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Author(s): Roger C. Mayer, James H. Davis and F. David Schoorman

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AN INTEGRATIVE MODEL OF ORGANIZATIONAL TRUST

ROGER C. MAYER
JAMES H. DAVIS
University of Notre Dame
F. DAVID SCHOORMAN
Purdue University

Scholars in various disciplines have considered the causes, nature, and effects of trust. Prior approaches to studying trust are considered, including characteristics of the trustor, the trustee, and the role of risk. A definition of trust and a model of its antecedents and outcomes are presented, which integrate research from multiple disciplines and differentiate trust from similar constructs. Several research propositions based on the model are presented.

The topic of trust is generating increased interest in organizational studies. Gambetta (1988) noted that "scholars tend to mention [trust] in passing, to allude to it as a fundamental ingredient or lubricant, an unavoidable dimension of social interaction, only to move on to deal with less intractable matters" (unnumbered foreword). The importance of trust has been cited in such areas as communication (Giffin, 1967), leadership (Atwater, 1988), management by objectives (Scott, D., 1980), negotiation (Bazerman, 1994), game theory (Milgrom & Roberts, 1992), performance appraisal (Cummings, 1983), labor-management relations (Taylor, 1989), and implementation of self-managed work teams (Lawler, 1992).

Although a great deal of interest in trust has been expressed by scholars, its study in organizations has remained problematic for several reasons: problems with the definition of trust itself; lack of clarity in the relationship between risk and trust; confusion between trust and its antecedents and outcomes; lack of specificity of trust referents leading to confusion in levels of analysis; and a failure to consider both the trusting party and the party to be trusted. The purpose of this article is to illuminate and resolve these problems in the presentation of a model of trust of one individual for another. Through this model we propose that this level of trust and the level of perceived risk in the situation will lead to risk taking in the relationship.

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Need for Trust

Working together often involves interdependence, and people must therefore depend on others in various ways to accomplish their personal and organizational goals. Several theories have emerged that describe mechanisms for minimizing the risk inherent in working relationships. These theories are designed to regulate, to enforce, and/or to encourage compliance to avoid the consequences of broken trust. In order to avoid self-serving behaviors as well as potential litigation, many firms utilize control mechanisms and contracts, and they alter their decision-making processes, internal processes, reward systems, and structures (Jensen & Meckling, 1976; Meyer, 1983; Sitkin & Bies, 1994; Williamson, 1975). Legalistic remedies have been described as weak, impersonal substitutes for trust (Sitkin & Roth, 1993), which may bring organizational legitimacy, yet often are ineffective (Argyris, 1994; Donaldson & Davis, 1991; Granovetter, 1985; Sitkin & Roth, 1993).

Current trends in both workforce composition and the organization of the workplace in the United States suggest that the importance of trust is likely to increase during the coming years. One important trend in workforce composition is the increase in diversity. Jamieson and O'Mara (1991) projected that the minority share of the workforce will grow from 17 percent in the late 1980s to over 25 percent by the year 2000. Jackson and Alvarez (1992) pointed out that increases in workforce diversity necessitate that people with very different backgrounds come into contact and deal closely with one another. A diverse workforce is less able to rely on interpersonal similarity and common background and experience to contribute to mutual attraction and enhance the willingness to work together (Berscheid & Walster, 1978; Newcomb, 1956). In this context, the development of mutual trust provides one mechanism for enabling employees to work together more effectively.

Another trend related to changes in the organization of work also will lead to an increased interest in the study of trust. Lawler (1992) cited continuing changes in the workplace in the direction of more participative management styles and the implementation of work teams. A recent survey indicates that 27 percent of American companies are implementing self-directed work teams in some part of the organization (Wellins, Byham, & Wilson, 1991). The emergence of self-directed teams and a reliance on empowered workers greatly increase the importance of the concept of trust (Golembiewski & McConkie, 1975; Larson & LaFasto, 1989) as control mechanisms are reduced or removed and interaction increases.

The trends just cited suggest that the development of a model of trust in organizations is both timely and practical. In the use of self-directed teams, trust must take the place of supervision because direct observation of employees becomes impractical. Further, a clear understanding of trust and its causes can facilitate cohesion and collaboration between people by building trust through means other than interpersonal similar-

ity. In spite of the growing importance of trust, a number of institutions that measure trust have witnessed diminishing trust among employees (Farnham, 1989).

One of the difficulties that has hindered previous research on trust has been a lack of clear differentiation among factors that contribute to trust, trust itself, and outcomes of trust (Cook & Wall, 1980; Kee & Knox, 1970). Without this clear distinction, the difference between trust and similar constructs is blurred. For example, many researchers have agreed with Deutsch (1958) that risk, or having something invested, is requisite to trust. The need for trust only arises in a risky situation. Although numerous authors have recognized the importance of risk to understanding trust (Coleman, 1990; Giffin, 1967; Good, 1988; Lewis & Weigert, 1985; Luhmann, 1988; March & Shapira, 1987; Riker, 1974; Schlenker, Helm, & Tedeschi, 1973), no consensus on its relationship with trust exists. It is unclear whether risk is an antecedent to trust, is trust, or is an outcome of trust. This key issue of how risk fits with trust must be resolved, and it is dealt with later in this article. The model developed in this article complements the risk literature by clarifying the role of interpersonal trust in risk taking. A parsimonious model (James, Mulaik, & Brett, 1982; Runkel & McGrath, 1972) with a manageable number of factors should provide a solid foundation for the empirical study of trust for another party.

Each of the essential trust issues that have just been described will be explored as a model of dyadic trust is developed. Although there is a growing body of literature in social psychology that examines trust in dating and other such relationships (e.g., Larzelere & Huston, 1980), the nature and bases of such relationships may be different from those in organizations. Thus, the model developed here is designed to focus on trust in an organizational setting involving two specific parties: a trusting party (trustor) and a party to be trusted (trustee) (Driscoll, 1978; Scott, C. L., 1980). The model explicitly encompasses factors about both the trustor and the trustee, which previous models have neglected. This relationship-specific boundary condition of our approach is important, because a number of authors have dealt with trust for generalized others (e.g., Rotter, 1967) and trust as a social phenomenon (e.g., Lewis & Weigert, 1985). Even though such approaches help provide a general sense of the considerations involved in trust, they do not clarify the relationship between two specific individuals and the reasons why a trustor would trust a trustee. Further, the failure to clearly specify the trustor and the trustee encourages the tendency to change referents and even levels of analysis, which obfuscates the nature of the trust relationship.

In the following sections, the definition of trust developed from our research is presented, and it is differentiated from similar constructs. Next, characteristics of both the trustor and the trustee, which affect the amount of trust the trustor has for the trustee, are considered. Following that, the relationship of trust and risk is considered. Finally, the effects of context as well as the long-term development of trust are considered.

Definition of Trust

Johnson-George and Swap (1982: 1306) asserted that "willingness to take risks may be one of the few characteristics common to all trust situations." Kee and Knox (1970) argued that to appropriately study trust there must be some meaningful incentives at stake and that the trustor must be cognizant of the risk involved. The definition of trust proposed in this research is *the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party*. This definition of trust is applicable to a relationship with another identifiable party who is perceived to act and react with volition toward the trustor. This definition parallels that of Gambetta (1988), with the critical addition of vulnerability. Being vulnerable (Boss, 1978; Zand, 1972) implies that there is something of importance to be lost. Making oneself vulnerable is taking risk. Trust is not taking risk *per se*, but rather it is a *willingness* to take risk. This distinction will be further explored in a later section.

Several terms have been used synonymously with trust, and this has obfuscated the nature of trust. Among these are *cooperation*, *confidence*, and *predictability*. The sections that follow differentiate trust from these constructs.

Cooperation

One conceptual difficulty with studying trust is that it has often been confused with cooperation (Bateson, 1988). For instance, Gambetta (1988: 217) asserted that trusting someone means "the probability that he will perform an action that is beneficial or at least not detrimental to us is high enough for us to consider engaging in some form of cooperation with him." The distinction of trust from cooperation is unclear.

Although trust can frequently lead to cooperative behavior, trust is not a necessary condition for cooperation to occur, because cooperation does not necessarily put a party at risk. An employee could cooperate with and, indeed, even appear to act like he or she trusts another employee who he or she does not trust. However, the reason for the cooperation may be due to a powerful manager who is clearly expected to punish the other employee for any act that damages the focal employee's interests. The focal employee may cooperate with and appear to trust the other employee, but his or her actions are due to a lack of perceived risk. Such means as control mechanisms and lack of available alternatives may lead a party to cooperate, even in the absence of trust. As Gambetta stated, "As the high incidence of paranoid behaviour among dictators suggests, coercion can be *self-defeating*, for while it may enforce 'cooperation' in specific acts, it also increases the probability of treacherous ones: betrayal, defection, and the classic stab in the back" (1988: 220).

Kee and Knox (1970) also concluded that there were a number of

reasons why individuals may be observed to act in cooperative or competitive fashions that are not reflective of the level of trust in the relationship. For example, a person may not be able to avoid a situation structured like the prisoner's dilemma. His or her behavior may appear to be trusting, but it is based on other motives or rationales.

Even though trust and cooperation have at times been treated as synonymous, it is important to distinguish between them. You can cooperate with someone who you don't really trust. If there are external control mechanisms that will punish the trustee for deceitful behavior, if the issue at hand doesn't involve vulnerability to the trustor over issues that matter, or if it's clear that the trustee's motives will lead him or her to behave in a way that coincides with the trustor's desires, then there can be cooperation without trust. In each of these cases, vulnerability is minimal or absent.

Confidence

The relationship between confidence and trust is amorphous in the literature on trust. For example, Deutsch (1960) considered the reasons why one person would trust another person to produce some beneficial events. The "individual must have *confidence* that the other individual has the ability and intention to produce it" (Deutsch, 1960: 125). Cook and Wall (1980: 39) 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." A number of other authors have not clearly distinguished between the two (e.g., Coleman, 1990; Frost, Stimpson, & Maughan, 1978; Jones, James, & Bruni, 1975).

Luhmann (1988) proposed a distinction that helps to differentiate trust from confidence. He asserted that both concepts refer to expectations that may lead to disappointment. Luhmann argued that trust differs from confidence because it requires a previous engagement on a person's part, recognizing and accepting that risk exists. Although Luhmann suggested that both confidence and trust may become routine, the distinction "depends on perception and attribution. If you do not consider alternatives (every morning you leave the house without a weapon!), you are in a situation of confidence. If you choose one action in preference to others in spite of the possibility of being disappointed by the action of others, you define the situation as one of trust" (1988: 102).

Luhmann's differentiation between trust and confidence recognizes that in the former risk must be recognized and assumed, and such is not the case with confidence. The trustor's explicit recognition of risk within our model precludes the conceptual ambiguity present in the research just cited.

Predictability

There is clearly a relationship between predictability and trust, but, again, the association is ambiguous. Both prediction and trust are means

of uncertainty reduction (Lewis & Weigert, 1985). However, much of the literature tends to equate predictability with trust. For example, Gabarro (1978: 294) cited several definitions of trust, including "the extent to which one person can expect predictability in the other's behavior in terms of what is 'normally' expected of a person acting in good faith." Several other theorists have defined trust in ways that also appear to overlap substantially with predictability (Dasgupta, 1988; Gambetta, 1988; Good, 1988; Rotter, 1967).

To be meaningful, trust must go beyond predictability (Deutsch, 1958). To equate the two is to suggest that a party who can be expected to consistently ignore the needs of others and act in a self-interested fashion is therefore trusted, because the party is predictable. What is missing from such an approach is the willingness to take a risk in the relationship and to be vulnerable. One can believe such a trustee to be predictable in a situation in which the trustee influences resource distribution between the trustee and the trustor but also be unwilling to be vulnerable to that trustee.

Another party's predictability is insufficient to make a person willing to take a risk. If a person's superior always "shoots the messenger" when bad news is delivered, the superior is predictable. However, this predictability will not increase the likelihood that the individual will take a risk and deliver bad news. On the contrary, predictability can reduce the likelihood that the individual will trust and therefore take actions that allow vulnerability to the superior.

Predictability might best be thought of as influencing cooperation. If one expects that a party will predictably behave positively, one will be disposed to cooperate with the party. However, the reason for that predictability may be external to the party, such as strong control mechanisms (Friedland, 1990). Without those mechanisms, a person may be unwilling to be vulnerable to the party. Thus, predictability is insufficient to trust.

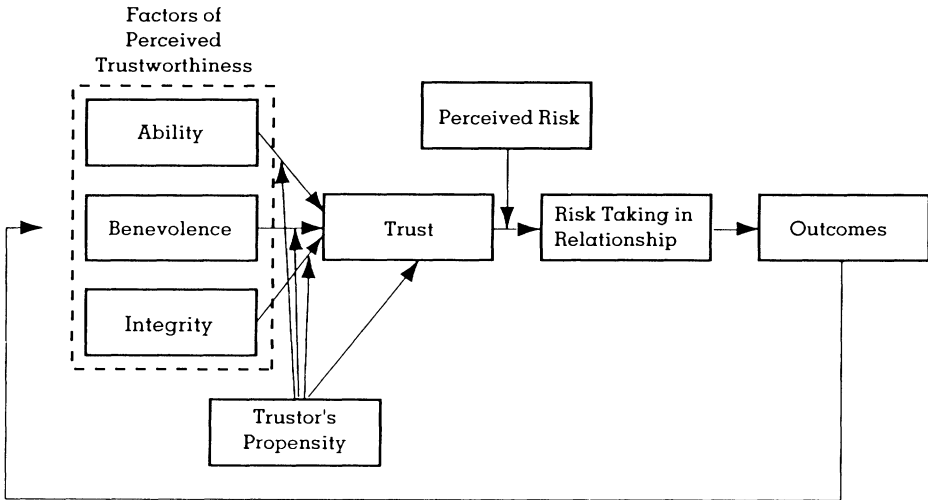
The previous section dealt with the nature of trust itself, differentiating it from similar constructs. The following sections of this paper deal first with factors concerning the trustor and then the trustee that lead to trust. These components of the model can be seen in Figure 1.

Characteristics of the Trustor

One factor that will affect the trust one party has for another involves traits of the trustor. Some parties are more likely to trust than are others. As discussed in this section, several authors have considered trust from the perspective of a person's general willingness to trust others.

Among the early trust theorists was Rotter (1967: 651), who defined *interpersonal trust* "as an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon." Although his definition appears to suggest the author is speaking of trust for a specific referent, Rotter's widely used

FIGURE 1
Proposed Model of Trust



measure focuses on a generalized trust of others—something akin to a personality trait that a person would presumably carry from one situation to another. For example, typical items in his scale are “In dealing with strangers one is better off to be cautious until they have provided evidence that they are trustworthy” and “Parents usually can be relied upon to keep their promises.”

Several other authors have discussed trust in similar ways. For example, Dasgupta’s treatment of trust includes generalized expectations of others; for example, “Can I trust people to come to my rescue if I am about to drown?” (1988: 53; emphasis added). Similarly, Farris, Senner, and Butterfield (1973: 145) defined trust as “a personality trait of people interacting with peripheral environment of an organization.” In this approach trust is viewed as a trait that leads to a generalized expectation about the trustworthiness of others. In the proposed model this trait is referred to as the *propensity to trust*.

Propensity to trust is proposed to be a stable within-party factor that will affect the likelihood the party will trust. People differ in their inherent propensity to trust. Propensity might be thought of as the *general willingness to trust others*. Propensity will influence how much trust one has for a trustee prior to data on that particular party being available. People with different developmental experiences, personality types, and cultural backgrounds vary in their propensity to trust (e.g., Hofstede, 1980). An example of an extreme case of this is what is commonly called blind trust. Some individuals can be observed to repeatedly trust in situations that most people would agree do not warrant trust. Conversely, others are unwilling to trust in most situations, regardless of circumstances that would support doing so.

Some evidence exists that this dispositional approach is worth pursuing. For example, using Rotter's (1967) measure, Conlon and Mayer (1994) found the willingness to trust others was significantly related to the behavior and performance of persons working in an agency simulation. Other researchers also have found this dispositional trust factor to be related to behaviors of interest in organizational research (e.g., Moore, Shaffer, Pollak, & Taylor-Lemcke, 1987; Sabatelli, Buck, & Dreyer, 1983). Propensity should contribute to the explanation of variance in trust if used as a part of a more complete set of variables.

Propensity to trust is similar to Sitkin and Pablo's (1992) definition of propensity in their model of the determinants of risk behavior. They define *risk propensity* as "the tendency of a decision maker either to take or avoid risks" (1992: 12). However, our approach differs in that propensity to trust others is viewed as a trait that is stable across situations, whereas according to Sitkin and Pablo's approach, risk propensity is more situation specific, affected both by personality characteristics (i.e., risk preference) and situational factors (i.e., inertia and outcome history).

Proposition 1. The higher the trustor's propensity to trust, the higher the trust for a trustee prior to availability of information about the trustee.

Even though an understanding of trust necessitates consideration of the trust propensity of the trustor, a given trustor has varied levels of trust for various trustees. Thus, propensity is by itself insufficient. To address this variance, in the next section we examine the characteristics of the trustee.

Characteristics of the Trustee: The Concept of Trustworthiness

One approach to understanding why a given party will have a greater or lesser amount of trust for another party is to consider attributes of the trustee. Ring and Van de Ven (1992) argued that because of the risk in transactions, managers must concern themselves with the trustworthiness of the other party. A number of authors have considered why a party will be judged as trustworthy.

Some of the earliest research on characteristics of the trustee was conducted by Hovland, Janis, and Kelley (1953) in the famous Yale studies on communication and attitude change. According to these researchers, credibility was affected by two factors: expertise and trustworthiness. Trustworthiness was assessed as the motivation (or lack thereof) to lie. For example, if the trustee had something to gain by lying, he or she would be seen as less trustworthy.

In more recent work, Good (1988) suggested that trust is based on expectations of how another person will behave, based on that person's current and previous implicit and explicit claims. Similarly, Lieberman (1981) stated that trust in fiduciary relationships is based on a belief in the professional's competence and integrity. Examination of the items in Johnson-George and Swap's (1982) measure of trust reveals that they reflect inferences about the trustee.

All of these authors have suggested that characteristics and actions of the trustee will lead that person to be more or less trusted. These characteristics are important if researchers are to understand why some parties are more trusted than others. In the remainder of this section, three characteristics of the trustee that determine trustworthiness are examined. Although they are not trust per se, these variables help build the foundation for the development of trust.

The Factors of Trustworthiness

Conditions that lead to trust have been considered repeatedly in the literature. Some authors identify a single trustee characteristic that is responsible for trust (e.g., Strickland, 1958), whereas other authors delineate as many as 10 characteristics (e.g., Butler, 1991). A review of factors that lead to trust is summarized in Table 1. Even though a number of factors have been proposed, three characteristics of a trustee appear often in the literature: ability, benevolence, and integrity. As a set, these three appear to explain a major portion of trustworthiness.¹ Each contributes a unique perceptual perspective from which to consider the trustee, while the set provides a solid and parsimonious foundation for the empirical study of trust for another party.

Ability

Ability is that group of skills, competencies, and characteristics that enable a party to have influence within some specific domain. The domain of the ability is specific because the trustee may be highly competent in some technical area, affording that person trust on tasks related to that area. However, the trustee may have little aptitude, training, or experience in another area, for instance, in interpersonal communication. Although such an individual may be trusted to do analytic tasks related to his or her technical area, the individual may not be trusted to initiate contact with an important customer. Thus, trust is domain specific (Zand, 1972).

A number of theorists have discussed similar constructs as affecting trust, using several synonyms. Cook and Wall (1980), Deutsch (1960), Jones, James, and Bruni (1975), and Sitkin and Roth (1993) all considered *ability* an essential element of trust. Others (e.g., Butler, 1991; Butler & Cantrell, 1984; Kee & Knox, 1970; Lieberman, 1981; Mishra, In press; Rosen & Jerdee, 1977) used the word *competence* to define a similar construct. In the Yale studies described previously, *perceived expertise* was identified as a critical characteristic of the trustee. Similarly, Giffin (1967) suggested

¹ It is interesting to note that Aristotle's *Rhetoric* suggests that a speaker's *ethos* (Greek root for ethics) is based on the listener's perception of three things: intelligence; character (reliability, honesty); and goodwill (favorable intentions toward the listener). These bases provide an interesting parallel with the factors of ability, integrity, and benevolence, respectively.

TABLE 1
Trust Antecedents

Authors	Antecedent Factors
Boyle & Bonacich (1970)	Past interactions, index of caution based on prisoners' dilemma outcomes
Butler (1991)	Availability, competence, consistency, discreetness, fairness, integrity, loyalty, openness, promise fulfillment, receptivity
Cook & Wall (1980)	Trustworthy intentions, ability
Dasgupta (1988)	Credible threat of punishment, credibility of promises
Deutsch (1960)	Ability, intention to produce
Farris, Senner, & Butterfield (1973)	Openness, ownership of feelings, experimentation with new behavior, group norms
Frost, Stimpson, & Maughan (1978)	Dependence on trustee, altruism
Gabarro (1978)	Openness, previous outcomes
Giffin (1967)	Expertness, reliability as information source, intentions, dynamism, personal attraction, reputation
Good (1988)	Ability, intention, trustees' claims about how (they) will behave
Hart, Capps, Cangemi, & Caillouet (1986)	Openness/congruity, shared values, autonomy/feedback
Hovland, Janis, & Kelley (1953)	Expertise, motivation to lie
Johnson-George & Swap (1982)	Reliability
Jones, James, & Bruni (1975)	Ability, behavior is relevant to the individual's needs and desires
Kee & Knox (1970)	Competence, motives
Larzelere & Huston (1980)	Benevolence, honesty
Lieberman (1981)	Competence, integrity
Mishra (In press)	Competence, openness, caring, reliability
Ring & Van de Ven (1992)	Moral integrity, goodwill
Rosen & Jerdee (1977)	Judgment or competence, group goals
Sitkin & Roth (1993)	Ability, value congruence
Solomon (1960)	Benevolence
Strickland (1958)	Benevolence

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. Whereas such terms as *expertise* and *competence* connote a set of skills applicable to a single, fixed domain (e.g., Gabarro's interpersonal competence), *ability* highlights the task- and situation-specific nature of the construct in the current model.

Benevolence

Benevolence is the extent to which a trustee is believed to want to do good to the *trustor*, aside from an egocentric profit motive. Benevolence suggests that the trustee has some specific attachment to the trustor. An

example of this attachment is the relationship between a mentor (trustee) and a protégé (trustor). The mentor wants to help the protégé, even though the mentor is not required to be helpful, and there is no extrinsic reward for the mentor. Benevolence is the perception of a positive orientation of the trustee toward the trustor.

A number of researchers have included characteristics similar to benevolence as a basis for trust. Hovland and colleagues (1953) described trustworthiness in terms of the trustee's motivation to lie. This idea is clearly consistent with the view that perceived benevolence plays an important role in the assessment of trustworthiness, in that high benevolence in a relationship would be inversely related to motivation to lie. Several authors have used the term *benevolence* in their analyses of trust, focusing on the specific relationship with the trustor (Larzelere & Huston, 1980; Solomon, 1960; Strickland, 1958). Others have considered intentions or motives as important to trust (e.g., Cook & Wall, 1980; Deutsch, 1960; Giffin, 1967; Kee & Knox, 1970; Mishra, In press). Although these authors reflect a belief that the trustee's orientation toward the trustor is important, the terms *intentions* and *motives* can include wider implications than the orientation toward the trustor (e.g., the trustee's profit motives). Benevolence connotes a personal orientation that is integral to the proposed model. Also, in a similar vein, Frost, Stimpson, and Maughan (1978) suggested that altruism contributes to the level of trust. Butler and Cantrell (1984) identified loyalty among their determinants of dyadic trust. Jones, James, and Bruni (1975) suggested that confidence and trust in a leader are influenced in part by the extent to which the leader's behavior is relevant to the individual's needs and desires. Rosen and Jerdee (1977) considered the likelihood that the trustee would put organizational goals ahead of individual goals. Thus, all of these researchers used some construct similar to benevolence, as defined in our model.

Integrity

The relationship between integrity and trust involves the trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable. McFall (1987) illustrated why both the adherence to and acceptability of the principles are important. She suggested that following some set of principles defines *personal integrity*. However, if that set of principles is not deemed acceptable by the trustor, the trustee would not be considered to have integrity for our purposes (McFall called this *moral integrity*). The issue of acceptability precludes the argument that a party who is committed solely to the principle of *profit seeking at all costs* would be judged high in integrity (unless this principle is acceptable to the trustor). Such issues as the consistency of the party's past actions, credible communications about the trustee from other parties, belief that the trustee has a strong sense of justice, and the extent to which the party's actions are congruent with his or her words all affect the degree to which the party is judged to have integrity. Even though a case could be

made that there are differentiable reasons why the integrity of a trustee could be perceived as higher or lower (e.g., lack of consistency is different from acceptability of principles), in the evaluation of trustworthiness it is the perceived level of integrity that is important rather than the reasons why the perception is formed.

Integrity or very similar constructs have been discussed as antecedent to trust by a number of theorists. Lieberman (1981) included integrity per se as an important trust factor. Sitkin and Roth's (1993: 368) approach utilizes a similar but more constrained construct of *value congruence*, which they defined as "the compatibility of an employee's beliefs and values with the organization's cultural values." Their approach compares the trustee's values with those of an organizational referent, rather than a judgment of the acceptability of the trustee's values to the trustor. Integrity and consistency were trust determinants in Butler and Cantrell's (1984) model. Likewise, Butler (1991) included consistency, integrity, and fairness as conditions of trust. Although a lack of consistency would cause one to question what values a trustee holds, being consistent is insufficient to integrity, as the trustee may consistently act in a self-serving manner. Gabarro (1978) suggested that three bases of trust were commonly mentioned by their interviewees, one of which was *character*. He contended that character includes integrity. Hart, Capps, Cangemi, and Caillouet's (1986) analysis of 24 survey items revealed three factors, one of which was openness/congruity (i.e., the integrity, fairness, and openness of management). Inclusion of integrity in the proposed model is well grounded in previous approaches to trust.

It is apparent from the previous discussion that the three factors of ability, benevolence, and integrity are common to much of the previous work on trust. Earlier models of trust antecedents either have not used the three factors together or have expanded into much larger sets of antecedents (e.g., Butler, 1991; Gabarro, 1978). These three factors appear to explain concisely the within-trustor variation in trust for others.

Proposition 2. Trust for a trustee will be a function of the trustee's perceived ability, benevolence, and integrity and of the trustor's propensity to trust.

Interrelationship of the Three Factors

Ability, benevolence, and integrity are important to trust, and each may vary independently of the others. This statement does not imply that the three are unrelated to one another, but only that they are separable.

Consider the case of an individual and would-be mentor. Ideally, the individual would want the mentor to be able to have the maximum positive impact on the protégé's career and to help and guide the protégé in any way possible. To what extent would the protégé trust the mentor? The mentor would need to be knowledgeable about the profession, have a thorough knowledge of the company, be interpersonally and politically

astute, and so on. All of these attributes would contribute to the protégé's perception that the mentor has the ability to be helpful. This perception, alone, would not assure that the mentor would be helpful; it would mean only that the possibility exists.

Previous positively viewed actions of the mentor in his or her relationships with others, compatibility of the mentor's statements and actions, and credible communications from others about honorable actions by the mentor would build the assessment of the mentor's integrity. However, even if the individual is deemed to have high integrity, he or she may or may not have the knowledge and capabilities to be a helpful mentor. Thus, integrity by itself will not make the individual a trusted mentor.

But what about the person whose integrity is well known and whose abilities are stellar? Would this potential mentor be trusted? Perhaps not—this individual may have no particular attachment to the focal employee. Would the focal employee trust this person enough to divulge sensitive information about mistakes or shortcomings? If the manager also were benevolent toward the employee, he or she may try to protect the employee from the possible ramifications of mistakes. A manager who is less benevolent to the focal employee may be more disposed to use the information in a way that helps the company most, even at the possible expense of the employee. However, benevolence by itself is insufficient to cause trust. A well-intentioned person who lacks ability may not know who in the organization should be made aware of what. Aside from not being helpful, the person could actually do significant harm to the employee's career. Thus, it is possible for a perceived lack of any of the three factors to undermine trust.

If ability, benevolence, and integrity were all perceived to be high, the trustee would be deemed quite trustworthy. However, trustworthiness should be thought of as a continuum, rather than the trustee being either trustworthy or not trustworthy. Each of the three factors can vary along a continuum. Although the simplest case of high trust presumes a high level of all three factors, there may be situations in which a meaningful amount of trust can develop with lesser degrees of the three. Consider the case in which a highly able manager does not demonstrate high integrity (e.g., in dealings with others) but forms an attachment to a particular employee. The manager repeatedly demonstrates strong benevolence toward the employee, providing resources even at others' expense. Will the employee trust the manager? On one hand, it can be argued that if the employee strongly believes in the benevolence of the manager, the employee has no reason to doubt how the manager will behave in the future. On the other hand, if the manager's integrity is questionable, can the employee help but wonder how long it will be until the manager betrays her or him as well? Whether or not the employee will trust the manager depends in part upon the employee's propensity to trust. In addition to propensity affecting trust when there are no data on characteristics of the

trustee, propensity can enhance the effect of these factors, thereby producing a moderating effect on trust. The point is that the employee may or may not trust the manager in such a scenario. Clearly, if all three factors were high, the employee would trust, but how low can some of the three factors be before the employee would not trust the manager? In what situations is each of the three factors most sensitive or critical? These questions clearly deserve investigation.

The proposed model can explain trust (based on propensity) before any relationship between two parties has developed. As a relationship begins to develop, the trustor may be able to obtain data on the trustee's integrity through third-party sources and observation, with little direct interaction. Because there is little information about the trustee's benevolence toward the trustor, we suggest that integrity will be important to the formation of trust early in the relationship. As the relationship develops, interactions with the trustee allow the trustor to gain insights about the trustee's benevolence, and the relative impact of benevolence on trust will grow. Thus, the development of the relationship is likely to alter the relative importance of the factors of trustworthiness.

Proposition 3. The effect of integrity on trust will be most salient early in the relationship prior to the development of meaningful benevolence data.

Proposition 4. The effect of perceived benevolence on trust will increase over time as the relationship between the parties develops.

Each of these three factors captures some unique elements of trustworthiness. Previously we suggested that as a set, ability, benevolence, and integrity appear to explain a major portion of trustworthiness while maintaining parsimony. Each element contributes a unique perceptual perspective from which the trustor considers the trustee. If a trustee is perceived as high on all three factors, it is argued here that the trustee will be perceived as quite trustworthy.

Even though there are many conceptualizations of which factors of trustworthiness are important, ability, benevolence, and integrity appear to encompass the major issues. Using three of the most current models available, Table 2 illustrates that factors of trustworthiness from earlier models are subsumed within the perceptions of these three factors. For example, Mishra's (In press) conceptualization includes competence, openness, caring, and reliability. Competence and ability are clearly similar, whereas caring parallels benevolence. A lack of trustee reliability as Mishra conceptualizes it would clearly damage the perception of integrity in the current model. Mishra's openness is measured through questions about both the trustee's general openness with others and openness with the trustor, which could be expected to be related to either integrity or benevolence, respectively. Likewise, if a trustor perceived that a trustee were low on any one of Butler's (1991) 10 factors of trustworthi-

TABLE 2
Apparent Overlap of Recent Models

Authors	No. of Factors	Similar Factors Included			
		Propensity	Ability	Benevolence	Integrity
Butler (1991)	10	No	Competence	Loyalty, openness, receptivity, availability	Consistency, discreetness, fairness, integrity, promise fulfillment
Mishra (In press)	4	No	Competence	Caring, openness	Reliability, openness
Sitkin & Roth (1993)	2	No	Ability	No	Value congruence

ness, that perceived deficiency would also lower the perception of one of three factors in our current model. Specifically, if a trustor perceived a trustee to be deficient on any of Butler's loyalty, openness, receptivity, or availability factors, it would also lower the perception of the trustee's benevolence in the current model. Butler's factors of consistency, discretion, fairness, integrity, and promise fulfillment are encompassed within the current conceptualization of integrity. If a trustor were concerned with a trustee's competence in Butler's model, those concerns would be reflected in the perception of ability in our model. Like the current model, Sitkin and Roth's (1993) model includes ability. Their definition of value congruence parallels the considerations encompassed in integrity. Thus, the factors of trustworthiness described in earlier, more complex models are accounted for in the current approach while gaining the advantage of parsimony (James, Mulaik, & Brett, 1982; Runkel & McGrath, 1972).

In the preceding sections, characteristics of a trustor and a trustee that lead to trust were examined. The distinction between a trustor's characteristics and trustee's characteristics is important. Perceptions of ability, benevolence, and integrity of another party leave a considerable amount of variance in trust unexplained, because they neglect between-trustor differences in propensity to trust. Likewise, understanding the propensity to trust does not include the trustworthiness of a given trustee. In sum, to understand the extent to which a person is willing to trust another person, both the trustor's propensity to trust and the trustor's perceptions of the trustee's ability, benevolence, and integrity must be discerned.

The above presentation dealt with characteristics of the trustor and trustee that lead to trust. What follows is a consideration of risk and its relationship with engaging in trusting actions.

Risk Taking in Relationship

It was argued previously that risk is an essential component of a model of trust. It is important for researchers to understand the role of risk. There is no risk taken in the *willingness* to be vulnerable (i.e., to trust), but risk is inherent in the *behavioral manifestation* of the willingness to be vulnerable. One does not need to risk anything in order to trust; however, one must take a risk in order to engage in trusting action. The fundamental difference between trust and trusting behaviors is between a "willingness" to assume risk and actually "assuming" risk. Trust is the willingness to assume risk; behavioral trust is the *assuming* of risk. This differentiation parallels Sitkin and Pablo's (1992) distinction in the risk-taking literature between the *tendency* to take risks and *risk behavior*. This critical differentiation highlights the importance of clearly distinguishing between trust and its outcomes.

Trust will lead to risk taking in a relationship, and the form of the risk taking depends on the situation. For example, a supervisor may take a risk by allowing an employee to handle an important account rather than

handling it personally. The supervisor risks repercussions if the employee mishandles the account. Likewise, an employee may trust a manager to compensate for exceptional contributions that are beyond the scope of the employee's job. If the employee allows performance on some aspects of his or her formal job description to suffer in order to attend to a project that is important to the supervisor, the employee is clearly taking a risk. If the supervisor fails to account for the work on the project, the employee's performance appraisal will suffer. In both examples, the level of trust will affect the amount of risk the trustor is willing to take in the relationship. In the former case, trust will affect the extent to which the supervisor will empower the employee; in the latter case, trust will affect the extent to which the employee will engage in organizational citizenship behavior. Even though the form of the risk taking depends on the situation, in both cases the amount of trust for the other party will affect how much risk a party will take.

Thus, the outcome of trust proposed in this article is risk taking in relationship (RTR). RTR differentiates the outcomes of trust from general risk-taking behaviors because it can occur only in the context of a specific, identifiable relationship with another party. Further, RTR suggests that trust will increase the likelihood that a trustor will not only form some affective link with a trustee, but also that the trustor will allow personal vulnerability. The separation of trust from RTR is illustrated in Figure 1 by the inclusion of a box representing each construct.

Trust is not involved in all risk-taking behavior. For example, when a farmer invests time and resources into planting crops, the farmer is taking a risk that sufficient rain will fall during the critical times of the growing season so that there will be a profitable crop to harvest. Although this behavior involves risk, it does not involve trust as defined in this theory, because there is no relationship with an identifiable "other party" to which the farmer would make himself or herself vulnerable. Even though proponents of a sociological approach might argue that this is an example of trust because there is a system that produces meteorological forecasts, it is important to remember that the meteorologists do not control the weather—they merely provide data about the likelihood of various weather scenarios. Perceptions of meteorologists' accuracy would affect risk perception (Sitkin & Pablo, 1992). Thus, the farmer does not trust the weather but takes a risk on what the weather will do (Deutsch, 1958).

Assessing the risk in a situation involves consideration of the context, such as weighing the likelihood of both positive and negative outcomes that might occur (Bierman, Bonini, & Hausman, 1969; Coleman, 1990). If a decision involves the possibility of a negative outcome coupled with a positive outcome, the aggregate level of risk is different than if only the possibility of the negative outcome exists. Thus, the stakes in the situation (i.e., both the possible gains and the potential losses) will affect the interpretation of the risk involved. In an integrative review of risk

behavior, Sitkin and Pablo (1992) identified a number of other factors that influence the perception of risk, such as familiarity of the domain of the problem, organizational control systems, and social influences.

It is important that we clarify what is meant by the perception of risk in this model, because it extends the risk literature in its meaning. In our model, the perception of risk involves the trustor's belief about likelihoods of gains or losses *outside of considerations that involve the relationship with the particular trustee*. Current approaches to perceived risk implicitly incorporate knowledge of the relationship with the trustee with non-relational reasons for assessments of risk, and, therefore, they do not clarify how trust for a given trustee is related to risk behavior. For example, Sitkin and Pablo (1992: 10) defined risk as "a characteristic of decisions that is defined here as the extent to which there is uncertainty about whether potentially significant and/or disappointing outcomes of decisions will be realized." In our model of trust, the decision to which Sitkin and Pablo refer is the RTR, wherein the trustor takes action. Two categories of factors influence the assessment of the likelihood of significant and/or disappointing outcomes: the relationship with the trustee (i.e., trust) and factors outside the relationship that make the decision significant and uncertain. In sum, to understand how trust actually affects a person's taking a risk, one must separate trust from other situational factors that *necessitate* trust (i.e., perceived risk in the current model).

We propose that the *level* of trust is compared to the *level* of perceived risk in a situation. If the level of trust surpasses the threshold of perceived risk, then the trustor will engage in the RTR. If the level of perceived risk is greater than the level of trust, the trustor will not engage in the RTR.

In sum, trust is a willingness to be vulnerable to another party, but there is no risk involved with holding such an attitude. Trust will increase the likelihood of RTR, which is the behavioral manifestation of trust. Whether or not a specific risk will be taken by the trustor is influenced both by the amount of trust for the trustee and by the perception of risk inherent in the behavior.

Proposition 5. RTR is a function of trust and the perceived risk of the trusting behavior (e.g., empowerment of a subordinate).

Early in this article it was argued the placement of risk in a model of trust was important, and this section clarifies that issue. Two other issues warrant exposition: the effects of context and the evolution of trust.

The Role of Context

The preceding discussion of risk-taking behavior makes a clear argument for the importance of the context in which the risk is to be taken. Even though the level of trust (as determined by ability, benevolence, integrity and propensity to trust) may be constant, the specific consequences of trust will be determined by contextual factors such as the

stakes involved, the balance of power in the relationship, the perception of the level of risk, and the alternatives available to the trustor.

Similarly, the assessment of the antecedents of trust (ability, benevolence, and integrity) are affected by the context. For example, in the previous discussion of ability we noted that ability was domain specific—high ability at one task does not necessarily imply high ability at another task. Furthermore, perceived ability will change as the dynamics of the situation in which the task is to be performed change. For example, a protégé may believe that the mentor is able to advance his or her career, but a change in top management's philosophy may change the situation. Although the mentor's skills are constant, the context in which those skills will be utilized has changed. The net result of the change in context (i.e., politics) has decreased the protégé's perception of the mentor's ability.

Perceived levels of benevolence also are influenced by context. For example, if an employee perceives that a new supervisor has attitudes and preferences similar to his or her own, the employee will perceive higher levels of benevolence from that supervisor (Berscheid & Walster, 1978; Newcomb, 1956). The context of the situation (i.e., perceived similarity) helps to determine the perceived level of benevolence that the supervisor has for the employee.

The context of a party's actions affects the perception of integrity as well. A middle manager may make a decision that appears to be inconsistent with earlier decisions. Knowing nothing else about the situation, employees may question the manager's integrity. However, if the employees learn that the manager's actions were in response to orders from those higher in the organization, the manager's integrity will no longer be questioned. The manager's actions are seen as unavoidable given the context, and they are not deemed to be his or her fault. Thus, the perception of integrity can be influenced by the context of the actions.

In sum, the trustor perception and interpretation of the context of the relationship will affect both the need for trust and the evaluation of trustworthiness. Changes in such factors as the political climate and the perceived volition of the trustee in the situation can cause a reevaluation of trustworthiness. A strong organizational control system could inhibit the development of trust, because a trustee's actions may be interpreted as responses to that control rather than signs of trustworthiness. A clear understanding of trust for a trustee necessitates understanding how the context affects perceptions of trustworthiness.

Long-Term Effects

Up to this point, in the proposed model we have described trust at a given point in time. A more complete understanding of trust would come from consideration of its evolution within a relationship (Boyle & Bonacich, 1970; Kee & Knox, 1970). The level of trust will evolve as the parties interact. Several factors that affect the process by which trust evolves have been explored in the literature and are discussed next.

Strickland's (1958) analysis of monitoring and employee locus of motivation provides an interesting insight into the evolution of trust. He suggested that low trust will lead to a greater amount of surveillance or monitoring of work progress. Kruglanski (1970: 215) suggested that a frequently monitored employee might interpret the supervisor's surveillance as illustrating distrust for the employee. The employee may react in retaliation by "double-crossing the supervisor whenever the opportunity arises. The supervisor's anticipation of such an effect might lead him to continue his surveillance of the subordinate."

A number of researchers have suggested that the emergence of trust can be demonstrated in game theory as a reputation evolves from patterns of previous behavior. For example, Solomon (1960) described effects of reputation on trust utilizing a prisoner's dilemma. He asserted that an individual who receives cooperation from another develops a liking for that individual, increasing the likelihood of the person's behaving in a trustworthy fashion. Boyle and Bonacich described the dynamic interplay between experiences and trust. They argued that "a Cooperative move by Opponent will increase Player's trust in him, while a Noncooperative move will decrease Player's trust" (1970: 130). Other researchers have used a repeated decision game to show how trust emerges in a transaction between two parties (e.g., Butler, 1983; Dasgupta, 1988; Davis, Helms, & Henkin, 1989; Milgrom & Roberts, 1992).

Our proposed model incorporates the dynamic nature of trust. This is represented in Figure 1 by the feedback loop from the "Outcomes" of RTR to the perceived characteristics of the trustee. When a trustor takes a risk in a trustee that leads to a positive outcome, the trustor's perceptions of the trustee are enhanced. Likewise, perceptions of the trustee will decline when trust leads to unfavorable conclusions. Boyle and Bonacich (1970) have suggested that the outcomes of engaging in a trusting behavior will affect trust directly. We propose that the outcome of the trusting behavior (favorable or unfavorable) will influence trust indirectly through the perceptions of ability, benevolence, and integrity at the next interaction. For example, a manager empowers an employee to deal with a task that is critical to the manager's performance. If the employee's performance of the task is very good, the manager's perception of the employee's trustworthiness will be enhanced. Conversely, if the employee performs poorly and damages the manager's reputation, the manager's perception of the employee's trustworthiness is diminished. The manager may attribute the employee's high or low performance to ability, benevolence, and/or integrity, depending upon the situation.

Proposition 6. Outcomes of trusting behaviors (i.e., RTR) will lead to updating of prior perceptions of the ability, benevolence, and integrity of the trustee.

Conclusions and Future Directions

This article raises a number of issues for the study of trust in organizations. Each is considered and dealt with in the development of a

model of dyadic trust in an organizational context. The model proposed in this article is the first that explicitly considers both characteristics of the trustee as well as the trustor. The model clearly differentiates trust from factors that contribute to it, and it also differentiates trust from its outcome of risk taking in the relationship. The current approach defines trust in a way that distinguishes trust from other similar constructs (cooperation, confidence, predictability), which often have been confused with trust in the literature. Likewise, the critical role of risk is clearly specified in this model. This article develops a versatile definition of trust and a parsimonious set of determinants.

The differentiations between factors that cause trust, trust itself, and outcomes of trust are critical to the validation of this model. All three must be measured in order to fully test the model. Measures of the perceptions of a trustee's ability, benevolence, and integrity must be developed that are consistent with the definitions provided. Behaviors that are characterized by vulnerability and the lack of ability to monitor or control can be assessed to operationalize RTR. RTR must be measured in terms of actual behavior, not willingness to engage in behavior. Such behaviors as monitoring are examples of a lack of risk taking in relationship. Dealing with these behaviors from a measurement perspective requires a reverse scoring of the measure of their occurrence. The extent of perceived risk involved in engaging in the trusting behavior should be assessed either directly (e.g., through survey items) or controlled for, such as structuring a simulation wherein the subjects have a limited number of possible responses that clearly vary in the amount of risk they involve. The most problematic component of the model from the standpoint of measurement is trust itself. Because trust is a willingness to be vulnerable, a measure that assesses that willingness is needed. Even though trust is conceptually easy to differentiate from perceived ability, benevolence, and integrity of the trustee, separating the *willingness* to be vulnerable from *actually* being vulnerable constitutes a finer distinction. To measure trust itself, a survey or other similar methodology that taps into the person's *willingness* to be vulnerable to the trustee is needed, because this is distinct from observable RTR.

The question "Do you trust them?" must be qualified: "trust them to do what?" The issue on which you trust them depends not only on the assessment of integrity and benevolence, but also on the ability to accomplish it. Thus, if a party is trusted on one task, will that increase the trust on another unrelated task, even in the absence of data on the party's ability on the new task? Consistent with the arguments of Sitkin and Roth (1993), this model suggests that assessments of ability may not generalize across dissimilar tasks or situations.

Several limitations of the proposed theory should be recognized. First, its focus is limited to trust of a specific trustor for a specific trustee. Thus, its contribution to understanding trust in a social system (e.g., Barber, 1983; Lewis & Weigert, 1985) is beyond the scope of this model. Second, trust as considered in this model is unidirectional: from a given

trustor to a given trustee. In its present form it is not designed to examine the development of mutual trust between two parties. Third, this model is focused on trust in an organizational relationship, and its propositions may not generalize to relationships in other contexts. Finally, the labels for the constructs in this model were selected from several options used earlier in the trust literature. To us, these labels most clearly reflected the constructs as defined in the proposed model; however, in some cases this necessitated that the definitions vary somewhat from some of the prior uses of the same terms.

In addition to model-specific hypotheses, a number of other avenues of research should be pursued. For example, the process by which trust develops needs further exploration. We propose that the need for trusting behavior often arises while there is still a lack of data regarding some of the three factors. For instance, an employee may not have had enough interaction with a given manager to be able to assess the manager's benevolence toward him or her. In order to gather such data, the employee first may have to be vulnerable (i.e., to trust the manager) to see how the manager deals with the vulnerability. In this instance, the employee may have to display a type of trust similar to blind faith. Depending on how the manager responds to the vulnerability, the employee will develop more or less trust.

A number of theorists have suggested that trust evolves over time based on a series of observations and interactions. A critical issue is the process by which trust evolves, given the framework of our model. Further research should investigate the relationship between trust and cooperation. Game theorists tend to equate cooperation and trust, suggesting that over time a pattern of cooperative behavior develops trust (Axelrod, 1984). To what extent does cooperation that can be attributed to external motivations develop trust? This idea also suggests the need to test the feedback loop in the proposed model.

There are many areas in organizational studies in which trust has been cited as playing a key role. Further development and operationalization of the model proposed in this article would benefit the study of organizations through an increased understanding of such topics as employee-organization linkages, negotiation, and the implementation of self-managed teams.

REFERENCES

- Argyris, C. A. 1994. Litigation mentality and organizational learning. In S. B. Sitkin & R. J. Bies (Eds.), *The legalistic organization*. Thousand Oaks, CA: Sage.
- Atwater, L. E. 1988. The relative importance of situational and individual variables in predicting leader behavior. *Group and Organization Studies*, 13: 290-310.
- Axelrod, R. 1984. *The evolution of cooperation*. New York: Basic Books.
- Barber, B. 1983. *The logic and limits of trust*. New Brunswick, NJ: Rutgers University Press.
- Bateson, P. 1988. The biological evolution of cooperation and trust. In D. G. Gambetta (Ed.), *Trust*: 14-30. New York: Basil Blackwell.

- Bazerman, M. H. 1994. *Judgment in managerial decision making*. New York: Wiley.
- Berscheid, E., & Walster, E. H. 1978. *Interpersonal attraction* (2nd ed.). Reading, MA: Addison-Wesley.
- Bierman, H., Jr., Bonini, C. P., & Hausman, W. H. 1969. *Quantitative analysis for business decisions* (3rd ed.). Homewood, IL: Irwin.
- Boss, R. W. 1978. Trust and managerial problem solving revisited. *Group and Organization Studies*, 3: 331–342.
- Boyle, R., & Bonacich, P. 1970. The development of trust and mistrust in mixed-motive games. *Sociometry*, 33: 123–139.
- Butler, J. K. 1983. Reciprocity of trust between professionals and their secretaries. *Psychological Reports*, 53: 411–416.
- Butler, J. K. 1991. Toward understanding and measuring conditions of trust: Evolution of a conditions of trust inventory. *Journal of Management*, 17: 643–663.
- Butler, J. K., & Cantrell, R. S. 1984. A behavioral decision theory approach to modeling dyadic trust in superiors and subordinates. *Psychological Reports*, 55: 19–28.
- Coleman, J. S. 1990. *Foundations of social theory*. Cambridge, MA: Harvard University Press.
- Conlon, E. J., & Mayer, R. C. 1994. *The effect of trust on principal-agent dyads: An empirical investigation of stewardship and agency*. Paper presented at the annual meeting of the Academy of Management, Dallas, TX.
- Cook, J., & Wall, T. 1980. New work attitude measures of trust, organizational commitment, and personal need nonfulfillment. *Journal of Occupational Psychology*, 53: 39–52.
- Cummings, L. L. 1983. Performance-evaluation systems in context of individual trust and commitment. In F. J. Landy, S. Zedrick, & J. Cleveland (Eds.), *Performance measurement and theory*: 89–93. Hillsdale, NJ: Earlbaum.
- Dasgupta, P. 1988. Trust as a commodity. In D. G. Gambetta (Ed.), *Trust*: 49–72. New York: Basil Blackwell.
- Davis, J., Helms, L., & Henkin, A. B. 1989. Strategic conventions in organizational decision making: Applications from game theory. *International Review of Modern Sociology*, 19: 71–85.
- Deutsch, M. 1958. Trust and suspicion. *Journal of Conflict Resolution*, 2: 265–279.
- Deutsch, M. 1960. The effect of motivational orientation upon trust and suspicion. *Human Relations*, 13: 123–140.
- Donaldson, L., & Davis, J. H. 1991. Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16(1): 49–64.
- Driscoll, J. W. 1978. Trust and participation in organizational decision making as predictors of satisfaction. *Academy of Management Journal*, 21: 44–56.
- Farnham, A. 1989. The trust gap. *Fortune*, Dec. 4: 56–78.
- Farris, G., Senner, E., & Butterfield, D. 1973. Trust, culture, and organizational behavior. *Industrial Relations*, 12: 144–157.
- Friedland, N. 1990. Attribution of control as a determinant of cooperation in exchange interactions. *Journal of Applied Social Psychology*, 20: 303–320.
- Frost, T., Stimpson, D. V., & Maughan, M. R. C. 1978. Some correlates of trust. *Journal of Psychology*, 99: 103–108.
- Gabarro, J. 1978. The development of trust, influence, and expectations. In A. G. Athos & J. J.

- Gabarro (Eds.), *Interpersonal behavior: Communication and understanding in relationships*: 290–303. Englewood Cliffs, NJ: Prentice Hall.
- Gambetta, D. G. (Ed.). 1988. Can we trust trust? In D. G. Gambetta (Ed.), *Trust*: 213–237. New York: Basil Blackwell.
- Giffin, K. 1967. The contribution of studies of source credibility to a theory of interpersonal trust in the communication department. *Psychological Bulletin*, 68: 104–120.
- Golembiewski, R. T., & McConkie, M. 1975. The centrality of interpersonal trust in group processes. In C. L. Cooper (Ed.), *Theories of group processes*. New York: Wiley.
- Good, D. 1988. Individuals, interpersonal relations, and trust. In D. G. Gambetta (Ed.), *Trust*: 131–185. New York: Basil Blackwell.
- Granovetter, M. 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91: 481–510.
- Hart, K. M., Capps, H. R., Cangemi, J. P., & Caillouet, L. M. 1986. Exploring organizational trust and its multiple dimensions: A case study of General Motors. *Organization Development Journal*, 4(2): 31–39.
- Hofstede, G. 1980. Motivation, leadership, and organization: Do American theories apply abroad? *Organizational Dynamics*, 9(1): 42–63.
- Hovland, C. I., Janis, I. L., & Kelley, H. H. 1953. *Communication and persuasion*. New Haven, CT: Yale University Press.
- Jackson, S. E., & Alvarez, E. B. 1992. Working through diversity as a strategic imperative. In S. Jackson (Ed.), *Diversity in the workplace*: 13–29. New York: Guilford Press.
- James, L. R., Mulaik, S. S., & Brett, J. M. 1982. *Causal analysis: Models, assumptions, and data*. Beverly Hills, CA: Sage.
- Jamieson, D., & O'Mara, J. 1991. *Managing workforce 2000: Gaining the diversity advantage*. San Francisco: Jossey-Bass.
- Jensen, M. C., & Meckling, W. H. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3: 305–360.
- Johnson-George, C., & Swap, W. 1982. Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other. *Journal of Personality and Social Psychology*, 43: 1306–1317.
- Jones, A. P., James, L. R., & Bruni, J. R. 1975. Perceived leadership behavior and employee confidence in the leader as moderated by job involvement. *Journal of Applied Psychology*, 60: 146–149.
- Kee, H. W., & Knox, R. E. 1970. Conceptual and methodological considerations in the study of trust. *Journal of Conflict Resolution*, 14: 357–366.
- Kruglanski, A. W. 1970. Attributing trustworthiness in supervisor-worker relations. *Journal of Experimental Psychology*, 6: 214–232.
- Larson, C. E., & LaFasto, F. M. J. 1989. *Teamwork: What must go right/what can go wrong*. Newbury Park, CA: Sage.
- Larzelere, R., & Huston, T. 1980. The dyadic trust scale: Toward understanding interpersonal trust in close relationships. *Journal of Marriage and the Family*, 42: 595–604.
- Lawler, E. 1992. *The ultimate advantage: Creating the high-involvement organization*. San Francisco: Jossey-Bass.
- Lewis, J., & Weigert, A. 1985. Trust as a social reality. *Social Forces*, 63: 967–985.
- Lieberman, J. K. 1981. *The litigious society*. New York: Basic Books.

- Luhmann, N. 1988. Familiarity, confidence, trust: Problems and alternatives. In D. G. Gambetta (Ed.), *Trust*: 94–107. New York: Basil Blackwell.
- March, J. G., & Shapira, Z. 1987. Managerial perspectives on risk and risk taking. *Management Science*, 33: 1404–1418.
- McFall, L. 1987. Integrity. *Ethics*, 98: 5–20.
- Meyer, J. W. 1983. Organizational factors affecting legalization in education. In J. W. Meyer & W. R. Scott (Eds.), *Organizational environments: Ritual and rationality*: 217–232. San Francisco: Jossey-Bass.
- Milgrom, P., & Roberts, J. 1992. *Economics, organization and management*. Englewood Cliffs, NJ: Prentice Hall.
- Mishra, A. K. In press. Organizational responses to crisis: The centrality of trust. In R. M. Kramer & T. Tyler (Eds.), *Trust in organizations*. Newbury Park, CA: Sage.
- Moore, S. F., Shaffer, L. S., Pollak, E. L., & Taylor-Lemcke, P. 1987. The effects of interpersonal trust and prior common problem experience on common management. *Journal of Social Psychology*, 127: 19–29.
- Newcomb, T. M. 1956. The prediction of interpersonal attraction. *American Psychologist*, 11: 575–586.
- Riker, W. H. 1974. The nature of trust. In J. T. Tedeschi (Ed.), *Perspectives on social power*: 63–81. Chicago: Aldine.
- Ring, S. M., & Van de Ven, A. 1992. Structuring cooperative relationships between organizations. *Strategic Management Journal*, 13: 483–498.
- Rosen, B., & Jerdee, T. H. 1977. Influence of subordinate characteristics on trust and use of participative decision strategies in a management simulation. *Journal of Applied Psychology*, 62: 628–631.
- Rotter, J. B. 1967. A new scale for the measurement of interpersonal trust. *Journal of Personality*, 35: 651–665.
- Runkel, P. J., & McGrath, J. E. 1972. *Research on human behavior: A systematic guide to method*. New York: Holt, Rinehart, & Winston.
- Sabatelli, R. M., Buck, R., & Dreyer, A. 1983. Locus of control, interpersonal trust, and nonverbal communication accuracy. *Journal of Personality and Social Psychology*, 44: 399–409.
- Schlenker, B., Helm, B., & Tedeschi, J. 1973. The effects of personality and situational variables on behavioral trust. *Journal of Personality and Social Psychology*, 25: 419–427.
- Scott, C. L., III. 1980. Interpersonal trust: A comparison of attitudinal and situational factors. *Human Relations*, 33: 805–812.
- Scott, D. 1980. The causal relationship between trust and the assessed value of management by objectives. *Journal of Management*, 6: 157–175.
- Sitkin, S. B., & Bies, R. J. 1994. The legalization of organizations: A multitheoretical perspective. In S. B. Sitkin & R. J. Bies (Eds.), *The legalistic organization*: 19–49. Thousand Oaks, CA: Sage.
- Sitkin, S. B., & Pablo, A. L. 1992. Reconceptualizing the determinants of risk behavior. *Academy of Management Review*, 17: 9–38.
- Sitkin, S. B., & Roth, N. L. 1993. Explaining the limited effectiveness of legalistic “remedies” for trust/distrust. *Organization Science*, 4: 367–392.
- Solomon, L. 1960. The influence of some types of power relationships and game strategies upon the development of interpersonal trust. *Journal of Abnormal and Social Psychology*, 61: 223–230.

- Strickland, L. H. 1958. Surveillance and trust. *Journal of Personality*, 26: 200–215.
- Taylor, R. G. 1989. The role of trust in labor-management relations. *Organization Development Journal*, 7: 85–89.
- Wellins, R. S., Byham, W. C., & Wilson, J. M. 1991. *Empowered teams: Creating self-directed work groups that improve quality, productivity, and participation*. San Francisco: Jossey-Bass.
- Williamson, O. E. 1975. *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.
- Zand, D. E. 1972. Trust and managerial problem solving. *Administrative Science Quarterly*, 17: 229–239.

Roger C. Mayer is an assistant professor of management at the University of Notre Dame. He received his Ph.D. in organizational behavior and human resource management from the Krannert Graduate School of Management, Purdue University. His research interests include trust, motivation, employee attitudes, and decision making.

James H. Davis is an assistant professor of strategic management at the University of Notre Dame. He received his Ph.D. from the University of Iowa. His research interests include corporate governance, stewardship theory, and trust.

F. David Schoorman is an associate professor of organizational behavior and human resource management at Purdue University. He received his Ph.D. in industrial administration from Carnegie Mellon University. His interests include decision making, work teams, and organizational effectiveness.