them explain the formation of swift trust in temporary task groups.

In the next section, I review the research studies on swift trust, the antecedents of swift trust in temporary work groups (dispositional trust, proactive attributions of trustworthiness, and affect), the mediating variable (group communication behavior), and
the outcomes of group work (performance, satisfaction with the group experience, and retroactive attributions of trustworthiness).

**Swift Trust**

Swift trust, defined in this study as willingness to trust and its corresponding behaviors, is a concept that has a short history. However, the idea of trust as intention or good will is not new in the interpersonal and work relationships literature.

Cook and Wall (1980) defined trust as “the extent to which one is willing to ascribe good intentions to and have confidence in the words and actions of other people” (p. 39). Mayer et al. (1995) pointed to a relationship between willingness and behavior. They found that willingness to trust others was significantly related to the behavior of people working in an agency simulation.

Many researchers saw trust as a risky behavior. However, Hardin (2001) suggested, instead, that acting on trust is what is risky. Therefore, it is not the cognitive or affective trust that put group members in a risky position, but what they do as a result of their trusting beliefs or affect. In everyday language, many more references point toward behaviors that indicate trust (or lack of, thereof), rather than the willingness to trust (e.g., X does not disclose to us because he or she does not trust us; X does not let us do this job because he or she does not trust us).

Very few attempts have been made to find what behaviors are intrinsically associated with trusting beliefs. In the current study, I propose that two behaviors are indicators of trust: knowledge sharing and suspending judgment. McEvily et al. (2003) argued that knowledge sharing, suspending judgment, and safeguarding are processes directly influenced by trust, which they defined as an organizing principle. They
demonstrated that trust encourages knowledge sharing and suspending judgment, and discourages safeguarding in organizations in which trust acts as a principle.

**Knowledge sharing.** Knowledge sharing refers to group members’ disclosure of “sensitive and proprietary details about themselves, others” and their work (McEvily et al., 2003, p. 97). McEvily et al. (2003) suggested that knowledge sharing is the closest indicator of trust in work groups. Free exchange of knowledge cannot occur when one party is unsure about the other’s behavior (Jones & George, 1998). In a group without trust, people will refrain from sharing knowledge because they are unsure about how the others will use their knowledge and because possessing some sort of knowledge is also a source of power (Fama & Jensen, 1983). On the other hand, positive attributions of trust will promote knowledge sharing (Williamson, 1985). Knowledge sharing, as McEvily et al. (2003) explained, is accomplished through increasing disclosure to others and granting others access to one’s knowledge.

Mixed evidence exists on how trust is related to knowledge sharing. Although some studies found that trust destroying reduces message clarity and suggested that trust building increases message clarity and information sharing (Prentice, 1975), others found that one person’s information sharing significantly predicts trust in work relationships (Ferrin & Dirks, 2003). Not only do researchers disagree on whether knowledge sharing is an antecedent or an outcome of trust, but the relationship between trust and knowledge sharing is seen as either direct or mediated. Williams (2001) found support for a mediated relationship between trust and knowledge sharing, showing that a partner’s information sharing is predicted by cooperative rewards, which indirectly influence the formation of trust. Ferrin and Dirks (2003) viewed knowledge sharing as an antecedent of trust rather
than an outcome of trust. This contradicts McEvily et al.’s (2003) assumptions that knowledge sharing cannot occur when people are unsure about the behaviors of others.

Moreover, knowledge sharing is a communication behavior that is open to attributions (Seibold & Spitzberg, 1982). Manusov and Koenig (2001) explained that communication attributions—causes of what has been said—are the bases for messages interpretations. People judge others not only by how they look or by how they behave, but also by what they say. When a group member is perceived as trustworthy, others are more likely to share what they know because they do not fear negative judgment. In this model, attributions of trustworthiness are proposed as antecedents of swift trust in temporary groups. Knowledge sharing should be a behavior through which trust is expressed. Hence, I hypothesize:

H1: Knowledge sharing is positively related to willingness to take risk.

Suspending judgment. McEvily et al. (2003) defined suspending judgment as a process of “adopting an orientation toward another actor that assumes the other party’s intentions and motives are benevolent, or at least benign” (p. 98). For instance, when one member of the group is late with his or her assignment, the others do not necessarily assume that their colleague sought to take advantage of them. By reducing efforts put in behaviors such as monitoring and safeguarding against potential losses, trust “liberates resources that can be put to better use” (McEvily et al., 2003, p. 98). As Ouchi (1979) observed, “people must either be able to trust each other or to closely monitor each other if they are to engage in cooperative enterprises” (p. 846).

Several research studies show support for an association between trust and suspending judgment. Benton, Gelber, Kelley, and Liebling (1969) and Roberts and
O’Reilly (1974) found that lower levels of trust were associated with suspiciousness towards the information, whereas high levels of trust were associated with acceptance of information. McAllister (1995) found that trust influenced performance indirectly by affecting such variables as control-based monitoring, defensive behavior, need-based monitoring, and citizenship behavior.

In McAllister’s (1995) study, control-based monitoring and defensive behavior were behavioral consequences of the lack of cognition-based trust and were the counterparts of suspending judgment. McAllister showed that high levels of cognition-based trust were associated with low levels of control-based monitoring and defensive behavior. Need-based monitoring refers to an increased awareness of peer needs. It is a consequence of affect-based trust and it has a positive connotation. The behavioral manifestation of the need-based monitoring is citizenship behavior. McAllister’s discussion of monitoring behavior informs this research project by pointing to a behavioral manifestation of trust that I called *suspending judgment*. Citizenship behavior is similar to *suspending judgment*, but it also includes more pro-social behavior, such as assisting peers in meeting their personal objectives and expressing care and concern for peers.

Another study by Kramer (1994) supported the assumption that, when people safeguard too much (i.e., they feel overly self-conscious or under scrutiny), they tend to make negative attributions about the others, similar to an attribution error. This, in turn, fosters a pattern of heightened distrust and suspicion regarding others’ motives and intentions. In this case, people cannot suspend their judgment because they are not
willing to take any risk. The following hypothesis tests whether there is a relationship between suspending judgment and willingness to take risk:

H2: Suspending judgment is positively related to willingness to take risk.

Research shows that communication behaviors, such as social communication and communication of enthusiasm, are also intrinsically related to trust in groups (Jarvenpaa & Leidner, 1999). These communication behaviors will be reviewed next.

*Group Communication Behaviors*

Social communication and communication of enthusiasm are two behaviors that facilitate trust early on in the group’s life (Jarvenpaa & Leidner, 1999). Social communication included comments about group members’ hobbies, their weekend activities, and their families. Communication of enthusiasm included encouragements (i.e., “we can do this,” “this is getting exciting,” “great work everyone”), claims such as “we are beginning to feel like friends, not just teammates,” and references about “producing the best” project ever. Although social communication and communication of enthusiasm do not appear in other studies as behavioral antecedents of trust, anecdotal evidence supports the argument that these two types of behavior can influence trust formation.

In their series of descriptive case studies on global virtual teams, Jarvenpaa and Leidner (1999) extended the theory of swift trust. Their objective was to explore whether and how trust develops in virtual teams on a short-term basis by analyzing group members’ communication behaviors. Results showed that trust can exist in a virtual team with no past history in the form of swift trust that is depersonalized and action-based. Results also showed that trust can be created via communication behaviors established
very early in a group’s life, such as social communication and communication of enthusiasm.

The following hypothesis is proposed to test the relationship between swift trust and group communication behaviors:

H3: Swift trust is positively related to group communication behaviors (social communication and communication of enthusiasm).

As proposed in this model, swift trust is influenced by dispositional trust, attributions of trustworthiness, and affect. Research about each of these variables will be reviewed next.

Antecedents of Swift Trust

The main antecedents of swift trust are dispositional trust and attributions of trustworthiness. In many studies, these two aspects of trust have been confused and, sometimes, studied separately, as each of them were the only indication of trust. The lack of consensus on a definition of trust is due in part to the fact that the contexts in which trust has been studied--romantic interpersonal relationships, work relationships, group relationships, organizations--affect the way trust has been conceptualized (Palmer, Bailey, & Faraj, 2000). Trust has been studied in romantic interpersonal relationships (Boon & Holmes, 1991; Couch & Jones, 1997; Holmes, 1991; Larzelele & Huston, 1980; Rempel et al., 1985), interpersonal work relationships (Granovetter, 1985; Pennings & Woiceshyn, 1987; Shapiro, 1987; Zucker, 1986), and, lately, in work groups (Jarvenpaa et al., 1998).

The idea of generalized or dispositional trust stems from the interpersonal relationships research. Several researchers have considered trust from the perspective of a
person’s general willingness to trust others. Among the early researchers who adopted this view was Rotter (1967), who developed measures of a generalized trust in others, a concept similar to a personality trait.

Several other authors have discussed trust in similar ways. Farris, Senner, and Butterfield (1973) defined trust as “a personality trait of people interacting with peripheral environment of an organization” (p. 145). Similarly, Dasgupta (1988) saw trust as generalized expectations of others. Mayer et al. (1995) clearly delineated propensity to trust as an antecedent condition of trust that influences trust directly and through perceived trustworthiness. They defined propensity to trust as “a stable within-party factor that will affect the likelihood the party will trust” (p. 715).

Several studies offer evidence that dispositional trust has significant effects on behaviors such as performance (Oldham, 1975; Rich, 1997). Rich (1997) found support for a positive relationship between trust in manager and sales performance. Tsai and Ghoshal (1998) connected trust with resource exchange between different organizational units.

Other studies do not support the idea of dispositional trust as having a significant effect on behaviors. McNight et al.’s (1998) model was developed to explain the high initial trust paradox suggesting that personality variables (such as disposition to trust) affect trusting beliefs and trusting intention, but are too distal from behaviors and, therefore, do not predict trust. They also argued that disposition-related trust is salient in initial ambiguous interactions. This argument is relevant to the model proposed here because it reinforces the idea that temporary systems resolve the experience of uncertainty and ambiguity in initial interactions by appealing to individual members’
personality characteristics. One path through which uncertainty is reduced and swift trust established is dispositional trust. Two competing views will be tested. Mayer et al. (1995) suggested that dispositional trust influences trust through perceived trustworthiness. Jarvenpaa and Leidner (1999) emphasized group communication behaviors as a path through which dispositional trust predicts actual trust. Therefore, I hypothesize:

H4a: Attributions of trustworthiness mediate the relationship between generalized trust and swift trust.

H4b: Group communication behaviors mediate the relationship between generalized trust and swift trust.

Another antecedent of trust, attributions of trustworthiness, includes perceptions of trustworthiness or the trustee’s perceived qualities that make someone willing to trust in a certain situation. Support for the argument that perceived trustworthiness can be thought of attributions comes from Mayer et al. (1995) who suggested that the factors that made up trustworthiness are not trust per se, but they help build trust. Researchers have identified several reasons people give for trusting others.

Among what researchers identified as qualities or attributes needed in order for the trust to occur are: competence, consistency, fairness, integrity, loyalty, openness (Butler, 1991), ability (Cook & Wall, 1980), reliability (Johnson-George & Swap, 1982), and benevolence (Solomon, 1960; Strickland, 1958). Mayer et al. (1995) reviewed the attributes of trustworthiness and proposed three characteristics that appeared repeatedly in the literature: ability, integrity, and benevolence. Therefore, I will use the three attributes as characteristics of trustworthiness in the current investigation. Mayer et al. (1995) defined ability as a “group of skills, competencies, and characteristics that enable
a party to have influence within some specific domain” (p. 717). In a temporary work group, each group member has a set of unique competencies. Integrity refers to the trustor’s perception that the trustee has a set of principles that the trustor finds acceptable. For instance, punctuality, hard work, timeliness are a set of principles that are usually acceptable and expected in a U.S. work group. Benevolence is the extent to which the trustor perceives that the trustee has a willingness to do good to the trustor. A group member who perceives that another behaves positively toward him or her, aside from an egocentric profit motive, may think that the other group member is benevolent.

Davis (1999) tested Mayer et al.’s (1995) model and found that integrity accounted for the most variance in trust, which was defined as the willingness to be vulnerable to the actions of another party, followed by ability and benevolence. Dispositional trust did not significantly explain variance in trust. This means that a perceived trustee’s characteristic, such as integrity, determined the trust relationship rather than a trustor’s personality trait. This finding supports the view that attributions of trustworthiness, such as integrity, ability, and benevolence, may influence trust formation.

Similar results were found by Aubert and Kelsey (2003), who investigated the formation of trust in virtual teams. They discovered that the integrity dimension of trust (or a person’s reliability) was more important in the formation of trust than benevolence (or concern). This means that good intentions do not build trust, but the ability to perform and deliver on commitments does. Interestingly enough, this relationship holds true regardless of the trustor’s propensity to trust. Even someone who is inclined to trust can have the trust shattered when receiving poor quality work.
More evidence of the perceived trustee’s characteristics as the basis of trust comes from a study by Wells and Kipnis (2001). Results from 275 managers and 267 employees from a wide variety of industries (e.g., health care, manufacturing, sales, insurance, education, restaurant services, etc.) suggested that perceived personal attributes of the trustee were significant reasons for distrust. Both managers and employees gave personal explanations for distrust (e.g., dishonest, gossip, secretive, not reliable, not supportive, cold). Wells and Kipnis (2001) offered the explanation that trust—at least in the American culture—is associated with character and personality. Another explanation could be that trust is influenced by the initial attributions about the others and people are often victim to the fundamental attribution error, by attributing causes of behavior to personality characteristics rather than to situations.

Attribution theory helps us understand the cognitive bases of trust by providing information about how people form perceptions of trustworthiness. According to Heider (1958), an attribution is an inferential judgment about another person’s behavior. People usually make attributions because of the lack of sufficient information about someone. The decision or choice to trust somebody fits the situation of lack of information: “Given total knowledge, there is no need to trust, and given total ignorance, there is no basis upon which to rationally trust” (McAllister, 1995, p. 26). Therefore, the attributions of trustworthiness fulfill the need for information about group members. They are proactive attributions—explanations of future situations, such as good or bad performance, or positive or negative group experience, based on past behaviors or experience—used when there is insufficient information about group members.
By considering perceived trustworthiness as attributions of trust, we can explain research findings pointing to unusually high levels of trust in initial group interactions (McKnight et al., 1998; Meyerson et al., 1996). Recent research suggests that individuals enter groups expecting better things to happen to them than to an average member. They tend to assume that others will be disappointed but not themselves (Janoff-Bulman, 1992). These attributions may lead to high levels of initial trust. The following hypothesis tests this assumption:

H5: Proactive attributions predict swift trust in temporary groups.

Affect is the last proposed antecedent of trust, after generalized trust and attributions of trustworthiness. Lewis and Wiegert (1985) proposed that trust is based on emotional bonds between individuals. McAllister (1995) also identified affect-based trust as a dimension of trust (after cognition-based trust). He measured affect-based trust by including items that referred to sharing, openness, sense of loss, concern, and emotional investment. McAllister found that the two forms of trust were related but distinct. Also, affect-based trust was related to citizenship behavior, or the tendency to help others.

McAllister (1995) found that interpersonal trust among members in organizations was both affect- and cognition-based. Cognition-based trust is the rationalization of the individuals’ choices, also referred to as “good reasons” (Lewis & Wiegert, 1985), whereas affect-based trust arises from the emotional bonds between individuals. Although he developed a scale to test both affect- and cognition-based trust, McAllister’s definition lacks in precision. He did not clearly define cognition-based trust, other than referring to it as “good reasons.” As a result, his scale measuring cognitive trust has items
that test psychological characteristics (i.e., concern, competence, reliability, respect, perceived trustworthiness) and behaviors (i.e., monitoring).

McAllister’s (1995) work is an important step in creating a coherent model of trust formation. By recognizing two bases of trust—cognition and affect—he offered a different approach to trust formation, through multiple paths (i.e., cognitive, affective) rather than through stages. Instead of conceptualizing trust as a relationship development process, researchers following McAllister’s view can explain research findings that show an almost instantaneous development of trust.

Williams (2001) defined affect as both affective attachments (i.e., a feeling of connectedness) and affective states (i.e., moods, emotions, and general liking). She proposed that affect influences how people perceive other’s trustworthiness, how motivated they are to display trust in others, and how inclined they are to cooperate or help others. In this study, I define the affect antecedent of swift trust as the interest, liking, respect, and admiration of group members for each other.

As with the cognitive trust, McAllister and other researchers who acknowledged the affect foundation of trust give sometimes significantly different meanings to the term (Lewis & Wiegert, 1985; Pennings & Woiceshyn, 1987; Rempel et al., 1985). They refer to affective trust as “emotional bonds between individuals” or “emotional investments,” “genuine care and concern,” and beliefs in the reciprocity of these feelings (McAllister, 1995, p. 26). This view differ from Williams (2001), Young and Daniel (2003), and the view I express here in that the term affect is less precise, mixing affective and cognitive elements.
Theorists who conceptualize trust development as a process similar to relationship development tend to propose that affect influences “deeper” levels of trust, corresponding to a higher level of relationship development. Lewicki and Bunker (1996) placed affect in the last stage of trust development, implicitly limiting the definition of affect to caring and attachment, which take longer to develop. McAlister (1995) takes this idea even further, inferring that trust based on “care and concern” is “less superficial” than trust based primarily on cognitive perceptions.

However, as Williams (2001) noticed, the potential influences of affect on more superficial levels of trust are often ignored. She pointed out that “to the degree that affect influences judgments, motives, and thought processes, it may actually influence all stages and types of trust” (p. 379). Williams (2001) also argued that affect influences trust development through multiple paths: cognitive, motivational, and behavioral. This means that people’s judgments about another’s trustworthiness are inherently “biased” because of the affect involved in making those judgments. Therefore, trust is not based on “accurate” or logical information about the others, but on information that is filtered through affect. Emotions play a large role in trust formation and development.

Following Williams’ (2001) reasoning, Young and Daniel (2003) added more clarity to the concept of affective trust. They distinguished between cognitive (calculative) trust and affective (emotional) trust. Calculative trust is focused on costs, benefits, and probability of risk, whereas emotional trust is a conglomerate of emotions, including relationship-building emotions (interest, admiration, respect, and liking), relationship-sustaining emotions (affection, gratitude, security, confidence, and
acceptance), and relationship-enjoying emotions (appreciation, contentment, and satisfaction).

The multitude of emotions incorporated in the affective dimension of trust is due to the fact that Young and Daniel (2003) defined trust as a process that develops over time in dyadic work relationships. Therefore, many of the emotions used to define affective trust are characteristics of relationship development stages. Temporary work groups, unlike interpersonal relationships, have less time to experience all the stages of relationship development. Relationship-building emotions (interest, admiration, respect, and liking) may be the most relevant to temporary groups.

Emotions and moods are included as fundamental aspects of the experience of trust in Jones and George’s (1998) model. They argued that, in a presence of a trusted person, people usually experience a positive affect, feeling excited and enthusiastic. Positive affect has been shown to influence helping behaviors. Positive affect may contribute to a positive mood that enhances communication behavior and trust. Therefore,

H6: Group communication behaviors mediate the relationship between affect and swift trust.

Williams (2001) also recognized the role of attributions in people’s affective responses to trust-related interactions. Because different emotions are associated with different patterns of cognitive appraisals, the attributions people make after trusting someone may influence their affective response to that person’s behavior. For instance, if a group member is perceived to be competent, he or she might be respected by the other members, as opposed to those members who are just liked because they make jokes or
have outgoing personalities. Moreover, experiencing positive moods or emotions may cause one to have more positive perceptions of others, or more positive attributions. McAllister (1995) also found strong support for the relationship between cognition-based trust and affect-based trust. These findings hold true for trust developed in interpersonal and group relationships with a long life span. The following hypothesis is offered to test the relationship between affect and proactive attributions of trustworthiness in temporary groups:

H7: The more positive affect group members experience in a temporary group, the more proactive attributions of trustworthiness they will make.

So far, I have examined group inputs and throughputs as factors contributing to the establishment of swift trust. In the next section I will review the literature on several group outputs that might be affected by the presence or absence of swift trust in groups. These are retroactive attributions, group performance, and group satisfaction.

**Group Outcomes**

*Retroactive Attributions.* Most research on attribution has focused on internal versus external causal attributions of behavior. When making internal attributions, people perceive the cause of their partner’s behavior to be a personality characteristic, whereas, when making external attributions, they perceive the behavior to be caused by a particular situation.

The functions of attributions are mainly found to be related to responsibility of performance and failure. Usually, group members associate high performance with responsibility and personal characteristics and low performance with situational variables. For instance, when attributing causes for failure, group members in high
performance self-managed teams mentioned easy-to-discuss and remedy causes (i.e., situational causes), whereas members in ineffective teams attributed failures to causes that were difficult to discuss and improve (i.e., internal causes) (Corn, 2000). Nye (2002) found that perception of group outcomes was related to characteristics of the leaders and to members’ attribution of leaders’ responsibility. Group members attributed more responsibility for the group outcome to winning leaders than they did to losing leaders. This finding complemented Corn’s (2000) results. Corn found that high performance team members attributed causes of their failure to external variables whereas low performance teams made internal causal attributions for their failure. These findings point to the direction that retroactive attributions and performance are related. They do not offer, though, information about the content of the attributions that explain performance perception, other than internal versus external. Therefore, the following research question is offered:

RQ2: Is there a relationship between retroactive attributions of trustworthiness and performance?

Performance. Performance received considerable scholarly attention in the organizational literature. Zaheer, McEvily, and Perrone (1998) found that performance was related to inter-organizational trust, but not to interpersonal trust. Both aspects of trust—cognitive and affective—were found to be associated with performance in groups (Hansen, Morrow Jr, & Batista, 2002).

Aubert and Kelsey (2003) tested the relationship between trust and performance in virtual teams. Although they did not find support for the relationship between trust and performance, their study illustrated how group communication might play a role in
performance. The authors offered the explanation that the groups experienced group process losses. Low performers had different perceived goals: some were perfectionists; others were interested in the process more than in the end result. Low performers also had communication problems: lack of punctuality, absenteeism, and insufficient feedback. On the other hand, high performers who did not trust other members recognized performance problems and devised effective strategies to resolve those problems. Finally, high performers who developed trust had also high levels of transparency. They shared information to a great extent, enabling members to know what each one was doing, communicating frequently, and providing access to work already done.

Other studies investigating the effect of trust on performance had mixed results. Two studies reported finding support for a main effect of trust on performance (Hughes, Rosenbach, & Clover, 1983; Klimoski & Karol, 1976), one study found support for an indirect effect (Friedlander, 1970), and one study found no support for the relationship between trust and performance (Kimmel, Pruitt, Magenau, Konar-Goldband, & Carnevale, 1980). Dirks (1999) investigated whether interpersonal trust affects group performance directly or indirectly. He found that in high trust groups, motivation was transformed into joint efforts and higher performance, whereas in low trust groups, motivation was transformed into individual efforts. Therefore, trust had a mediating effect on performance.

It seems that, in high trust groups, performance is mediated by knowledge sharing, whereas in low trust groups, performance is enhanced by choosing the correct ways to motivate each other. The following research question is proposed to find which of the trusting behaviors are related to performance in temporary groups:
RQ 3: Which of the trusting behaviors (knowledge sharing or suspending judgment) is most closely related to group performance?

Satisfaction. Satisfaction is a communication outcome that has often been employed in the study of small groups. Most of the research on satisfaction has focused on individuals’ reactions to the group processes, communication within the group, and satisfaction with the job, and even participation in group discussion (Crowell & Scheidel, 1963; Gouran, 1973).

Research on satisfaction comes from three directions: social psychology, interpersonal communication, and group research. In social psychology, Hrycenko and Minton (1974) identified three factors that contributed to overall satisfaction: satisfaction with the task procedure, feelings of independence in group, and concern with personal effectiveness. In interpersonal communication literature, satisfaction was defined as “the affective response to the fulfillment of expectation-type standards” (Hecht, 1978, p. 350). A group member satisfied with the group experience will like his or her group because the group met his or her standards (i.e., performance, good time, etc.). In the group literature, Keyton (1991) found three factors in task group members’ satisfaction that were consistent with those found by Heslin and Dunphy (1964): status consensus, perceived progress toward group goal, and perceived freedom to participate. The same factors were identified by Offut (1990).

In this study I used the definition of group satisfaction given by Hecht (1978) and employed by Keyton (1991) and Offut (1990). Satisfaction is defined as a group member affective response as a result of status consensus, perceived progress toward group goal, and perceived freedom to participate. The three dimensions (status consensus, perceived
progress toward group goal, and perceived freedom to participate) have been supported in past research.

One goal of this study was to test the effect of trust on satisfaction. However, as suggested by other trust models, trust may influence satisfaction indirectly, through trusting behaviors, such as knowledge sharing and suspending judgment. Therefore, I propose the following research question:

RQ 4: Which of the trusting behaviors (knowledge sharing or suspending judgment) is most closely related to group satisfaction?

Many researchers of satisfaction consider it an outcome of the group. However, people’s willingness to participate in future groups is based, in part, on their interpretation of their perceived satisfaction. Retroactive attributions that attempt to explain the group performance are likely to be influenced by satisfaction. Little evidence exists on the relationship between attributions and satisfaction. Vangelisti (1992) found that causal attributions for behavior were an important element that distinguished satisfied from dissatisfied couples in committed relationships. Satisfied couples tended to attribute external causes for their spouse’s negative behavior and internal causes for spouse’s positive behavior. Vangelisti’s findings show that satisfaction is directly related to causal attributions.

Because group members make internal attributions for success, as well as for failure, retroactive attributions of group outcomes are, therefore, likely to be related to swift trust in temporary groups. Moreover, at the end of the group work, people have extra information available when making retroactive attributions: the information that comes from their satisfaction (or lack of it) with their group experience. Satisfaction is
likely to play a role in the relationship between trust and attributions. The following
research question is offered to clarify this relationship:

RQ5: What is the relationship between swift trust, retroactive attributions,
performance, and satisfaction?

Summary

The purpose of this study was to test a model of trust formation in temporary
work groups. Trust in temporary groups is thought to take the form of swift trust, which
is conceptualized as a willingness to take risk that translates at the behavioral level in
knowledge sharing and suspending judgment. The model proposed that swift trust is
predicted by several antecedents in temporary work groups: generalized trust or
predisposition to trust, attributions of trustworthiness, and affect. Generalized trust refers
to one’s general tendency to see the world as a “just” place. Attributions of
trustworthiness include assumptions about group members’ competence, concern, and
reliability. Affect is defined as a set of emotions that include interest, admiration, respect,
and liking. Working under the theoretical framework of attribution and uncertainty
reduction theories, I proposed seven propositions that lay out the relationship among
antecedents of trust and swift trust.

Proposition 1: In temporary groups, uncertainty is negatively related to
generalized trust.

Proposition 2: In temporary group, uncertainty is positively related to social
communication.

Proposition 3: The more uncertainty members of temporary groups have, the more
proactive attributions of trustworthiness they will make.
Proposition 4: Members of temporary groups move from a state of uncertainty to a state of certainty by developing a willingness to take risk and performing trusting behaviors.

Proposition 5: Uncertainty in temporary groups is negatively related to affect.

Proposition 6: Group members explain their satisfaction with the group by using retroactive attributions of trustworthiness.

Proposition 7: Group members explain their group performance by using retroactive attributions of trustworthiness.

The first research question attempts to establish which antecedents of trust best explains swift trust formation in temporary groups.

RQ1: Which of the antecedents of trust (generalized trust, proactive attributions of trustworthiness, and affect) best predicts swift trust?

Swift trust is defined as having two components: willingness to take risk and trust behavior (knowledge sharing and suspending judgments). The first two hypotheses tested the relationship between the two components of trust:

H1: Knowledge sharing is positively related to willingness to take risk.

H2: Suspending judgment is positively related to willingness to take risk.

Proposition 2 states that social communication is a strategy used in temporary work groups to reduce uncertainty. Findings from case studies suggested that social communication and communication of enthusiasm are group behaviors used to build trust in early group’s life (Jarvenpaa & Leidner, 1999). Hypothesis 3 tested this relationship:

H3: Swift trust is positively related to group communication behaviors (social communication and communication of enthusiasm).
I proposed that one path through which swift trust is built is generalized trust. Mayer et al. (1995) suggested that dispositional trust influences trust through perceived trustworthiness. Jarvenpaa and Leidner (1999) emphasized group communication behaviors as a path through which dispositional trust predicts actual trust. These two competing views were tested by hypotheses 4a and 4b.

H4a: Attributions of trustworthiness mediate the relationship between generalized trust and swift trust.

H4b: Group communication behaviors mediate the relationship between generalized trust and swift trust.

There is some evidence that perceived trustworthiness alone is an indication of trust. If we perceive other people to be trustworthy, we trust them. By considering perceived trustworthiness as attributions of trust, we can explain research findings pointing to unusually high levels of trust in initial group interactions (McKnight et al., 1998; Meyerson et al., 1996). Recent research suggests that individuals enter groups expecting better things to happen to them than to an average member. They tend to assume that others will be disappointed and not themselves (Janoff-Bulman, 1992). These attributions may lead to a high level of initial trust. The following hypothesis tested this assumption:

H5: Proactive attributions predict swift trust in temporary groups.

Research suggests that emotions like interest, admiration, liking, and respect influence people’s trust in each other (Jones & George, 1998; Williams, 2001; Young & Daniel, 2003). URT also states that uncertainty reduction and liking are positively related. The next hypothesis proposes that people will increase their communication
behavior if they experience positive affect toward each other. The group communication behavior (social communication, communication of enthusiasm) will then influence trust.

H6: Group communication behaviors mediate the relationship between affect and swift trust.

Hypothesis 7 stems from Proposition 5 proposed in this model. One of URT’s axioms states that reducing uncertainty is positively related to liking. Proposition 5 in this model adapts URT’s axiom to temporary work group, stating that uncertainty is negatively related to affect. Trust, as an intermediate state between uncertainty and certainty should be predicted by attributions of trustworthiness. Therefore, I proposed that attributions of trustworthiness are related positively to affect.

H7: The more positive affect group members experience in a temporary group, the more proactive attributions of trustworthiness they will make.

The remaining of the research questions investigate the relationships between swift trust and group outcomes: performance, satisfaction, and retroactive attributions.

RQ2: Is there a relationship between retroactive attributions of trustworthiness and performance?

RQ3: Which of the trusting behaviors (knowledge sharing or suspending judgment) is most closely related to group performance?

RQ4: Which of the trusting behaviors (knowledge sharing or suspending judgment) is most closely related to group satisfaction?

RQ5: What is the relationship between swift trust, retroactive attributions, performance, and satisfaction?
Figure 2 shows a map of the research questions and hypotheses proposed in the model of swift trust formation.
Figure 2. Hypotheses and research questions
CHAPTER 2

METHOD

The purpose of this study was to test a model of trust development in temporary small groups. The model conceptualized swift trust in temporary groups as willingness to take risks and trust behaviors (knowledge sharing and suspending judgment). It considered antecedents of trust--generalized trust, affect, and proactive attributions of trustworthiness--and group outputs that might be influenced by trust: group performance, satisfaction, and retroactive attributions. It also took into consideration group communication behaviors, such as social communication and communication of enthusiasm, as possible factors that influence the formation of swift trust. The proposed model clarified the conceptualizations made about trust and the relationships among trust and different outcome variables.

Design

The main data gathering techniques used in past studies on trust are experimental and self-report questionnaire. The experimental method has the advantages of improving the researcher’s ability to (a) draw conclusions of causality and specific mediating variables, (b) use reliable measures from different sources, and (c) isolate trust. Social psychological researchers who used experiments to study trust had subjects working on tasks such as tower building and moon or wilderness survival task (Dirks, 1999; Ferrin & Dirks, 2003). The disadvantages of experimental designs reside in the fact that, being conducted in a laboratory, the results have little external validity. In addition, the tasks often have little resemblance to the tasks that group members face in an organizational setting. Self-report questionnaires are used to collect data about attitudes, personality
characteristics, and psychological states, to name but a few. Trust researchers have used self-report questionnaires in studying interpersonal or group trust (Couch & Jones, 1997; McAllister, 1995; Rempel et al., 1985; Simons & Peterson, 2000; Wells & Kipnis, 2001; Zaheer et al., 1998).

Some researchers used a measure of self-report in which they incorporated a task in order to focus the participants’ self-reports on a specific group and to give the participants a recent group experience to which they can refer when recollecting their attitudes toward the group (Aubert & Kelsey, 2003; Jarvenpaa & Leidner, 1999; VanLear & Trujillo, 1986). This method combines the advantages of both self-report and experiment.

In this study, I collected data using self-report measures. I gave the participants a task to provide them with a recent group experience to increase the accuracy of their self-reports. In terms of data analyses, the hypotheses and research questions suggested a correlational design in which the level of analysis is the individual. This type of design seemed to provide the best data to examine the relationship among antecedents of trust, swift trust, and group outcomes in temporary work groups. The self-reports included measures of trust, uncertainty, attributions, affect, group communication behavior, group satisfaction, and group performance.

Sample

The required sample size for the regression analyses is 89 subjects. In order to be able to detect a moderate effect, with a power of .90 and a significance level of .05, Cohen (1988) suggested a sample size of 125. The participants in this investigation were 158 undergraduate students enrolled in a basic communication course at Kent State
University. College students work groups fit the definition of temporary groups in that they meet for a relatively short period of time to work together on a common task. They usually do not have a history of working together and there is a small probability that they will do so in the future.

The participants were college students between the ages of 18 and 28; 90% were between the ages of 18 and 21; 19 was the median age of the sample. Males comprised 50% of the sample. Participants came from a variety of majors, including Business (31%), Accounting (20%), Education (12%), Journalism (10%), Computer Science (9%), Communication Studies (9%), and other majors (9%). In terms of ethnic background, 82.3% of the participants identified themselves as Caucasian, 17% were African American, and 3% were Asian. The remaining 7% did not declare their ethnicity. Another demographic characteristic was past experience with working in groups. Two questions assessed this variable: a four-point Likert-type question with answers ranging from “not at all” to “a lot,” and an open-ended question that asked “About how many groups have you worked with within the last two years?” A chi-square test revealed that there were no significant differences between the two questions, so I used the answers from the Likert-type question to describe the sample. The majority of the participants had experience working in groups (70.9%). Only 20.9% said that they did not have much experience, and 8.2% answered that they did not have any experience with working in groups. An overview of the demographic statistics is provided in Table 1.
Table 1

Demographics of the Sample

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
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<td></td>
</tr>
<tr>
<td>18-21</td>
<td>141</td>
<td>89.2</td>
</tr>
<tr>
<td>Over 22</td>
<td>17</td>
<td>10.8</td>
</tr>
<tr>
<td>Gender</td>
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<td></td>
</tr>
<tr>
<td>Male</td>
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<td>50</td>
</tr>
<tr>
<td>Female</td>
<td>79</td>
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</tr>
<tr>
<td>Ethnicity</td>
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<tr>
<td>Caucasian</td>
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<tr>
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<tr>
<td>Major</td>
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</tr>
<tr>
<td>Business</td>
<td>51</td>
<td>32.3</td>
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<tr>
<td>Computer Science</td>
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<td>15.8</td>
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<tr>
<td>Communication</td>
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<td>18.9</td>
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<tr>
<td>Education</td>
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<tr>
<td>Other</td>
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<td>15.8</td>
</tr>
<tr>
<td>Group Experience</td>
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<tr>
<td>Not at all</td>
<td>13</td>
<td>8.2</td>
</tr>
<tr>
<td>Not much</td>
<td>33</td>
<td>20.9</td>
</tr>
<tr>
<td>Some</td>
<td>72</td>
<td>45.6</td>
</tr>
<tr>
<td>A lot</td>
<td>40</td>
<td>25.3</td>
</tr>
</tbody>
</table>
Procedure

Once approval from the Kent State University Human Subjects Review Board was granted, participants were randomly assigned to groups and invited to work together on an assigned task. The tasks most commonly used in survey research on trust are research papers or projects (Aubert & Kelsey, 2003; Jarvenpaa & Leidner, 1999, VanLear & Trujillo, 1986). In this study, I proposed a project that could be completed within ninety minutes.

Participants were asked to create a website advertising nice and affordable housing for new students in the Kent area. They were provided with paper and pencils and were allowed to use the Internet to search for information on housing. The task is relevant for college students because it resembles class projects in which they are likely to be involved over the course of their life as students. It requires research skills (searching the Internet), critical thinking skills (summarizing and evaluating the merits of different housing options), and presentation skills (designing the final project), which are basic skills required of college students. It also requires a high degree of interdependence among participants, which is an important condition for studying trust (Dirks, 1999). In order to account for the willingness to take risk--which is proposed as a dimension of swift trust--I provided a monetary incentive. The best website, as evaluated by a group of graduate students trained in web design, received one hundred dollars.

Participants were assigned to groups randomly, but under the condition that they should not know their group members. In cases where group members knew each other, I asked them to move to other groups. Also, I made sure that each group had a relatively equal number of males and females. The groups ranged from 4-member groups to 6-
member groups, with the majority of them being 5-member groups. There were 34
groups, of which 24 were 5-member groups.

I described the task to the participants and I gave them a consent form that
contained the description of the task and how the outcome was to be evaluated (see
Appendix A). They were given five minutes to discuss among themselves and to get to
know each other before they were given the questionnaires. After five minutes, I returned
to the room and I answered any questions they had about the task. The participants were
then asked to fill out measures of uncertainty, generalized trust, proactive attributions of
trustworthiness, and affect. A measure of uncertainty was needed to test the model’s
propositions. Generalized trust, proactive attributions of trustworthiness, and affect
measures were given before the group interacted, to assess participants’ internal states
and attitudes prior to the interaction. After the task, participants were asked to fill out
measures of swift trust, group communication behavior, retroactive attributions, group
satisfaction, and expected group performance, all based on their experience in this
temporary work group. The whole investigation lasted two hours.

Measurement

*Uncertainty* was measured by the global uncertainty scale, the CLUES7
(Clatterbuck, 1979). The CLUES7 is one of the several accepted measures of uncertainty
and has the advantage of demonstrated reliability and validity. It includes seven items
measuring global uncertainty, such as “How confident are you of your general ability to
predict how your partner will behave?” Answers to these items are recorded on a scale
ranging from 1 (not confident) to 9 (extremely confident). Reliabilities for the CLUES7
have ranged from .85 (Neuliep & Grohskopf, 2000) to .88 (Douglas, 1991). The items
were reworded to reflect the group rather than a specific partner or a conversation (see Appendix B). In this investigation, the Cronbach alpha was .90.

Data on generalized trust or propensity to trust were collected using a propensity to trust measure developed by Jarvenpaa et al. (1998) and subsequently used by Aubert and Kelsey (2003) in virtual teams. The measure is composed of four items and has had good reliability (Cronbach alpha of .81). In this investigation, generalized trust was adapted to reflect trust towards fellow students, rather than trust in general, because the population of the study was college students. The measure is presented in Appendix C. In this investigation, the Cronbach alpha was .89.

Data about attributions were collected on a scale designed by Jarvenpaa et al. (1998) to test ability, benevolence, and integrity (see Appendix D). These three characteristics were the most common elements of perceived trustworthiness (Mayer et al., 1995). Perceived trustworthiness was operationalized in this study as attributions of trustworthiness. The scale contains 15 items. Aubert and Kelsey (2003) reported high reliability for each subscale (Cronbach alphas ranged from .72 for benevolence to .89 for integrity and .92 for ability). In this investigation the Cronbach alpha for the 15 items was .92. The Cronbach alpha for ability was .88, .78 for benevolence, and .81 for integrity.

Swift trust, conceptualized as a willingness to take risk and trusting behavior (knowledge sharing and suspending judgment) was measured using three scales. The first scale was developed by Jarvenpaa et al. (1998), based on Mayer et al.’s (1995) conceptualization of trust. Jarvenpaa et al. (1998) reported a reliability of .66. Aubert and Kelsey (2003) reported a Cronbach alpha of .82 for the same measure of trust. Based on a conceptualization of knowledge sharing and suspending judgment by McEvily et al.
(2003), I constructed a 4-item scale to test the perception of group knowledge sharing and a 3-item scale to test group members’ suspending judgment during the group work (Appendix E). A principal components factor analysis showed that the swift trust scale had three components, which corresponded to willingness to take risk, knowledge sharing, and suspending judgment. Willingness to take risk subscale had a Cronbach alpha of .85, knowledge sharing subscale had a Cronbach alpha of .77, and suspending judgment subscale had a Cronbach alpha of .45. Because of this low alpha, I decided to use a combined measure of swift trust, which was reliable (alpha = .86).

Affect is another antecedent of trust. Affect is conceptualized as relationship-building emotions (liking, admiration, respect, and interest) based on Young and Daniel’s (2003) study, who borrowed the term affect from McAllister’s (1995) concept of affect-based trust. To measure affect in temporary groups, I created a 4-item scale with statements addressing each of the four relationship-building emotions (Appendix F). In this investigation, the Cronbach alpha was .84.

The mediating variable is group communication behavior, which has two dimensions: social communication and communication of enthusiasm. These two dimensions were proposed by Jarvenpaa et al. (1999), who obtained qualitative data on the two constructs. Using case studies, Jarvenpaa et al. identified social communication as non-task comments or information about group members’ hobbies, their weekend activities, and their families. Communication of enthusiasm was another dimension of group communication that appeared in the Jarvenpaa et al. study. Examples of comments made by teams who used communication conveying enthusiasm were: “we are beginning to feel like friends, not just teammates,” “this is getting exciting,” “great work everyone!”
Based on the conceptualization of Jarvenpaa et al., I created a 3-item scale to measure social communication and a 3-item scale to measure communication of enthusiasm (Appendix G).

The group communication scale was pilot-tested on a sample of 52 participants. The pilot study was conducted two weeks before the final study. Its participants were college students who completed the group communication scale after participating in a group task. The group task was similar to the one given in the final study: to design a website to advertise nice and affordable housing in the local area. The group communication scale had a reliability of .87. A principal components factor analysis showed that the group communication scale had two factors, which corresponded to the two dimensions, social communication and communication of enthusiasm. The alpha for the group communication scale in the final study was .87. The alpha for the social communication subscale was .87, and the alpha for the communication of enthusiasm subscale was .81.

*Retroactive attributions* are reasons people give for present behavior based on past behavior and/or personal traits. To measure retroactive attributions of the participants, I asked for participants’ perception of their performance and rephrased the proactive attributions of trustworthiness to answer the question: Why do you think you had a good/bad performance? Moreover, because attributions of trustworthiness are internal attributions, and bad performance is often explained as due to an external situation, the last item in the retroactive attribution measure was an open-ended item that asks for other causes of the group’s performance (see Appendix H). In this investigation, the Cronbach alpha was .92.
Measures of group performance are sparse (Brannick, Salas, & Prince, 1997). Outcomes of group effectiveness in work settings are: objective indices (i.e., win-loss records of racing crews), subjective ratings by superiors (Tziner & Eden, 1985), or assessment of satisfaction (Higgs, 1993). Krayer (1988) used standardized grades to assess performance in classroom groups. In this study, I used trained raters to assess group performance. The argument in this case is that trained raters provide an assessment that resembles real-life performance evaluations (college students’ group work is graded by a professor). A group of 3 graduate students were trained in evaluating web pages and were asked to evaluate each group’s project. The 3 raters rated the project on a scale from 1 to 4 (1 meaning “poor”, 2 meaning “fair”, 3 meaning “good”, and 4 meaning “excellent”) on design (organization, visual appeal, and theme) and content (quality and quantity of information) (see Appendix I). Inter-rater reliability was determined by computing a Cronbach alpha for the three raters. It was .94. I resolved the disagreements among the raters by using the most often used ratings.

Participants’ perceptions of the group outcome were also included as a single-item indicator (see Appendix H). Participants’ self-perception of the group project was needed in order to assess their proactive and retroactive attributions about the group’s performance.

Satisfaction has been assessed usually through a single-item measure. Heslin and Dunphy (1964) identified three dimensions of satisfaction: perceived progress toward the goal, perceived freedom to participate, and status consensus. Offutt (1990) used the three-dimensional satisfaction concept in a study about group outcomes. She developed a Group-Sat scale (Offutt, 1990) and reported a reliability of .81. Offutt (1990) developed a
group satisfaction scale that proved to have face validity and internal reliability. I used two of its three subscales to measure satisfaction with the group experience. The third subscale in Offutt’s measure was status consensus and it contained items that assess the emergence of a leader in a group, which was not relevant for this study (see Appendix J). The Cronbach alpha for the scale in this investigation was .94. An overview of all the instruments’ reliabilities is provided in Table 2. All scales use means in the data analyses that followed.

Summary

In this investigation, I used a correlational design to develop and test a model of swift trust development in temporary work groups. The independent variables – generalized trust, affect, and proactive attributions of trust – were measured by instruments that proved to have very good reliability, as measured by Cronbach’s alpha.

Table 2

*Reliability of Instruments*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Cronbach alpha</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLUES7</td>
<td>.89</td>
<td>5.79</td>
<td>0.20</td>
</tr>
<tr>
<td>Generalized Trust</td>
<td>.89</td>
<td>4.40</td>
<td>0.02</td>
</tr>
<tr>
<td>Proactive Attributions</td>
<td>.92</td>
<td>4.92</td>
<td>0.13</td>
</tr>
<tr>
<td>Affect</td>
<td>.83</td>
<td>5.51</td>
<td>0.31</td>
</tr>
<tr>
<td>Group Communication Behavior</td>
<td>.87</td>
<td>4.57</td>
<td>0.43</td>
</tr>
<tr>
<td>Swift Trust</td>
<td>.86</td>
<td>5.70</td>
<td>0.29</td>
</tr>
<tr>
<td>Retroactive Attributions</td>
<td>.92</td>
<td>5.83</td>
<td>0.08</td>
</tr>
<tr>
<td>Group Satisfaction</td>
<td>.94</td>
<td>6.10</td>
<td>0.06</td>
</tr>
</tbody>
</table>
The mediator variable – group communication behavior – is a scale tested for the first time in this investigation. It is based on previous research conceptualization (Jarvenpaa et al., 1999) and it had good reliability in this study.

The main dependent variable – swift trust – was measured by combining three subscales. The first subscale measured willingness to take risk and was used in previous research on swift trust (Jarvenpaa et al., 1998; Mayer et al., 1995). The second and third subscales measured the other two components of swift trust – knowledge sharing and suspending judgment. The subscales were developed based on conceptualizations of knowledge sharing and suspending judgment in previous research. The swift trust scale proved to be a reliable instrument in this investigation.

Group outcome variables were group performance, retroactive attributions of trustworthiness, and group satisfaction. Group performance was measured by compiling the ratings given to the groups’ projects by three independent raters. Retroactive attributions of trustworthiness were measured by the same scale used to measure the proactive attributions of trustworthiness and rephrasing the items in the past tense. Group satisfaction was measured by a scale used in previous research, which proved to have good reliability.
CHAPTER 3

RESULTS

The main purpose of this investigation was to identify the best predictors of swift trust formation in temporary small task groups. The independent variables proposed to predict swift trust were: generalized trust, proactive attributions, and affect. Group communication behavior was expected to be a mediating variable between affect and swift trust and between generalized trust and swift trust. According to Baron and Kenny (1986), a mediator variable explains how “external physical events take on internal psychological significance” (p. 1176). In this investigation, I proposed that the external event -- group communication behavior -- takes on psychological significance -- swift trust.

In this chapter, I provide an overview of the relationships among the model’s variables--predictors of swift trust, mediators of swift trust, and swift trust--and I present the results of the regression and correlation analyses needed to test the hypotheses and to answer the research questions. Although the main purpose of this study was to establish the mechanisms of swift trust formation and not to test the model’s propositions, I present the results of additional analyses that give an indication of whether the propositions are valid. In Table 3, I give an overview of the relationships among the independent variables and between the independent and the dependent variables.

As Table 3 indicates, proactive attributions and affect show the strongest correlation with swift trust, followed by generalized trust and group communication behaviors. Also, proactive attributions showed a substantial relationship with affect and a slight relationship with generalized trust and group communication behavior.
Table 3

*Correlations among Predictors of Swift Trust, Mediators of Swift Trust, and Swift Trust*

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Generalized Trust</td>
<td>_</td>
<td>.25**</td>
<td>.35**</td>
<td>.20*</td>
<td>.20*</td>
</tr>
<tr>
<td>2. Affect</td>
<td>_</td>
<td>.67**</td>
<td>.30**</td>
<td>.31**</td>
<td></td>
</tr>
<tr>
<td>3. Proactive Attributions of Trustworthiness</td>
<td>_</td>
<td>.34**</td>
<td>.31**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Group Communication Behavior</td>
<td>_</td>
<td>.19*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Swift Trust</td>
<td>_</td>
<td>_</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. * p < .05, ** p < .01*

The way the participants explained the upcoming performance was related to how they felt about each other and whether they trusted each other or not. All of the independent variables (generalized trust, affect, and proactive attributions of trust) were positively correlated with swift trust, showing that they all might be predictors of swift trust. A regression analysis will establish if this is the case.

To answer RQ1, I sought the best predictors of swift trust from among the antecedents of trust (generalized trust, proactive attributions of trustworthiness, and affect). I conducted a series of linear regression analyses to evaluate the prediction of swift trust from each antecedent of trust. The results indicated that proactive attributions of trustworthiness and swift trust were linearly related such that, as proactive attributions increased, swift trust increased. Accuracy in predicting swift trust was moderate. The correlation between the proactive attributions and swift trust was .31, \( t (158) = 4.05, p < .001 \). Approximately 10% of the variance of the swift trust was accounted for by its linear relationship with the proactive attributions.
The results of the second linear regression analysis showed that affect and swift trust were linearly related such that, as affect increased, swift trust increased. Accuracy in predicting swift trust was moderate. The correlation between affect and swift trust was .31, \( t(158) = 4.12, p < .001 \). Approximately 11% of the variance of the swift trust was explained by its linear relationship with affect.

The third linear regression indicated that generalized trust and swift trust were linearly related. As generalized trust increased, swift trust increased. The correlation between generalized trust and swift trust was .20, \( t(158) = 2.52, p < .001 \) (see Table 4). Therefore, affect best predicted swift trust, closely followed by proactive attributions of trustworthiness.

Hypotheses 1 and 2 proposed that the two components of trust behavior (knowledge sharing and suspending judgment) would be related to willingness to take risk, which is the third component of swift trust. The data indicated that both trust behavior and willingness to take risk are components of swift trust, as defined in this investigation. Both knowledge sharing \((r = .48, p < .01)\) and suspending judgment

<p>| Table 4 |
| Summary of Linear Regression Analyses for Predictors of Swift Trust |</p>
<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proactive Attributions</td>
<td>0.30</td>
<td>0.07</td>
<td>.31**</td>
</tr>
<tr>
<td>Affect</td>
<td>0.26</td>
<td>0.06</td>
<td>.31**</td>
</tr>
<tr>
<td>Generalized Trust</td>
<td>0.13</td>
<td>0.05</td>
<td>.20*</td>
</tr>
</tbody>
</table>

*Note.* \( R^2 = .10 \) for proactive attributions and affect; \( R^2 = .04 \) for generalized trust.

* \( p < .05 \), ** \( p < .001 \); \( N = 158 \)
(r = .65, p < .01) were positively related to willingness to take risk. Moreover, knowledge sharing and suspending judgment were positively related to each other (r = .53, p < .01). Therefore, both Hypotheses 1 and 2 were supported.

Hypothesis 3 proposed that swift trust would be positively related to group communication behaviors (social communication and communication of enthusiasm). Pearson correlations indicated that swift trust was positively related to communication of enthusiasm (r = .37, p < .01), but no significant relationship was found between swift trust and social communication. Also, there was a small positive relationship between swift trust and group communication behavior (r = .19, p < .05). In addition, social communication and communication of enthusiasm were positively related (r = .46, p < .01). Therefore, Hypothesis 3 was partially supported.

In order to test Hypotheses 4a and 4b, I conducted several regression analyses to examine if either attributions of trustworthiness was a mediator variable between generalized trust and swift trust or group communication behavior was a mediator between generalized trust and swift trust. According to Baron and Kenny (1986) (who explained in detail how to test for a mediating effect), there are three regression analyses needed: first, the regression of the mediator (attribution of trustworthiness or group communication behavior) on the independent variable (generalized trust); second, the regression of the dependent variable (swift trust) on the independent variable (generalized trust); and third, the regression of the dependent variable (swift trust) on both the independent variable (generalized trust) and the mediator (attribution of trustworthiness or group communication behavior). In order to have a mediating effect, the independent variable must affect the mediator, the independent variable must affect the dependent
variable, and the mediator must affect the dependent variable. If these conditions hold, then the effect of the independent variable on the dependent variable must be less in the third regression equation than in the second.

Hypothesis 4a predicted that attributions of trustworthiness mediated the relationship between generalized trust and swift trust. The first regression equation was significant, $F(1, 155) = 22.06, p < .001, B = .24, \beta = .35$. The second regression equation was significant, $F(1, 155) = 6.35, p < .05, B = .13, \beta = .20$. The third regression equation was also significant, $F(1, 154) = 9.01, p < .001$. All the conditions of mediation were met. In order to have a mediating effect, the effect of generalized trust on swift trust must be less in the third regression than in the second. The standardized coefficient beta in the third equation was .10 and it was .20 in the second equation. Therefore, attributions of trustworthiness mediated the relationship between generalized trust and swift trust, providing support for Hypothesis 4a.

Hypothesis 4b predicted that group communication behavior would mediate the relationship between generalized trust and swift trust. In order to test for this hypothesis, I performed the same steps as above. The first equation was significant, $F(1, 155) = 6.17, p < .05, B = .21, \beta = .20$. The second equation was significant, $F(1, 155) = 6.35, p < .05, B = .13, \beta = .20$. The third equation was also significant, although modest, $F(1, 154) = 5.28, p < .01$. The standardized coefficient beta in the third equation for generalized trust was .17 and it was .20 in the second equation; therefore, there was a mediating effect, although small. Group communication behavior mediated the relationship between generalized trust and swift trust. Hypothesis 4b was supported. Table 5 shows the results
### Table 5

**Summary of Linear Regression Analyses for Predictors and Mediators of Swift Trust**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>R²</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Regression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive Attributions on Generalized Trust</td>
<td>.24</td>
<td>.05</td>
<td>.35**</td>
<td>.13</td>
<td>.13</td>
</tr>
<tr>
<td><strong>Second Regression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swift Trust on Generalized Trust</td>
<td>.13</td>
<td>.05</td>
<td>.20*</td>
<td>.04</td>
<td>.04</td>
</tr>
<tr>
<td><strong>Third Regression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swift Trust on Generalized Trust</td>
<td>.07</td>
<td>.05</td>
<td>.10</td>
<td>.11</td>
<td>.11</td>
</tr>
<tr>
<td>Swift Trust on Proactive Attributions</td>
<td>.27</td>
<td>.08</td>
<td>.27**</td>
<td>.11</td>
<td>.11</td>
</tr>
<tr>
<td><strong>First Regression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Communication Behavior on Generalized Trust</td>
<td>.21</td>
<td>.08</td>
<td>.20*</td>
<td>.04</td>
<td>.04</td>
</tr>
<tr>
<td><strong>Second Regression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swift Trust on Generalized Trust</td>
<td>.13</td>
<td>.05</td>
<td>.20*</td>
<td>.04</td>
<td>.04</td>
</tr>
<tr>
<td><strong>Third Regression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swift Trust on Generalized Trust</td>
<td>.11</td>
<td>.05</td>
<td>.17*</td>
<td>.06</td>
<td>.06</td>
</tr>
<tr>
<td>Swift Trust on Group Communication Behavior</td>
<td>.10</td>
<td>.05</td>
<td>.16*</td>
<td>.06</td>
<td>.06</td>
</tr>
</tbody>
</table>

*Note. * p < .05, ** p < .001; N = 158*
of the regression analyses for Hypotheses 4a and 4b. The mediating model is presented in Figure 3.

Hypothesis 5 tested whether proactive attributions would predict swift trust directly. The results of a linear regression analysis showed that linearly and positively related. The standardized coefficient beta showed a small effect ($\beta = .31, p < .001$). Approximately 10% of the variance in swift trust was explained solely by variance in proactive attributions. Therefore, Hypothesis 5 was supported. Additional analyses were performed to identify whether proactive attributions of trustworthiness predicted swift trust when affect, generalized trust, and group communication behavior were controlled for. Proactive attributions did not significantly predict swift trust when controlled for affect, but proactive attributions predicted swift trust when controlled for generalized trust and group communication behavior ($\beta = .25, p < .01$). When controlled for all variables, proactive attributions did not significantly predict trust.

Hypothesis 6 proposed that group communication behavior would mediate the relationship between affect and swift trust. All the conditions for mediation were met. The standardized coefficient beta in the third equation was .28, less than the standardized coefficient beta in the second equation, .31, showing that group communication behavior

![Figure 3](mediational_model.png)

Figure 3. Mediational model: Generalized trust-swift trust

Note: Beta weights precede correlation coefficient.
mediated affect and swift trust, although the mediating effect was modest. Hypothesis 6 was supported. The mediational model is shown in figure 4.

Hypothesis 7 predicted a relationship between affect and proactive attributions. The results of the Pearson correlation showed that there is a substantial positive relationship between affect and proactive attributions, $r = .67, p < .01$. Therefore, Hypothesis 7 was supported.

RQ2 investigated the existence of a relationship between retroactive attributions and performance. No significant relationship was found between retroactive attributions and group performance.

RQ3 investigated the relationship between trusting behaviors (knowledge sharing and suspending judgment) and performance. The results of the Pearson correlation showed no significant relationship between trusting behaviors and performance.

Finally, RQ5 investigated the relationship between swift trust, retroactive attributions, performance and satisfaction. The results of Pearson correlations showed that swift trust, retroactive attributions, and group satisfaction were positively and significantly correlated. There were moderate relationships detected between swift trust and retroactive attributions and between swift trust and group satisfaction. There was also a strong positive relationship between retroactive attributions and group satisfaction. No

![Figure 4. Mediational model: Affect-swift trust](image)

Note: Beta weights precede correlation coefficient.
significant relationships were detected between group performance and any of the group outputs, nor between group performance and swift trust.

Research Question 4 asked for the closest relationship between trusting behaviors (knowledge sharing and suspending judgment) and group satisfaction. Knowledge sharing was most closely related to group satisfaction, \( r = .60, p < .01 \), whereas suspending judgment correlated positively with satisfaction, although not as strong, \( r = .47, p < .01 \). This shows that participants who shared their ideas about the group project and in general shared more information with their group members also enjoyed the group experience more than those who did not share information as much. Suspending judgment about group members’ ideas and feeling comfortable giving others responsibility for the project without constant monitoring was also related to satisfaction, but the relationship was weaker.

Table 6

*Correlations among Swift Trust and Group Outputs*

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Swift Trust</td>
<td>___</td>
<td>.56**</td>
<td>.58**</td>
<td>.06</td>
</tr>
<tr>
<td>2. Retroactive Attributions</td>
<td>___</td>
<td>.80**</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>3. Group Satisfaction</td>
<td>___</td>
<td></td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>4. Group Performance</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* *p < .05, **p < .01

Propositions and Additional Analyses

The model’s propositions were generally supported in this investigation. Based on the data in this sample, uncertainty was negatively related to affect (\( r = -.47, p < .01 \) and
generalized trust ($r = -.24, p < .01$). Therefore, Proposition 1, which indicated that uncertainty should be negatively related to generalized trust, was supported. Proposition 2, which indicated that social communication and uncertainty should be negatively related, did not receive support in this investigation. There was no significant relationship between uncertainty and social communication. However, additional analyses indicated that uncertainty was positively related to knowledge sharing ($r = .27, p < .001$). Uncertainty was also positively related to proactive attributions ($r = .43, p < .01$), providing support for Proposition 3. The more people felt uncertain in initial group interactions, the more attributions they made about the others in the group to dissipate the uncertainty. Proposition 4 was not tested in this investigation because the uncertainty was not measured at the end of the experiment. Proposition 5 received support; uncertainty was negatively related to affect ($r = .44, p < .001$).

Additional analyses revealed that integrity, one of the three components of attributions of trustworthiness, explained the most variance in swift trust ($\beta = .35, R^2 = .12, p < .001$). Also, of the emotions included in affect, liking and interest explained most variance in swift trust ($\beta_{\text{liking}} = .20, R^2 = .10, p < .001; \beta_{\text{interest}} = .21, R^2 = .13, p < .05$). Perceived performance was positively related to communication of enthusiasm ($r = .43, p < .01$), but actual performance was negatively related to group communication behaviors, although the correlation was not significant ($r = -.10, p = .20$).

Additional analyses were performed on demographics variables (age, gender, ethnicity, and group experience). None of the demographic variables had any significant effect on the model dependent variables (swift trust, group satisfaction, and group performance).
Summary

In this study, I proposed and tested a model of swift trust formation. The results of statistical analyses showed that the model’s hypotheses were generally supported. Specifically, the proposed conceptualization of swift trust as willingness to take risk and trusting behaviors (knowledge sharing and suspending judgment) received empirical support. All three components of swift trust were correlated; therefore, Hypotheses 1 and 2 were supported. Both behavioral components of swift trust--knowledge sharing and suspending judgment--were positively correlated with group satisfaction, with knowledge sharing more closely related to satisfaction than suspending judgment. Swift trust in temporary work groups was best predicted by affect, followed closely by proactive attributions of trustworthiness. Swift trust was also correlated with one group communication behavior, communication of enthusiasm, providing partial support for Hypothesis 3, and with proactive attributions of trustworthiness, supporting Hypothesis 5.

A more complex relationship was discovered between swift trust and generalized trust. Proactive attributions of trustworthiness and group communication behavior, respectively, mediated the relationship between generalized trust and swift trust. Group communication behavior also mediated the relationship between affect and swift trust. Hypotheses 4a, 4b and 6 were supported. In addition, a substantial positive relationship was discovered between affect and proactive attributions, supporting Hypothesis 7.

The answers to the five research questions further clarified the relationships among the variables of the model. Affect and proactive attributions of trustworthiness were found to best predict swift trust, answering RQ1. The rest of the research questions investigated the relationships between swift trust and other group outputs. Swift trust was
found to be positively related to group satisfaction, but not with group performance (RQ5). Trusting behaviors were positively related to group satisfaction, but not to group performance (RQ4 and RQ3). Both trusting behaviors were positively related to group satisfaction, but knowledge sharing had a stronger relationship with group satisfaction that did suspending judgment (RQ4). Retroactive attributions were also found to follow the same relational pattern as swift trust. They were positively related to group satisfaction, but not to group performance (RQ5 and RQ2). Swift trust and retroactive attributions were positively related. The relationship between group satisfaction and group performance was not statistically significant in this study. In the next chapter I discuss the significance of the results of the statistical analyses, as well as the limitations of the study. Finally, I provide suggestions for future research in the area of swift trust development.
The questions posed in the introduction of this study stemmed from research about trust in temporary work groups. My goal was to find out how swift trust develops. The results showed that the best predictors of swift trust were proactive attributions of trustworthiness, generalized trust, and affect. People trust others with whom they work (temporarily) because they perceive their group members as trustworthy, they have a propensity to trust others in general, and they like their group members.

In this chapter I discuss how the purposes of the study were accomplished, I situate the findings in the trust literature, and I discuss the theoretical and practical implications of the study. Then, I point toward several conceptual and methodological limitations, and I suggest future directions for the study of swift trust in temporary groups.

The results of this study provide an exciting addition to the trust literature and a useful tool for swift trust researchers. My purpose in this study were threefold. First, I wanted to identify the mechanisms through which swift trust was established in temporary work groups. My second purpose was to extend the realm of phenomena investigated under two theoretical frameworks: uncertainty reduction theory and attribution theory. My third purpose was to propose a model of swift trust in temporary work groups.

I accomplished the first and third goals of this study by identifying the paths through which swift trust is established. The results of the analyses pointed toward the
affect and the proactive attributions of trustworthiness as best direct predictors of swift trust.

Swift trust was also established through mediating paths. A first path was from generalized trust to swift trust and the mediators were proactive attributions of trustworthiness and group communication behavior. Group members who entered the groups with a propensity to trust people in general (generalized trust) anticipated very good performance and attributed this anticipation to the trustworthiness of their group members. These attributions, in turn, led them to engage in conversations that were not related to the task at hand (social communication) such as, activities outside the class and their friends and family. They were also excited about the project and congratulated each other (communication of enthusiasm). By engaging in these types of group communication behavior, participants developed trust toward their group members; they were comfortable sharing responsibility for the project and letting their group members influence the project, a willingness to take risk. They also shared their ideas about the project (knowledge sharing) and did not judge the others for their contributions (suspending judgment).

A second path was from affect to swift trust, and the mediator was group communication behavior. Participants who liked their group members engaged in more group communication behaviors (social communication and communication of enthusiasm) that led to the development of trust.

It seems that swift trust can be established either directly when people either like their group members (affect) or assume that their group members are trustworthy (proactive attributions of trustworthiness) or indirectly, when people have a belief in a
just world (generalized trust) or they like their group members (affect). In the last two cases, perceiving one’s group members as trustworthy (attributions of trustworthiness) or communicating on topics outside the task and expressing enthusiasm for the group work (group communication behavior) facilitate the formation of swift trust from general trust and affect.

These findings support and complement both Mayer et al.’s (1995) and Jarvenpaa and Leidner’s (1999) models of swift trust. Mayer et al. (1995) suggested that both perceived trustworthiness (attributions of trustworthiness) and the trustor’s propensity to trust (generalized trust) influence trust. Their model did not explain how the two antecedents of trust lead to actual trust. In this study, I showed how generalized trust is transformed in attributions of trustworthiness and communication behaviors that foster the actual development of trust. Moreover, I extend the model of trust proposed by Mayer et al. from dyadic relationships in organizations to work group relationships. Jarvenpaa and Leidner (1999) focused on group communication behavior, suggesting that although trust might be imported (i.e., people might enter groups with a level of initial trust) from group members’ previous experience, it is more likely to be created via the communication behavior of the group. In this study, I demonstrated that trust could be established through multiple paths, including group communication.

The first and third goal of the study were to develop a theoretical model of swift trust in groups, whereas the second goal involved advancing the domain of phenomena investigated by uncertainty reduction theory and attribution theory. Both URT and attribution theory provided a good foundation for the model of swift trust. URT, which has been applied mainly in research about interpersonal relationships and organizational
socialization, and only in limited ways to research about groups, has added the process of establishing trust to its realm of phenomena.

The propositions of the swift trust model clearly demonstrate that swift trust is an uncertainty reduction phenomenon in temporary work groups and is similar to uncertainty reduction in other interpersonal encounters. Reducing uncertainty in small task groups requires group members to go through the same process of disclosing information and asking for information as they would do in a small social group, say a group of new housemates. Small task groups are similar to small social groups in that both types of groups go through a socialization process in which members get acquainted and establish relationships. Barker, Wahlers, Watson, and Kibler (1991) emphasized that all groups have a social dimension, which is related to their maintenance goals. Work groups have also a task dimension, which is related to their achievement goals. Barker et al. suggested that there is a continual fluctuation in a group’s life between the achievement and the maintenance goals.

This study used the concepts of proactive and retroactive attributions, central to URT and also found in the attribution theory, to explain a characteristic of the trustee (perceived trustworthiness) that affects swift trust. Swift trust also reinforced perceived trustworthiness. Proactive attributions of trust (perceived trustworthiness before the group starts working together) predicted swift trust, but also swift trust was positively related to retroactive attributions of trust (perceived trustworthiness at the end of the group work).

Theoretical Implications

This model of swift trust development differs in certain ways from the existing theoretical models of trust. Unique to this model is its dual capacity for understanding
trust. The definition of swift trust proposed and tested in the model includes willingness to take risk and behavioral components. Other definitions of trust focused on cognitive components, cognitive and affective components, or just willingness to take risk. None has included behavioral components of trust. The definition of swift trust as willingness to take risk and trust behaviors (knowledge sharing and suspending judgment) received empirical support in this study. Knowledge sharing and suspending judgment were positively related to willingness to take risk and positively related to each other. Moreover, willingness to take risk predicted both knowledge sharing and suspending judgment.

As trust researchers noticed (Mayer et al., 1995), one of the difficulties that have hindered previous research on trust has been a lack of a clear and comprehensive differentiation among factors that contribute to trust, trust itself, and outcomes of trust. Having a clear and accurate definition of the concept of trust confers validity to the study of trust. In this study, I showed that swift trust occurs when a person is willing to make himself or herself vulnerable and take a risk in a group, by either disclosing information or losing a reward at the end of the group work. However, willingness itself is not sufficient in defining trust. Mayer et al. came the closest to this realization when they proposed a strong relationship between the willingness to take risk and the very action of taking a risk (trusting action). In this study I went a step further and argued that the trusting action is also trust, along with the willingness to take risk. It would be hard to assess someone’s willingness to take risk, other than by asking the person before and after she or he is willing to take the risk. But observing the manifestation of the person’s
willingness to take risk, along with his or her assessment of willingness to take risk, provides researchers with a better understanding of what trust is.

Another theoretical contribution of the model is the integration of findings on trustworthiness by using the concept of attributions of trustworthiness, which made more conceptual sense. Many definitions of trust used trustworthiness as a measure of trust. However, as I explained earlier, trustworthiness is an antecedent that leads to trust. By considering attributions of trustworthiness as antecedents of trust, researchers can explain unusually high levels of trust in initial group interactions in which group members did not have a high level of generalized trust (McNight et al., 1998; Meyerson et al., 1996). Next, I will discuss the findings of the study and position them in the research on trust.

**Group Inputs**

A first set of findings refers to the antecedents of trust. The proposed antecedents of trust--generalized trust, attributions of trustworthiness, and affect--were found to be predictors of swift trust, with affect and attributions of trustworthiness being the best predictors. Swift trust is typically greatest in groups that have members who like, admire, and respect each other, and in groups that have members who anticipate good performance based on how they see each other as benevolent, having integrity, and having the necessary ability to perform well.

The finding regarding generalized trust is consistent with past research in which generalized trust and trust were differentiated (Mayer et al., 1995; McNight et al., 1998). Mayer et al. proposed that propensity to trust influences perceived trustworthiness and actual trust. McNight et al. proposed that disposition to trust influences trusting beliefs and trusting intention, terms that correspond conceptually to perceived trustworthiness
and willingness to trust. As opposed to early interpersonal researchers, who equated generalized trust with actual trust (Farris et al., 1973; Rotter, 1967), generalized trust is defined in this study as a personality trait that contributes to the development of the actual trust.

This study revealed that group communication behaviors and proactive attributions of trustworthiness are mediators of the generalized trust--swift trust relationship. Group members form trust by building on their disposition to trust others, by attributing anticipated good performance to their group members’ ability, integrity, and benevolence, and by communicating socially and enthusiastically. Previous findings on groups with unexpectedly high levels of trust can be explained by variations in generalized trust, attributions of trustworthiness, or group communication behaviors. If group members have an already high predisposition to trust others, this tendency can only be enhanced by the way they perceive others’ trustworthiness and the way they communicate with their group members.

The last finding regarding the attributions of trustworthiness and swift trust supports past research on perceived trustworthiness. Mayer et al. (1995) identified attributes of trustworthiness as antecedents of trust. Davis (1999) found that integrity, as an attribute of trustworthiness, accounted for the most variance in trust, followed by ability and benevolence. In this study, integrity also explained most of the variance in swift trust. In this respect, it seems that how people perceive others as trustworthy does not differ in long-term groups and temporary groups.

In past research, affect was recognized as having an important role in building trust. Some researchers (Lewis & Wiegert, 1985) proposed that trust is based on
emotional bonds, whereas others (McAllister, 1995) made affect part of the conceptual definition of trust. In this study, I proposed affect as a predictor of trust, based on the chosen definition of swift trust. Of the four emotions proposed in the definition of affect, liking and interest explained most of the variance in swift trust. The fact that admiration and respect did not influence swift trust as strongly as liking and interest might be due to the nature of temporary groups. In this study, the four components of affect were chosen based on previous literature on affect-building trust in interpersonal relationships. However, whereas in dyadic relationships there is more time for emotions such as respect and admiration to develop, in temporary groups, due to the number of members and time constraints, people may not have time to develop admiration and respect for their fellow group members.

In this study, I also attempted to explain how affect and swift trust interact during the group process. The results show that affect leads to trust through group communication behaviors, such as knowledge sharing and suspending judgment. These findings provide support for Williams’ (2001) model of trust, in which affect was proposed to influence trust through cognitive, motivational, and behavioral paths. In this study, group communication behavior was the behavioral path through which affect influenced swift trust. The motivational and the cognitive paths were not the focus of this investigation, but they promise to stimulate interesting future research.

*Group Throughputs*

This study advanced the knowledge of the role of communication as a throughput in establishing trust in temporary work groups. Building on the findings of a qualitative study (Jarvenpaa & Leidner, 1999), I created and tested a scale that measures social
communication and communication of enthusiasm. Both scales proved to be reliable and correlated with each other, suggesting that social communication and communication of enthusiasm could be combined into a single construct, group communication behaviors. As a variable, group communication behaviors mediated the relationship between affect and swift trust. The relationship between group communication behaviors and swift trust, although not particularly strong, clarifies Jones and George’s (1998) argument that people usually experience a positive affect, feeling excited and enthusiastic in the presence of a trusted person.

Previous research on trust, with few exceptions (Jarvenpaa & Leidner, 1999), ignored the role of communication behaviors in building trust, although second-hand sources such as textbooks abound in advice on how to build trust through communication. Social psychological researchers used communication explicitly in their measures of trust, but did not make communication a variable of interest and, therefore, did not test its effects on trust (e.g., McAllister, 1995: “We can both freely share our ideas,” “If I shared my problems with this person, I know (s)he would respond constructively and caringly.”; Ferrin & Dirks, 2003: “I feel that my partner is straight with me in the information she or he provides,” “I think my partner represents information inaccurately.”). By bringing group communication as a defining variable in a model of trust, communication researchers can explore more accurately the types of communication that leads to trust, maintains trust, or destroys trust in groups.

Group Outcomes

Another set of findings refers to group outcomes related to swift trust: retroactive attributions, group performance, and group satisfaction. Although some researchers
included trust among group outcomes, I argued in this study that trust can also be a throughput. It can be referred to as a process that develops during the group work. As a group process, it can influence outcomes such as attributions, performance, and satisfaction. Retroactive attributions--defined as explanations of perceived performance based on perceived trustworthiness of group members--were found to be related positively to swift trust. Moreover, proactive and retroactive attributions were positively related to generalized trust, suggesting that one’s propensity to trust is reinforced with each group experience in which he or she trusts the group members.

Interestingly, there was no relationship between willingness to take risk and performance. Performance was positively related to knowledge sharing, but not to suspending judgment. Previous research showed mixed findings with regard to performance and trust. Some researchers found that performance was related to cognitive and affective trust (Hansen et al., 2002) and to inter-organizational trust. Others did not find any relationship between performance and interpersonal trust (Zaheer et al., 1998). Aubert and Kelsey (2003), likewise, did not find support for a relationship between trust and performance. Following their argument that group communication plays a role in performance, I conducted additional analyses which showed perceived performance to be positively related to communication of enthusiasm, but actual performance (as measured by outside raters) was negatively related to group communication behaviors. This finding is interesting because group communication seems to be both a catalyst for perception and a preventor of actual performance. Because perceived performance and group communication behaviors were also positively related to group satisfaction, it seems that group communication behavior is a catalyst for group satisfaction but a preventor of
group performance. Swift trust, instead, was positively related to group satisfaction, which reinforces the relational aspect of swift trust. These findings lead to several practical implications.

Practical Implications

Once more is known about how swift trust is established and operates in temporary work groups, and its effects on group processes and outcomes, guidelines can be established for those who use temporary work groups. College instructors who use group work in their classes can use the knowledge about affection, swift trust, and group satisfaction to select groups and overview their activity.

Other industries can also use the swift trust model to train group members on the implications of swift trust on their group work. Supervisors of temporary groups can benefit from the findings of this study when they select the group members. Although groups in industries such as computers, aviation, auditing, negotiation, and the like might not be very flexible in how the groups are put together, supervisors should be aware that temporary groups in which members have a propensity to trust others or groups in which members like each other from the beginning will be more likely to be more satisfied with their group experience than those who do not meet these initial conditions.

Another practical implication comes from findings on group satisfaction. Knowing that trust leads to group satisfaction might help supervisors overcome their subordinates’ resistance to group work. Particularly if the group work is part of the subordinates’ multiple responsibilities, providing guidelines on how to establish trust early on in the group’s life, by inculcating a regular pattern of communication, will reduce the uncertainty and improve the group’s coordination.
For the participants in temporary groups, it might be relevant to know what makes a group experience enjoyable or, at least, not so stressful. Those entering groups expecting all their group members to communicate only about the task at hand might want to reconsider their expectations. Other types of communication (i.e., social communication) are also important in their group experience. Also, learning when to trust their group members will increase their overall satisfaction with the group. Researchers and practitioners using these suggestions must be wary, though, of the applicability of the findings to any temporary group. In the next section, I point to several limitations of this study.

Limitations

Several limitations must be considered when examining the results of this study. To begin, it should be noted that the demographics of the sample are restricted to college students groups. Although college students groups are excellent examples of temporary work groups, the generalizability of the findings to other types of temporary groups, such as cockpit crews, environmental groups, engineering groups, etc. might be limited.

The model’s propositions should be fully tested in different types of temporary groups. The initial findings in this study show that some propositions are supported, whereas others need more testing and refining. Future studies should better account for the states of uncertainty and certainty that temporary groups experience and establish whether uncertainty is, indeed, a condition of swift trust development.

A methodological limitation of the study is that it did not account for changes in time in the proposed variables. Although the length of time that was allotted for the completion of task might have been what most college students use when working in
groups for class projects, conclusions should be drawn with caution. The scarcity of studies on swift trust does not allow for meaningful comparisons.

Another methodological limitation might lay in the choice of design. The experimental design asked for face-to-face, limited time, one time group meeting. In natural group settings, students use a variety of communication channels, including face-to-face, e-mail, and telephone to stay in touch with each other. They also might meet several times when working on their project. The use (and misuse) of various channels and the number of meetings would likely modify the attributions of trustworthiness group members made of each other.

The task itself is another limitation of the study. The participants were asked to design a web page advertising housing for students, a task that required using the Internet to search for information and drawing an Internet-like site on paper. One of the conditions of swift trust was that group members should have different abilities that they bring to the project. The salience of the task for the participants was not measured in this study. Also, participants’ abilities with regard to the task were not assessed. Some groups might not have had Internet searching skills nor drawing skills. In the next section, I advance suggestions for developing future studies in the area of swift trust and temporary groups.

A measurement limitation refers to the way uncertainty was measured. The model of swift trust assumes that in temporary groups uncertainty is rather high. In this study uncertainty was moderate, as reported on the CLUES7 scale. However, CLUES7 was developed to measure uncertainty in initial interpersonal dyadic relationships, in which the conversational partners focus on the social aspects of the interaction. Temporary task
groups require more task interaction. Therefore, uncertainty might be more directed
toward the task, the members’ roles, and the members’ abilities related to task, rather
than toward members’ attitudes, feelings, and emotions. A triangulation method for
measuring uncertainty would have been more appropriate for measuring the specific
uncertainty of temporary groups.

Future Research Directions

The concept of uncertainty should be researched further. In this model, I proposed
that uncertainty is a condition of swift trust and, by extension, of temporary groups.
However, more research is needed on the types of uncertainties that exist in temporary
groups. Here are some of the questions that group members might have: how much do
my group members know about our task? How important is the task for them? What is
the risk for them in case the task is not completed as assigned? These questions might be
multiplied in different contexts, such as mediated communication or intercultural
communication. Scholarly argument and common sense advise on the negative role that
uncertainty might have on the development of trust. Jarvenpaa and Leidner (1999)
suggested that uncertainty might threaten temporary groups’ viability and longevity. This
area of research can benefit from more work on the uncertainties specific to temporary
groups and the relationship of uncertainty with swift trust.

Future research should also look into various group settings and age and gender
groups. Different settings--groups that combine face-to-face meetings with mediated
communication, geographically close groups versus geographically dispersed groups--
might influence how communication is developed in groups and, implicitly, how swift
trust is developed. Different age groups may develop trust based on different antecedents:
older members might be more likely rely on generalized trust and younger members would probably rely on affect.

The nature of the task might be a factor in determining what antecedents of trust are more salient. Tasks with low levels of difficulty might not even meet the condition of risk that makes the discussion of trust possible. On the other hand, a high level of task difficulty might force group members to communicate more. The nature of this communication in groups with different task difficulty levels should be investigated. Researchers can control for the level of task difficulty or choose naturally occurring groups with different task difficulty levels. They can also use a triangulation method of data collection, in which self-reports are combined with participant-observations and interviews to obtain richer and more accurate data on the nature and role of group communication in establishing swift trust.

To improve the model’s accuracy, other variables may be considered. Williams (2001) proposed that trust is established through cognitive, affective, and motivational paths. In this study, I accounted for what would correspond to the cognitive and affective paths in Williams’ model by using attributions of trustworthiness and affect. However, I did not have a specific motivational variable. How motivated group members are in working in groups is more likely to make a difference in whether or not they want to get involved in the group work, take risk, and establish trust or not. Other ways in which motivation and trust might be related are outlined by Dirks and Ferrin (2001). They informed us that individual motivation makes a difference in group performance. In a high-trust condition motivation affect group performance positively whereas in a low-
trust condition motivation has no effect on performance. Adding the motivation variable might improve the model’s prediction accuracy.

Also, group members’ similarities in values might be a salient variable in groups in which members participate voluntarily and have a keen interest in the group’s project, such as environmental groups (Siegrist, Cvetkovich, & Roth, 2000). When group members surmise that a person shares the values that they think are appropriate in a particular context, they are likely to rely on that person.

Methodologically, studies using the model can benefit from several suggestions. First, assessing the participants’ perceived risk in a trust situation is important because risk is a condition for establishing trust. Mayer et al. (1995) suggested assessing perceived risk either directly through self-report measures or indirectly by controlling it in experiments. Another methodological issue involves the unidirectionality of assessing trust. In this study, each group member reported his or her trust toward the group as a whole, but there was no individualized report of trust in each person.

Along with continuing the research devoted to how people establish trust in temporary work groups, the swift trust model could be used for examining trust in relation to other group throughputs and outputs, such as power relationships. In the process of building trust, the trustor can be seen as assuming a subordinate position and relinquishing decision and behavior control to the trustee. On the other hand, the act of trusting does not necessarily produce a feeling of loss of control of power. People trade behavior and decision control for cognitive control, thinking that hazards will be controlled, and secondary control by selecting whom they trust.
No matter how researchers conceptualize trust, the most important practical issue is that of rebuilding trust where it was broken. Although rebuilding trust might not be an issue in short-term temporary groups, it might affect temporary groups with a longer life (several weeks or months), in which conflict, deception, and other “dark side” forms of communication have time to develop. Nonetheless, whether or not swift trust, which is rather depersonalized and not as “deep” as trust in longer-lasting groups, can be broken is, in itself, an issue of study. Studies on rebuilding trust are relatively new and few and this area of research will tremendously benefit from an accurate model of trust that includes rebuilding trust. This area of research can be informed by the literature on relationship repair, which suggests apologizing, seeking repeated feedback, and reevaluating the goals as repair strategies (see Duck, 1982).

Conclusion

Trust is a comforting psychological state that most human beings strive to experience, whether it is in romantic, friendship, or work dyadic relationships, family, friends, or work groups, or organizational institutions, whether it is for a long term or for a short period of time. Temporary work groups make no exception. These groups do develop a trust-like state, swift trust that influences group members’ satisfaction with their group experience.

The proposed model of swift trust was generally supported in this investigation. Swift trust has three components: willingness to take risk, knowledge sharing, and suspending judgment. Knowledge sharing was most closely related to group satisfaction. Swift trust was best predicted by affect and proactive attributions of trustworthiness. Group communication behaviors mediated the relationship between generalized trust and
swift trust and between affect and swift trust. Performance was not related to any of the variables of the model. A revised model of swift trust is shown in figure 5.

As researchers, we should investigate the phenomenon of swift trust in further detail, looking at the characteristics of people who are more likely to engage in this form of trust, at the contexts in which swift trust is more likely to appear, and at the best types of research designs that can inform us about the nature, antecedents, and consequences of swift trust. As with any research enterprise, our efforts should be guided by solid theoretical principles and relevant practical implications.

This study introduced a model of swift trust in temporary groups with a focus on communication behavior and it tested hypotheses and research questions in an attempt to discover predictors of swift trust and effects of swift trust on several group outcomes. The results enhance our understanding of the mechanisms through which swift trust develops and raise further questions about how other variables might play in the process of developing swift trust.
Figure 5. Revised model of swift trust in temporary work groups
APPENDICES
Appendix A

Informed Consent

I want to do research on how people establish trust in groups. I want to do this because I want to understand better how small task groups communicate. I would like you to take part in this project. If you decide to do this, you will be asked to work in a group on an assigned task for a period of one hour and thirty minutes. You will work with your group members to design a website that will be useful for someone looking for housing in the Kent area. You will receive paper and colored pencils. The best website will receive a monetary reward ($100). The website will be evaluated by design (organization, visual appeal, and theme) and content (quality and quantity of information). You will also be asked to fill out several questionnaires before and after you work on your group task. Your responses to the questionnaires will be anonymous. Your professor will not have access to your answers. They will be aggregated with other students’ answers and be used for this research purpose only.

If you take part in this project, you will learn about how research studies are conducted in the field of communication and you will have a chance to win a monetary reward given to the best group project, as evaluated by independent judges. Taking part in this project is entirely up to you, and no one will hold it against you if you decide not to do it. If you do take part, you may stop at any time. You will receive 4 research points by participating in this 2-hour study.

If you want to know more about this research project, please call me at 216-410-6796, e-mail me at cpopa1@kent.edu, or e-mail my advisor, Dr. Rebecca Rubin at rrubin@kent.edu. The project has been approved by Kent State University. If you have questions about Kent State University's rules for research, please call Dr. John L. West, Vice President and Dean, Division of Research and Graduate Studies (Tel. 330-672-2704).

Please keep this sheet for your records. Your participation is important. Thank you for your support.

Sincerely,

Clara Popa
Doctoral Candidate
School of Communication Studies
Appendix B

CLUES7

(Clatterbuck, 1979)

Below are several statements that ask for how you feel about your group members after the short conversation you just had with them. Please choose your response from the following scale, which ranges from 1 (Not Confident) to 9 (Extremely Confident). **Circle the number** that best reflects how confident you are.

1. How confident are you of your general ability to predict how your group members will behave?

   Not Confident 1 2 3 4 5 6 7 8 9 Extremely Confident

2. How confident are you of your ability to determine accurately how much your members will like you?

   Not Confident 1 2 3 4 5 6 7 8 9 Extremely Confident

3. How confident are you of your ability to predict accurately your group members’ values?

   Not Confident 1 2 3 4 5 6 7 8 9 Extremely Confident

4. How confident are you of your ability to predict accurately your group members’ attitudes?

   Not Confident 1 2 3 4 5 6 7 8 9 Extremely Confident

5. How confident are you of your ability to predict accurately your group members’ feelings and emotions?

   Not Confident 1 2 3 4 5 6 7 8 9 Extremely Confident

6. When you meet others for the first time, generally how well can you empathize with (share) the way they feel about themselves?

   Not Confident 1 2 3 4 5 6 7 8 9 Extremely Confident

7. In general, how well do you think you know other people after you meet them for the first time?

   Not Confident 1 2 3 4 5 6 7 8 9 Extremely Confident
Appendix C

Generalized Trust Scale

(Jarvenpaa et al., 1998)

The following questions refer to your **general attitude** about working in groups with other students. Please **circle** the one number that represents your agreement with each statement, using the scale that ranges from 1 (**strongly disagree**) to 7 (**strongly agree**).

1. One should be very cautious when working with students.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2. Most students tell the truth about the limits of their knowledge.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3. Most students can be counted on to do what they say they will do.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

4. Most students are honest in describing their experiences and abilities.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

*Note:* Item 1 is reverse coded.
Appendix D

Proactive Attributions of Trustworthiness

(Jarvenpaa et al., 1998)

Please predict how you think your **group project will be evaluated** by circling one number on the following scale:

<table>
<thead>
<tr>
<th>Very Poor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Very Good</th>
</tr>
</thead>
</table>

Think of the group to which you have been assigned. Why do you think that your group will perform the way you indicated above? Please circle one number that represents your agreement with each statement, using the scale that ranges from 1 (**strongly disagree**) to 7 (**strongly agree**).

**I believe that our group will perform as indicated above because....**

**Ability**

1. I feel very confident about my group members’ skills.

   **Strongly Disagree** 1 2 3 4 5 6 7  **Strongly Agree**

2. My group members have much knowledge about the work that needs to be done.

   **Strongly Disagree** 1 2 3 4 5 6 7  **Strongly Agree**

3. My group members have specialized capabilities that can increase our performance.

   **Strongly Disagree** 1 2 3 4 5 6 7  **Strongly Agree**

4. My group members are well qualified.

   **Strongly Disagree** 1 2 3 4 5 6 7  **Strongly Agree**

5. My group members are very capable of performing their tasks.

   **Strongly Disagree** 1 2 3 4 5 6 7  **Strongly Agree**

**Benevolence**

6. My group members seem to be successful in the activities they undertake.
Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

7. My group members are very concerned about the ability of the group to get along.

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

8. The outcomes of this project are very important to my group members.

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

9. My group members would not knowingly do anything to disrupt or slow down the project.

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

10. My group members are concerned about what is important to the group.

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

11. My group members will do anything in their capacity to help the group perform.

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

**Integrity**

12. My group members are fair in dealing with one another.

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

13. My group members have a strong sense of commitment.

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

14. I like the work values of my group.

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

15. I am not sure if my group members are going to do what they promised or not.

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

*Note:* Item 15 is reverse coded.
Appendix E

Swift Trust Scale

(Based on work by Jarvenpaa et al., 1998; Mayer et al., 1995; McEvily et al., 2003)

Please think of the group with whom you worked today when you answer the following questions. Circle one number that represents your agreement with each statement, using the scale that ranges from 1 (strongly disagree) to 7 (strongly agree).

Willingness to Take Risk

1. I did not let my group members have any influence over issues that were important to the project.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2. I was comfortable giving the other team members complete responsibility for the completion of this project.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3. I really wish I had a good way to oversee the work of the other team members on the project.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

4. I was comfortable giving the other team members a task or problem which was critical to the project, even if I could not monitor them.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Knowledge Sharing

5. My group came up with important ideas during our group work.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

6. My group members shared everything that they knew about the project.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

7. I shared everything I knew about the project.

   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
8. I came up with important ideas during our group work.
   
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

**Suspending Judgment**

9. I was confident that my group members had good intentions when it came to the completion of this project.
   
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

10. When the members of my group came up with different ideas, I listened to all without considering them worthless.
    
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

11. I had to verify every idea of my group members to see if it was accurate or relevant.
    
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

Note: Items 1, 3, and 11 are reverse coded.
Appendix F

Affect Scale

(Based on work by McAllister, 1995; Young & Daniel, 2003)

Please rate on a scale from 1 (strongly disagree) to 7 (strongly agree) how you currently feel about your group members. Think of the first impression that you have about them.

1. I like my group members.
   
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

2. I admire my group members.
   
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

3. I respect my group members.
   
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

4. I am interested in knowing more about my group members.
   
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree
Appendix G

Group Communication Behavior Scale

(Based on work by Jarvenpaa et al., 1999)

Social Communication

1. In my group, we shared information about what we like to do outside the class.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2. In my group, we shared information about what we like to do in class.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3. In my group, we shared information about our weekend activities.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

4. In my group, we shared information about our families.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

5. In my group, we shared information about our friends and/or acquaintances.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Communication of Enthusiasm

1. We are beginning to feel like friends, not only teammates in this group.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2. My group got excited about our project.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3. We congratulated each other when we did something good.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
Appendix H

Retroactive Attributions of Trustworthiness

(Jarvenpaa et al., 1998)

Now evaluate your group project on the following scale:

Very Poor  1  2  3  4  5  6  7  8  9  Very Good

Think of the group to which you were assigned. Why do you think that your group had the performance that you indicated above? Please circle one number that represents your agreement with each statement, using the scale that ranges from 1 (strongly disagree) to 7 (strongly agree).

I believe that our group performed in this way because....

Ability

1. My group members had the required skills to fulfill the project.
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

2. My group members had much knowledge about the work that needed to be done.
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

3. My group members had specialized capabilities that increased our performance.
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

4. My group members were well qualified.
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

5. My group members were very capable of performing their tasks.
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

Benevolence

6. My group members were successful in the activities they undertook.
   Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree
7. My group members were very concerned about the ability of the group to get along.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

8. The outcomes of this project were very important to my group members.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

9. My group members did not knowingly do anything to disrupt or slow down the project.
   Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

10. My group members were concerned about what was important to the group.
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

11. My group members did everything in their capacity to help the group perform.
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

**Integrity**

12. My group members were fair in dealing with one another.
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

13. My group members had a strong sense of commitment.
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

14. I liked the work values of my group.
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

15. My group members did not do what they promised.
    Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

16. Other reasons why you believe your group performed the way it did?
    (please note them here): ..........................

*Note: Item 15 is reverse coded.*
Appendix I

Performance Scale

Please rate the organization of the site:

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Please rate the visual appeal of the site:

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Please rate how well the site shows a theme (a unique “image”):

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Please rate the site in terms of how much information about housing it has (the more info the better):

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Please rate the site in terms of the quality of information (accurate, relevant):

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Total grade for the site (add all points):
Appendix J

Group Satisfaction Scale

(Offutt, 1990)

Please think of the group with whom you worked today and answer the following questions. Please circle one number that represents your agreement with each statement, using the scale that ranges from 1 (strongly disagree) to 7 (strongly agree).

1. The group made the best use of the time allotted to complete the group project.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2. Our group worked as a team.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3. On the average, the group meeting was effective.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

4. I usually felt we were accomplishing something with our group.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

5. The group was interested in what I had to say.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

6. The group, as a whole, understood what I said.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

7. My opinion was not given serious attention.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

8. I felt my ideas and opinions were welcomed by group members.
   - Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Note: Item 7 is reverse coded.
Appendix K

Demographics

Now, please answer the following demographic questions (these are used to describe the participants in this study, collectively)

Age: ________

Gender (circle one):
1. Male
2. Female

Major: __________________

Ethnic background (circle one):
1. African American
2. Asian
3. Caucasian
4. Native American
5. Other __________________________

Have you participated in any group work before today? (Circle one answer)

Not at All    Not Much     Some   A Lot

About how many groups have you worked with within the last two years?

________________

THANK YOU VERY MUCH FOR YOUR PARTICIPATION!
REFERENCES


