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Citation

KONG, Dejun Tony; DIRKS, Kurt T.; and FERRIN, Donald L.. Interpersonal Trust Within Negotiations: Meta-Analytic Evidence, Critical Contingencies, and Directions for Future Research. (2014). Academy of Management Journal. 57, (5), 1235-1255. Research Collection Lee Kong Chian School Of Business.

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INTERPERSONAL TRUST WITHIN NEGOTIATIONS: META-ANALYTIC EVIDENCE, CRITICAL CONTINGENCIES, AND DIRECTIONS FOR FUTURE RESEARCH

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Trust has long been recognized, by scholars and practitioners alike, as an important factor for negotiation success. However, there has been little effort to date to empirically review or theoretically synthesize the research on trust in the context of negotiations. We present a social exchange framework that describes the processes through which trust influences negotiation behaviors and outcomes. We identified three critical contingencies that modified the effects of trust on negotiation behaviors and outcomes. A meta-analysis on a sample of 38 independent studies provided considerable support for the model, and also confirmed the importance of the three contingencies for understanding the effects of trust. The framework and accompanying empirical evidence provide a necessary theoretical and empirical integration of the trust and negotiation literatures. Based on the theory and meta-analytical findings, we identified critical gaps and limitations in existing research, and we propose a research agenda to address key theoretical, empirical, and methodological issues identified by our framework and review.

Negotiators face a dilemma: On one hand, they recognize that, by working cooperatively with their counterpart, they may be able to increase their own welfare and perhaps also the welfare of their partner (Lax & Sebenius, 1986). For example, by sharing information about their preferences and encouraging their counterparts to share information in return, negotiators may be able to craft a mutually agreeable solution that makes both of them better off (Murnighan, Babcock, Thompson, & Pillutla, 1999; Thompson, 1991). On the other hand, negotiators recognize that these cooperative behaviors put them at risk of being taken advantage of by their counterparts. For example, one's counterpart may be tempted not to share information in return, but instead exploit the information for personal

We would like to thank Richard Arvey, Bart De Jong, Peter Kim, Roy Lewicki, Robert Lount, members of the Organizational Behavior Research Group at Washington University in St. Louis, editor in chief Jason Colquitt, and the three anonymous reviewers for their comments and suggestions on the paper. gain at one's expense. This dilemma, which is common to many social situations but is particularly acute in negotiations (Kelley, 1966), naturally invokes the concept of trust.

In the dilemma described above, negotiators may become better or worse off in the negotiation. In other words, negotiations involve not only opportunities but also risks. Additionally, whether one negotiator ends up better or worse off is contingent upon the behavior of the other negotiator. Thus, negotiations also involve interdependence. Rousseau, Sitkin, Burt, and Camerer (1998: 395) observed that trust—defined as "the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another"—involves both risk and interdependence. Thus, trust is a concept that is a natural and integral element of negotiations.

What is the current state of thought and knowledge about the role of trust in the context of negotiations? Bazerman and Neale (1992: 90–91) listed trust building as "Strategy 1" for creating mutually beneficial agreements, and Thompson, Wang, and Gunia (2010: 501) asserted that "[m]utual trust is an

essential ingredient of effective negotiations." Representing an alternative view, Nobel Prize Laureate Williamson (1993: 469) declared, "I maintain that trust is irrelevant to commercial exchange and that reference to trust in this connection promotes confusion." Finally, the dynamics described in the opening paragraph might even suggest that trusting one's counterpart is detrimental, as it sets one up to be exploited. The empirical literature does little to resolve these contrasting views. Some studies have found that negotiators' trust promotes collaboration (De Dreu, Beersma, Stroebe, & Euwema, 2006) and better negotiated outcomes (Schurr & Ozanne, 1985). Other studies, however, have found that trust is not related to the degree of collaboration (De Dreu, Giebels, & Van de Vliet, 1998; Gunia, Brett, Nandkeolyar, & Kamdar, 2011) or joint outcomes achieved (Butler, 1999; Kimmel, Pruitt, Magenau, Konar-Goldband, & Carnevale, 1980). And, surprisingly, we did not find a single study that specifically set out to examine the question of whether trust predicts an individual's own outcome in a negotiation. In summary, the current literature yields divergent opinions as well as conflicting and limited evidence regarding the role of trust in negotiations.

There is much to gain from better understanding the role of trust in negotiations. Negotiation has achieved considerable popularity in business school education and leadership training, presumably because individuals have a strong desire to improve their negotiation outcomes. What should negotiation training advocate for the role of trust in negotiations? When will it yield better outcomes? The potential gain is equally important for research. The negotiation and trust literatures have grown extensively in recent decades, and negotiation and trust have been among the most studied topics in organizational behavior. However, there has been limited integration between these literatures. For example, although negotiation studies do sometimes examine trust, the concept tends to be included in an ancillary, as opposed to focal, role. As a consequence, research on trust in negotiations has focused on rather elementary issues and relationships and has not sufficiently considered some more complex—and also fundamental—roles that trust may play in negotiations. Meanwhile, the literature on trust has largely focused on contexts such as trust toward leaders (Dirks & Ferrin, 2002), among peers (McAllister, 1995), in teams (De Jong & Elfring, 2010), and between organizations (Zaheer, McEvily, & Perrone, 1998), and much less on

trust in the negotiation context. Not only do negotiations provide a promising arena for future trust research, but research in this arena may also yield new insights for existing areas.

The present study provides insights into three fundamental questions. First, what is the overall relationship between trust and negotiation behaviors/outcomes? Does it "pay" to trust? Second, through what processes does trust influence negotiation behaviors/outcomes? Third, what critical contingencies determine when these relationships are stronger or weaker? To address these questions, we seek to meta-analyze the existing empirical evidence on trust in the context of interpersonal (dvadic) negotiations. Our study advances knowledge by identifying what is known about the existence, strength, and variability of core relationships; identifying moderators not yet studied systematically; developing a theoretical framework to guide future research; and identifying important issues or questions that need to be resolved.

THEORETICAL FOUNDATIONS

A negotiation is a social process in which multiple, interdependent parties with non-identical preferences mutually decide how to allocate scare resources (Neale & Northcraft, 1991; Pruitt, 1983). This study will focus on negotiations between two individuals. Negotiation is a ubiquitous social activity that occurs when individuals do not have identical interests but nevertheless must rely upon others to reach their goals (Carnevale & Pruitt, 1992; Thompson et al., 2010). In negotiations, parties can have opposing interests (competitive), aligned interests (cooperative), or, most commonly, a mixture of interests (mixed motives) (Deutsch, 1949). Trust has been recognized as relevant in mixed motive situations as there is uncertainty about a counterpart's motives and potential behaviors (Ferrin & Dirks, 2003).

Having defined forms of interdependence in his earlier work, Deutsch (1958) also provided one of the early treatments of trust, discussing its importance in a variety of social situations in which an individual's gains and losses are dependent on a counterpart's behaviors. Trust research has since expanded into an extensive literature (Dirks & Ferrin, 2001; Fulmer & Gelfand, 2012; Kramer, 1999; Searle, Weibel, & Den Hartog, 2011). Researchers have identified a general model in which trust leads to individuals' willingness to take risks and then realize the consequences through various attitudes and

performance-related outcomes (Mayer, Davis, & Schoorman, 1995). This model has been validated using data from a range of organizational settings and work relationships (Colquitt, Scott, & LePine, 2007; Dirks & Ferrin, 2002).

Despite their common roots, our review revealed that the negotiation literature has been slow to integrate the last two decades' developments in trust theory and measures. This lack of integration may be due, at least in part, to the lack of a common framework for understanding trust in the negotiation context. Therefore, we begin by developing a theoretical framework, based on social exchange theory, to describe the role of trust in interpersonal negotiations.

Negotiations and Trust as Social Exchange

Social exchange theory, which has its roots in sociology, social psychology, and anthropology, has been used as a theoretical lens in numerous areas of study within organizational behavior and management (Cropanzano & Mitchell, 2005). Social exchange theory is based on the notion that many human interactions, and many commercial exchanges, involve the simultaneous transacting of economic and social goods, resulting in both contractual and relational bonds. Social exchange differs from economic exchange in a number of ways. First, according to Blau (1964: 94), "social exchange tends to engender feelings of personal obligation, gratitude, and trust; purely economic exchange as such does not." Trust and obligations become relevant because social exchange involves uncertainty and risk in how exchange occurs. Second, the "goods" exchanged include not only extrinsic goods but also intrinsic benefits such as approval, assistance, socioemotional support, and so on (Foa & Foa, 1974). Third, typically, these benefits are not exchanged in a specified, contractual manner, but voluntarily and informally, usually according to the norm of reciprocity.

Negotiation researchers will recognize that the above elements of social exchange theory very much reflect the negotiation experience. While negotiations involve the exchange of material goods, they also typically involve the exchange of intrinsic benefits such as compliments and informal assistance. While some negotiations conclude with a formal agreement, many do not, and even the most formal agreement cannot capture all the intrinsic benefits involved. In most negotiations, issues typically have different importance to negotiators; ne-

gotiators can utilize their different preferences to arrive at a mutually beneficial outcome (Lax & Sebenius, 2003). Despite these similarities, social exchange theory has not been extensively adopted in negotiation research. Cropanzano and Mitchell (2005: 878) concluded that negotiations had "generally not been considered in light of social exchange theory." Our review revealed that social exchange theory is implicit in many studies and has occasionally been made explicit. For example, some researchers have recognized the applicability of social exchange theory by studying the relative predictive validity of social exchange versus agency theory in the context of negotiations (Bottom, Holloway, Miller, Mislin, & Whitford, 2006), comparing the effects of "reciprocal exchange" (informal, non-binding exchange) to "negotiated exchange" (use and enforcement of binding agreements) (Molm, Takahashi, & Peterson, 2000), or drawing on common intellectual roots (Kim, Pinkley, & Fragale, 2005).

Trust researchers also recognize the elements of social exchange theory as capturing the processes through which trust develops and functions in work relationships. Authors are increasingly recognizing its ability to describe how trust develops and functions in work relationships (Colquitt, LePine, Piccolo, Zapata, & Rich, 2012; Dirks & Skarlicki, 2009; Konovsky & Pugh, 1994; Whitener, Brodt, Korsgaard, & Werner, 1998). Based on the above, social exchange theory seems particularly promising as a framework to integrate trust and negotiations, and to develop predictions about the role of trust in negotiations.

Starting Assumptions

In our literature review, we noted that, in the body of empirical work, studies vary in the negotiation structure studied, the conceptualization of trust, and the level of analysis, and these variations reflect important theoretical and research design issues. Accordingly, in our theorizing, we begin with three simplifying assumptions, each of which we will later relax and examine empirically. First, negotiations can be highly competitive, highly cooperative, or mixed motive in nature (Deutsch, 1949). Indeed, in our review, we noted that some negotiations had an entirely competitive structure, in which negotiators' interests were competitive rather than cooperative (e.g., Srivastava & Chakravarti, 2009), some had a highly cooperative structure (e.g., Conlon & Hunt, 2002), and many other studies ranged between these extremes. For our main effect hypothesis development, we assume that the structure of negotiations includes both cooperative and competitive motivations (we will refer to these as having a moderate level of "integrative potential"). Later, we consider the implications of variation on this factor.

Second, in reviewing the literature on trust, Ferrin, Bligh, and Kohles (2008: 174) observed that trust has been treated as "a family of constructs," both in theory and measurement; Ross and La-Croix (1996) made a similar observation of trust in their study of negotiations. Indeed, in our review, we noted that studies varied in the operational definitions of trust. For instance, some studies defined trust as a broad concept (e.g., De Dreu et al., 1998; Gunia et al., 2011), whereas others defined it as a specific dimension of trustworthiness (e.g., Schurr & Ozanne, 1985; Srivastava & Chakravarti, 2009). Thus, we begin by treating the construct of trust as broad and encompassing a range of more specific conceptualizations and measures. Later, we test whether results differ according to the form of trust studied.

Third, within the negotiation literature, trust is often treated as a concept at the individual level (e.g., Gunia et al., 2011), but sometimes at the dyadic level (e.g., De Dreu et al., 1998). Thus, in developing our hypotheses of the effects of trust, we will make the simplifying assumption that trust has similar effects regardless of its level. Later in the paper, we will test the level of analysis as a critical contingency that may influence the magnitudes of the effects.

EFFECTS OF TRUST IN INTERPERSONAL NEGOTIATIONS

Social exchange theory recognizes that relationships involve processes in which prior conditions, particularly trust, affect future behaviors and outcomes (Blau, 1964). We focus on the relationships trust has with its three classes of consequences in the negotiation context: (1) negotiation behaviors, (2) extrinsic outcomes (joint and individual), and (3) outcome satisfaction. Consistent with social exchange

theory, our framework recognizes that trust shapes negotiation behaviors, which in turn influence extrinsic outcomes and outcome satisfaction.

Negotiation Behaviors

Negotiation behaviors can be classified into two main categories: integrative and distributive behaviors (Lax & Sebenius, 1986; Walton & McKersie, 1965). Integrative behaviors are cooperative behaviors aimed at creating value ("enlarging the pie"), such as exchanging information about preferences and interests, proposing and exploring options for mutual gains, packaging issues in value-creating ways, and relationship building. Distributive behaviors are those aimed at claiming value ("slicing the pie"), including extreme offers and counteroffers, selective, strategic, or resistant sharing of information, gamesmanship and non-reciprocity in concessions, and exploitation of power advantages (Weingart, Olekalns, & Smith, 2004; Weingart, Thompson, Bazerman, & Carroll, 1990). In mixed motive negotiations, negotiators need to create and claim value (Lax & Sebenius, 1986). Therefore, they may exhibit a combination of integrative and distributive behaviors.

Several researchers have proposed that trust will increase integrative behaviors and decrease distributive behaviors (Butler, 1999; Gunia et al., 2011; Kimmel et al., 1980). One key distinction between integrative and distributive behaviors is the extent to which they make the negotiator vulnerable and involve a willingness to accept risk versus protect one's own interests. Integrative behaviors are inherently risky. The information that one shares, the exploration of routes for joint gains, and efforts to build a relationship can all be exploited by the counterpart. If one trusts the counterpart, social exchange theory would predict that he or she will be willing to engage in these behaviors because of an expectation that the behaviors will be reciprocated and, ultimately, yield benefits. Distributive behaviors, on the other hand, are self-protective and limit vulnerability. One makes extreme offers, carefully restricts information sharing, resists reciprocating concessions, and perhaps even falsifies information in order to get the better part of a deal at the expense of one's partner, or to ensure the other party does not get a better deal at one's own expense. For instance, Mayer and Gavin (2005) and Dirks (1999) noted that individuals who lack trust in leaders or teammates tend to focus their energy on protecting themselves. Consequently, a negotia-

¹ Ferrin et al. (2008: 174) observed that "the 'trust' label was used to refer to operational definitions of trust as: (1) a perception of another's perceived ability, (2) a perception of another's perceived integrity, (3) positive confident expectations, (4) a willingness to accept vulnerability, and (5) trusting actions."

tor who has little trust in the counterpart is less willing to accept vulnerability toward the counterpart and will therefore opt for more distributive and fewer integrative behaviors than a negotiator who trusts the counterpart.

Hypothesis 1a. Trust is negatively related to distributive behaviors.

Hypothesis 1b. Trust is positively related to integrative behaviors.

Extrinsic Outcomes

Underlying social exchange theory is the notion that two parties engage in social exchange because they may achieve extrinsic benefits through the exchange that could not be achieved otherwise. These benefits can be joint and for oneself.

Joint outcome. As argued above, trust is predicted to increase integrative behaviors. Parties who engage more in integrative behaviors, such as sharing information about their interests and preferences and solving problems collaboratively, are likely to discover and agree to solutions that are more creative and effective at meeting their joint interests. Such solutions reflect value creation above and beyond a simple distributive, value-claiming solution (Raiffa, 1982). On the other hand, parties who have little trust in each other are likely to engage in fewer integrative behaviors, and thus arrive at a lower joint outcome.

As predicted above, parties who have little trust in each other are more likely to engage in distributive behaviors such as withholding or distorting information, refusing to reciprocate, and resisting the exploration of creative solutions. These valueclaiming behaviors may be successful for advancing or protecting a single party's interests (as will be discussed below), but such behaviors are likely to drive negotiators to value-claiming solutions with lower joint gains. Conversely, parties who trust each other are likely to avoid such distributive behaviors, and thus arrive at solutions that are likely to involve more value creation and less value claiming. In sum, distribute behaviors short-circuit the exchange processes that yield mutual benefits, whereas integrative behaviors contribute to them.

Hypothesis 2a. Trust is positively related to joint outcomes.

Hypothesis 2b. The relationship between trust and joint outcomes is fully mediated by integrative behaviors and distributive behaviors. *Trustor's outcome.* Of course, negotiators are concerned with their own outcomes to an equal or greater degree than joint outcomes. Negotiation scholars, teachers, and practitioners often assume that trust provides a valuable route toward better "take-home" negotiated outcomes. We found no published study, however, that was purposefully designed to test the effect of trust on individual negotiation outcomes.

As noted above, we expect that trust will increase integrative behaviors and decrease distributive behaviors. The reduction in distributive behaviors in response to higher trust is likely to decrease the trustor's own outcome by reducing value claiming and self-protective behaviors. Meanwhile, the positive effect of trust on integrative behaviors may have mixed effects on the trustor's outcome. On one hand, integrative behaviors may increase the joint outcome (as argued above), which will ultimately be split between the two parties. Thus, one's own outcome has potential to increase. On the other hand, one's integrative behaviors that flow from trusting the counterpart (e.g., sharing information) put one at risk of being exploited by the counterpart who seeks to maximize her or his own outcome, which could then lower one's individual outcome. Thus, the overall effect of trust on the trustor's outcome is variable and small on average, given the contradictory effects from integrative behaviors and distributive behaviors.

Hypothesis 3a. Trust is positively related to the trustor's outcome.

Hypothesis 3b. The relationship between trust and the trustor's outcome is fully mediated by integrative behaviors and distributive behaviors.

Hypothesis 3c. The relationship between trust and the trustor's outcome is weaker than the relationship between trust and the joint outcome.

Outcome Satisfaction

Negotiations involve the exchange of both tangible economic outcomes and social—psychological outcomes (Thompson, 1990a). Curhan, Elfenbein, and Xu (2006) found that the latter fall into four categories: feelings about the negotiation outcome, the self, the negotiation process, and the relationship. We focus on satisfaction with the negotiation outcome. Outcome satisfaction is derived from negotiators' interpretation of their extrinsic outcomes.

For example, outcome satisfaction can be driven by a comparison between negotiators' extrinsic outcomes and their prior expectations (Oliver, Balakrishnan, & Barry, 1994), or a social comparison regarding how they believe they performed as compared to their counterpart (Loewenstein, Thompson, & Bazerman, 1989).

Social exchange theory suggests two ways that trust affects outcome satisfaction. First, we expect a direct effect: the level of trust in the counterpart will provide a lens through which various aspects of the exchange are perceived and valued, including outcome satisfaction. In other words, trust will cast a positive halo on other factors. Second, trust may affect outcome satisfaction via negotiation behaviors. Specifically, trust increases integrative behaviors, which create a sense of fairness in process and reinforce the relationship; these factors are desired intrinsic outcomes in social exchange. Similarly, trust influences distributive behaviors, which, because of their contentious nature, decrease intrinsic outcomes, but simultaneously yield personal extrinsic outcomes valued in social exchange.

Hypothesis 4a. Trust is positively related to outcome satisfaction.

Hypothesis 4b. The relationship between trust and outcome satisfaction is partially mediated by integrative and distributive behaviors.

CRITICAL CONTINGENCIES

We now relax the initial simplifying assumptions to consider three factors that vary across studies, are prevalent in research, and are expected to be particularly consequential.

Integrative Potential

Earlier, we assumed that negotiations comprised a relatively equal mixture of competitive and cooperative motives. As noted above, in reality, negotiations vary in this mixture, with some being entirely or mostly competitive, some being entirely or mostly cooperative, and many ranging between these two extremes (De Dreu et al., 1998). We hypothesize that the impact of trust on negotiation outcomes will differ according to the level of *integrative potential* inherent in the structure of a negotiation.

While scholars have recognized the relevance of integrative potential (De Dreu, Koole, & Steinel,

2000; Murnighan et al., 1999), its definition has proved elusive, posing a challenge for its operationalization. We define integrative potential as the extent to which, based on the structure of the negotiation and, particularly, the interests and motives of the negotiators, negotiators are able to reach multiple possible agreements with different levels of joint outcomes. For a negotiation in which the incentives are purely distributive, there is only one possible joint outcome, which is, by necessity, distributive. In contrast, for a negotiation in which the incentives are more integrative, multiple possible joint outcomes of different values exist, and the overall value of that outcome varies according to how well the settlements on the combination of issues meet the negotiators' objectives (Tripp & Sondak, 1992). In short, integrative potential increases the possibility for gain by collaboration, and, thus, the relevance of social exchange.

We argued that, because integrative behaviors are risky and distributive behaviors are self-protective, trust is positively related to integrative behaviors and negatively related to distributive behaviors. We now extend the argument to propose that, as the integrative potential of a negotiation increases, the effects of trust on integrative behaviors and joint outcomes are likely to further increase. We expect these effects for two reasons. First, negotiators seldom know the full extent of the integrative potential of a negotiation because this requires knowledge of both sides of the deal. However, prior to the negotiation, individuals can gain a sense of the integrative potential by considering the number of issues, the range of possible solutions to those issues, the potential trade-offs, and so forth. If the integrative potential is perceived to be substantial, high-trust negotiators will be more motivated to make themselves vulnerable by engaging in integrative behaviors because the negotiation provides an opportunity to discover a mutually beneficial solution that outweighs the risk of exploitation. But, if the integrative potential is perceived to be minimal or nonexistent, high-trust negotiators are less likely to engage in integrative behaviors, given the higher risk of exploitation relative to the benefits of cooperation (see Mayer et al., 1995).

Second, the level of integrative potential typically becomes more evident during the course of a negotiation, as parties exchange information and explore potential options and trade-offs. We expect that high-trust negotiators who engage in integrative behaviors where there is high integrative potential are likely to discover ways of creating value

during the negotiation, thus encouraging them to continue the pattern of behaviors. On the other hand, high-trust negotiators who engage in integrative behaviors where integrative potential is low are likely to find few or no opportunities for value creation, which should suppress the motivation to continue with integrative behaviors in the rest of the negotiation. Finally, as integrative potential strengthens the relationship between trust and integrative behaviors, following Hypothesis 2b, it should also strengthen the relationship between trust and the joint outcome.

Hypothesis 5a. The effect of trust on integrative behaviors is moderated by the degree of integrative potential in the structure of the negotiation; the effect of trust on integrative behaviors increases as integrative potential increases.

Hypothesis 5b. The effect of trust on the joint outcome is moderated by the degree of integrative potential in the structure of the negotiation; the effect of trust on the joint outcome increases as integrative potential increases.

Level of Analysis of Trust

Trust in interpersonal negotiations inherently comprises two levels of analysis: the individual and the dyad. Negotiation studies typically examine individual trust, although occasionally they consider the dyadic level. One major distinction between these levels is the theoretical meaning and empirical manifestation of trust. Trust researchers typically conceptualize trust as an individual-level concept (i.e., a psychological state existing in the mind of one individual regarding another). In contrast, a dyad-level study of trust and negotiation would assume, and often empirically verify, that two parties have a common level of trust (i.e., individuals trust each other to a similar degree).

Blau (1964) argued that effective social exchange relationships require not only high levels of exchange but also high reciprocity of exchange. To achieve this, reciprocity in trust may be necessary (De Jong & Dirks, 2012). Specifically, when a negotiator trusts the counterpart and the trust is reciprocated, the negotiator is likely to expect the counterpart to behave cooperatively and engage in integrative behaviors. However, if a negotiator's trust is not reciprocated by the counterpart, the negotiator is likely to expect the counterpart to behave competitively and engage in distributive behaviors. To the extent that this occurs or is even

suspected, integrative behaviors and mutually beneficial outcomes will quickly be extinguished. One of the ways to address this concern is to have trust that is not only high but also mutual. Indeed, trust congruence theory (Tomlinson, Dineen, & Lewicki, 2009) suggests that, when negotiators have congruent trust (i.e., negotiators trust each other at the same level), such congruent trust generates synergistic effects on the exchange of information and benefits. The exchange of information and benefits then leads to a positive joint outcome (Butler, 1999; Roth & Murnighan, 1982; Weingart et al., 1990). As a consequence, we predict that trust will be more strongly and positively related to integrative behaviors and the joint outcome when trust is assessed at the dyadic level, compared to when trust is assessed at the individual level. Likewise, we expect dyadic trust to be more strongly and negatively related to distributive behaviors than individual trust. In making these predictions, we assume (and our review supports) that studies operationalizing trust at the dyadic level usually provide empirical justification for the dyad-level operationalization (including congruence of trust).

Hypothesis 6a. Dyadic trust has stronger positive effects on integrative behaviors and the joint outcome than individual trust.

Hypothesis 6b. Dyadic trust has a stronger negative effect on distributive behaviors than individual trust.

Meaning and Measure of Trust

In their review of trust within negotiations, Ross and LaCroix (1996: 315) queried, "what exactly is meant by 'trust?'" Similarly, Naquin and Paulson (2003: 114) noted that, "[w]hereas its importance is frequently noted, trust has historically proved to be an elusive construct with multiple interpretations." The trust literature suggests that there are three factors of trustworthiness: perceived integrity, ability, and benevolence (Mayer & Davis, 1999; Mayer et al., 1995). Integrity refers to the perception that the target will adhere to sound moral values, such as being honest and fair, and can be depended upon to act consistently with those values. Ability refers to the perception that the target person is trustworthy in terms of having a certain skill set or ability relevant to performance. Benevolence refers to the perception that the target cares about the well-being of the trustor, aside from an egocentric profit motive.

Integrity, ability, and benevolence represent different factors on which individuals might be dependent upon another in a negotiation. Gunia et al. (2011) found that American and Indian negotiators included all three factors in their view of trust. Existing research, however, has given little consideration to whether it is meaningful to focus on a broad measure of trust or to differentiate among the three factors of trustworthiness. In existing research (see Methods for details), a sizeable number of studies has focused on the integrity factor (e.g., the counterpart is honest or fair). Meanwhile, other studies have measured trust as a broad concept, either by (a) utilizing a scale that taps multiple elements of trust, (b) measuring trust with one or more general trust questions (e.g., "How much did you trust the other party during the negotiation?"; Maddux, Mullen, & Galinsky, 2008: 466), or (c) measuring trust with items capturing general intentions to trust.² This is not merely a measurement issue, but also has substantive implications, as understanding whether some forms of trust are more strongly related to outcomes than others may govern the substance of interventions that generate desired outcomes.

A social exchange logic suggests that the type of trust that is measured should focus on the nature of uncertainty within social exchange (Dirks & Skarlicki, 2009). When it comes to distributive behaviors, we would expect perceived integrity to be most relevant. For example, in determining whether to focus on value claiming, one would be interested in determining whether the counterpart will be honest and fair in dealings. A question of ability, in contrast, is not relevant. Thus, a focus on integrity is likely to demonstrate the strongest and most consistent results. Adding other, nonrelevant factors would weaken the effect.

In contrast, integrative behaviors may be affected by a broader set of factors. When considering integrative behaviors, a negotiator is interested not only in whether the counterpart will be honest, fair, and willing to reciprocate cooperation, but also in the issues of ability and benevolence. The negotiator will be concerned about whether the counterpart has the ability to craft an integrative agreement. For example, experienced or skilled negotiators report that they would prefer to negotiate with skilled negotiators for this reason (Benoliel & Cashdan, 2010). By the same token, negotiators tend to reach integrative agreements by pursuing collective interests. Hence, negotiators will be concerned about whether their counterparts are benevolent. Thus, we expect a broader definition of trust, as opposed to just perceived integrity, to be relevant to integrative behaviors and the joint outcome.

Hypothesis 7a. Perceived integrity is more strongly related to distributive behaviors than a broad measure of trust.

Hypothesis 7b. A broad measure of trust is more strongly related to integrative behaviors and the joint outcome than perceived integrity.

In summary, trust is expected to set in motion negotiation processes that, ultimately, facilitate the joint outcome, trustor's outcome, and outcome satisfaction via integrative behaviors and distributive behaviors. These effects are likely to be moderated by integrative potential, the level of trust, and the meaning and measure of trust.

METHODS

Sample

We performed a comprehensive search to identify substantially all empirical studies of trust in the context of negotiation. We used the PsycINFO, PsycARTICLES, Web of Science, Wiley Interscience, ScienceDirect, Dissertation & Theses (Pro-Quest), Social Science Research Network, and Academy of Management archives' search engines to identify studies for potential inclusion. We also electronically searched journals expected to include studies of interest: Academy of Management Journal, Administrative Science Quarterly, American Economic Review, American Journal of Sociology, American Sociological Review, Industrial and Labor Relations Review, International Journal of Conflict Management, Journal of Applied Psychology, Journal of International Business Studies, Journal of Experimental Social Psychology, Journal of Management Studies, Journal of Organizational Behavior, Journal of Personality and Social Psychology, Management Science, Negotiation and Conflict Management Research, Organization Science, Organizational Behavior and Human Decision Pro-

² Prior theoretical and empirical research suggests that the latter two reflect integrity, benevolence, and ability in combination. Thus, in our review, we will examine whether research that focuses on integrity only yields different results in theoretically meaningful ways than broad measures of trust, which explicitly or implicitly comprise a broader array of factors (Butler, 1991; Clark & Payne, 1997; Colquitt et al., 2007).

cesses, Personality and Social Psychology Bulletin, and Personnel Psychology. Finally, we searched the citations to Mayer et al. (1995) and Colquitt et al. (2007) through Web of Science. In the above, we searched the terms negotiat*, bargaining, bargainer, dispute, or disputant in the title, subject term, and keyword fields to first identify negotiation studies, then we limited the search to studies with terms trust, trustworthiness, perceived ability, perceived competence, benevolence, benevolent, integrity, reliability, reliable, dependability, or dependable in the titles, subject terms, and keywords of the papers wherein trust was treated as a key variable.

In addition to the electronic search above, we also called for unpublished papers through the list-serves of the Academy of Management, the International Association for Conflict Management, and the Society for Judgment and Decision Making, and we contacted prominent scholars in these areas to directly identify any unpublished studies.

Papers were included in our meta-analysis if they focused on interpersonal negotiations as defined in this study (not a third-/multi-party negotiation, an ultimatum game, a prisoner's dilemma game, a trust game, an allocation decision making study, or an organization-level negotiation), and if they examined trust as an interpersonal variable (therefore, we excluded studies in which trust was only examined as a dispositional variable, such as trust propensity). Finally, when we found instances of dissertation/thesis data also being reported in journals, we retained the results published in the journals rather than those in the dissertations/theses. After applying the above inclusion criteria, 61 papers and dissertations/theses were included for coding.

Variable Coding

Coding was done by the first author based on the agreed-upon working definitions created by all three authors. Most of the coding was unambiguous, based on the definitions. When coding required a judgment call, the first two authors discussed and jointly decided on the coding strategy. Integrative behaviors were conceptualized as negotiation behaviors motivated by increasing joint outcomes, whereas distributive behaviors were conceptualized as negotiation behaviors motivated by increasing individuals' own outcomes. Therefore, in coding distributive behaviors, we included both ethical and unethical distributive behaviors, as

they both stem from competitive/uncooperative motives and are correlated (Robinson, Lewicki, & Donahue, 2000).

Meta-analysis only requires two bivariate effects for calculating statistics, but a k of three is often cited as the minimum number of studies for deriving population estimates (Fehr, Gelfand, & Nag, 2010). Therefore, we only retained in our meta-analysis those variables for which bivariate effects with trust were reported in at least three independent samples. We calculated the sample-adjusted meta-analytic deviancy statistic to detect outliers (Huffcutt & Arthur, 1995). We have 32 papers (38 independent samples) in our final sample.

We coded each study for the critical contingencies. To code integrative potential, the first author and a research assistant who was blind to our hypotheses independently counted: (1) the total number of negotiation issues, (2) the number of logrolling issues (issues that negotiators can trade off with each other to increase the joint outcome; Thompson, 1990b), (3) the number of distributive issues, and (4) the number of contingency contracting issues in each negotiation study. Any differences between the coders were resolved by discussion. Then, an index of integrative potential was calculated by dividing the sum of the number of logrolling issues by the total number of negotiation issues.3 The index therefore ranged from "0" to "1." This measure was appropriate for two reasons. First, we defined integrative potential as the extent to which negotiators are able to have a number of possible agreements with different levels of joint outcomes. Accordingly, it is the number of negotiation issues that determines the possibility of negotiators constructing agreements with different levels of joint outcomes. Second, given the limited information about the negotiation reported in the empirical studies, this coding method was feasible

³ We thank Judi McLean Parks for her suggestion regarding this index. We chose to (conservatively) exclude the number of contingency contracting issues from the numerator of the integrative potential index because contingent agreements can be integrative or distributive in nature. A contingent agreement, if ill constructed, can destroy value rather than create it (Cassidy, 2009). We re-performed moderator analysis with the number of contingency contracting issues included in the measure of integrative potential and found a similar result pattern.

and constrained integrative potential within the range between "0" and "1." 4

We identified five studies that examined dyadic trust. All of them except for Morris, Nadler, Kurtzberg, and Thompson (2002) provided empirical justification for the dyad-level measure. Because our theory involved congruence in the dyad, we excluded Morris et al. (2002) from our moderator analysis of the level of trust; this did not change the result pattern.

We defined perceived integrity as negotiators' perceptions of their counterparts' honesty, reliability, dependability, and fairness (Kim, Ferrin, Cooper, & Dirks, 2004; Mayer et al., 1995), and a broad measure of trust as negotiators' intention to accept vulnerability based on positive expectations of their counterparts' intentions or behaviors (Rousseau et al., 1998). Thus, if scales largely focused on terms of honesty, reliability, dependability, fairness, or related terms, they were coded as perceived integrity. If scales captured global trust (e.g., "How much did you trust the other party during the negotiation?"; Maddux et al., 2008: 466), they were coded as a broad measure of trust. The first and second authors discussed the coding protocol and reached a perfect agreement on the coding.

Analysis

We converted Pearson's r, Cohen's d, F statistics, and t statistics to Fisher's z scores (Lipsey & Wilson, 2001) for the calculation of relevant error statistics (Field, 2001). We reported the weighted mean of correlation coefficients for each bivariate relationship.

We analyzed the data using the software MIX Pro 2.0 (Bax, Yu, Ikeda, Tsuruta, & Moons, 2006). Consistent with Erez, Bloom, and Wells's (1996) recommendation and the majority of recent meta-analytic studies, we adopted random-effects models to estimate the bivariate relationships unless the Q and I^2 statistics (Huedo-Medina, Sánchez-Meca, Marín-Martínez, & Botella, 2006) empirically confirmed the theoretical assumption of sample homogeneity, in

which case we adopted fixed-effects models (Hunter & Schmidt, 1990). Fixed-effects models assume that all the studies are drawn from the same population and are functionally identical, whereas random-effects models assume that studies are not drawn from the same population and are not functionally equivalent (Hedges & Vevea, 1998). Given the influence of both sampling error and randomly distributed sources of variance (Lipsey & Wilson, 2001), random-effects models allow us to make inferences to studies with participants and measures different from those included in our sample (Hedges & Vevea, 1998).

We corrected all effect sizes for attenuation due to unreliability in measurement (Hunter & Schmidt, 1990). For studies that did not provide these data, we used the average coefficient for similar measures. We then weighted each effect size as a function of inverse variance (Cohn & Becker, 2003). We calculated an optimally weighted corrected mean effect size (Fisher's z) and its corresponding 95% confidence interval. We converted Fisher's z back to correlation coefficients to facilitate interpretation. For main effects, we further corrected for publication bias due to the "file drawer problem" (Rosenthal, 1979). We adopted Duval and Tweedie's (2000) "trim and fill" method, which provided the publication-bias-adjusted estimate of the true mean effect size (Geyskens, Krishnan, Steenkamp, & Cunha, 2009).

To be included in the moderation analysis, a construct must have at least two effect sizes within each subcategory to allow for stable estimation of between-group homogeneity (Hedges & Olkin, 1985) using a fixed-effects model. A significant between-group homogeneity statistic (Q_B) indicated that the moderator variable significantly explained variability of effect sizes (i.e., a significant moderating effect). For the continuous moderator variable, integrative potential, we conducted weighted least squares (WLS) regression analysis (Steel & Kammeyer-Mueller, 2002) and calculated a corrected z score (Lipsey & Wilson, 2001).

RESULTS

We report our meta-analytic estimates for each hypothesis in this section. Each main effect is presented in Table 1. For weighted effect sizes that needed further correction for publication bias, we also reported the coefficients with corrections for attenuation and publication bias in the table note. Publication bias was detected in

⁴ One alternative we considered was to compare the value of a pure even-split settlement relative to the value of the optimal agreement. This was less consistent with our definition and was also impractical to code. This coding method set the minimum level of integrative potential to be "1" (i.e., the value ratio was constant regardless of the agreements in distributive negotiations) but the maximum level of integrative potential was unknown.

TABLE 1
Main Effects of Trust on Its Consequences in Interpersonal Negotiations

	k	N	$ar{r}$ (Uncorrected)	95% CI (\bar{r}) (Uncorrected)	$ar{r}_c$ (Corrected) $^{ m a}$	95% CI (\bar{r}_c) (Corrected) ^a	Q	I^2
Integrative behaviors	14	2,194	.26	[.15, .36]	.32	[.19, .45]	99.99***	87.00%
Distributive behaviors	14	1,984	25	[37,13]	30	[43,16]	82.73***	84.29%
Joint outcome	20	2,327	.22	[.11, .32]	.26	[.12, .39]	135.91***	86.02%
Trustor's outcome ^b	8	1,186	.09	[.01, .17]	.10	[.02, .18]	10.55	33.62%
Outcome satisfaction	12	1,463	.38	[.30, .46]	.48	[.37, .57]	41.93***	73.77%

Note: k represents the number of independent samples. N represents the number of individuals. To prevent the error autocorrelation problem within negotiation dyads that might decrease the significance of Fisher's z, we used one negotiation party's data, if provided, or dyadic data for meta-analysis. Given that Q is statistically underpowered when the number of studies is low and when the sample size within the studies is low, we also provided I^2 [= $100\% \times (Q - df)/Q$], with a larger value of I^2 indicating more heterogeneity. Typically, an I^2 of 75% indicates large heterogeneity; 50%, moderate heterogeneity; and 25%, low heterogeneity.

^a These estimates are weighted effect sizes corrected for attenuation only. There was publication bias in estimating integrative behaviors. The mean correlation corrected for both attenuation and publication bias was .26 with 95% CI [.22, .31]. All the other coefficients were not affected by publication bias.

 $^{\rm b}$ The coefficients for the trustor's outcome were estimated using fixed-effects models rather than random-effects models because Q was non-significant.

only one bivariate relationship, the trust–integrative behaviors relationship.

Main Effects

The effects of trust on integrative behaviors, the joint outcome, the trustor's outcome, and outcome satisfaction were all significantly positive, with $\bar{r}=.32,.26,.10$, and .48, respectively. The effect of trust on distributive behaviors was negative and significant, with $\bar{r}=-.30$. The effect of trust on the trustor's outcome was smaller than the effect of trust on the joint outcome, z=-3.30 (p<.001). Therefore, Hypotheses 1a, 1b, 2a, 3a, 3c, and 4a were supported.

To further examine the relationships, we conducted meta-analytic path analysis (Viswesvaran & Ones, 1995). We hypothesized that the effects of trust on the joint outcome (Hypothesis 2b) and the

trustor's outcome (Hypothesis 3b) were fully mediated by integrative behaviors and distributive behaviors, whereas the effects of trust on outcome satisfaction (Hypothesis 4b) were partially mediated by integrative behaviors and distributive behaviors. We first constructed the meta-analytic correlation matrix (corrected for attenuation) based on our sample (see Table 2). We then subjected the meta-analytic correlation matrix to path analysis using LISREL version 8.80 (Jöreskog & Sörbom, 1996). We followed Viswesvaran and Ones' (1995) recommendation and calculated the harmonic mean sample size (n = 376) for testing the significance of the path coefficients. Integrative and distributive behaviors are considered alternate approaches that negotiators can pursue based on various considerations (Savage, Blair, & Sorenson, 1989). They are not mutually exclusive, but more of

TABLE 2 Meta-Analytic Correlations

Micta-Amary the Correlations						
	1	2	3	4	5	
1. Trust						
2. Integrative behaviors	.32 (14, 1589)					
3. Distributive behaviors	30 (14, 1240)	27(7,676)				
4. Joint outcome	.26 (20, 1215)	.16 (7, 454)	23(6,318)			
5. Trustor's outcome	.10 (8, 593)	18(4,297)	.17 (2, 139)	.45 (6, 412)		
6. Outcome satisfaction	.48 (12, 893)	.32 (5, 431)	.31 (3, 176)	.06 (5, 321)	.35 (4, 254)	

Note: The correlations are all significant at the level of .05. The number of independent samples (*k*) and cumulative sample sizes (*N*), respectively, are provided in parentheses.

^{*} *p* < .05

^{**} p < .01

^{***} p < .001

one implies less of the other and they may have unmeasured common causes. There is some evidence for the expected negative correlation (Gunia et al., 2011). Thus, we allowed the residuals of integrative and distributive behaviors to covary, which significantly improved the model fit.

Our path model showed a good fit (see Figure 1): $\chi^2(2) = 19.51$, p < .001, SRMR = .06, CFI = .96, IFI = .96, NFI = .96, and GFI = .98. All coefficients below are significant at p < .05. Trust was significantly related to both integrative behaviors (β = .32) and distributive behaviors ($\beta = -.30$). Integrative behaviors ($\beta = .11$) and distributive behaviors $(\beta = -.20)$ were both significantly related to the joint outcome. Integrative behaviors ($\beta = -.14$) and distributive behaviors ($\beta = .13$) were both significantly related to the trustor's outcome. Trust (β = .52), integrative behaviors ($\beta = .31$), and distributive behaviors ($\beta = .56$) were all positively related to outcome satisfaction. In assessing the mediation effects we hypothesized, we adopted the productof-coefficients approach popularized by Sobel (1982), rather than the causal-steps approach popularized by Baron and Kenny (1986), because the latter has low statistical power for detecting mediation effects (see MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). With the product-of-coefficients approach (e.g., Colquitt et al., 2012; Rodell & Colquitt, 2009), a statistically significant indirect effect supports mediation when a direct effect is also modeled.

First, we found significant indirect effects of trust on the joint outcome via integrative behaviors ($z'=1.47,\ p<.05$; see MacKinnon et al., 2002: 90 for details about z') and via distributive behaviors ($z'=3.01,\ p<.05$). Second, we found significant indirect effects of trust on the trustor's outcome via distributive behaviors ($z'=-2.71,\ p<.05$) and via integrative behaviors ($z'=-3.01,\ p<.05$). Finally, we found significant indirect effects of trust on outcome satisfaction via integrative behaviors ($z'=5.03,\ p<.05$) and via distributive behaviors ($z'=-5.62,\ p<.05$). Therefore, Hypotheses 2b, 3b, and 4b were supported.

Critical Contingencies

The average *integrative potential* of the sample was .50, consistent with our starting assumption that negotiations comprise both distributive and integrative elements. Integrative potential moderated the effect of trust on integrative behaviors ($z = \frac{1}{2}$)

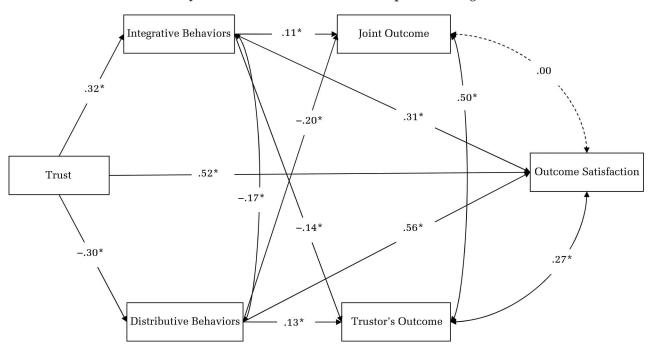


FIGURE 1
Meta-Analytic Path Model of Trust in Interpersonal Negotiations

Note: * p < .05. Standardized regression coefficients are presented. $\chi^2(2, N = 376) = 19.51$, p < .001, SRMR = .06, CFI = .96, NFI = .96, GFI = .98.

2.44, p = .01) and the joint outcome (z = 2.95, p <.01). WLS regression analysis suggested that, as integrative potential increased, the effect (Fisher's z) of trust on integrative behaviors (b = .31, corrected SE = .13) and the joint outcome (b = .32, corrected SE = .11) increased. After converting the estimated Fisher's z scores to correlations, we found that the correlation between trust and integrative behaviors was .51 when integrative potential was 1, .41 when integrative potential was moderate (M = .58), and .25 when integrative potential was 0. The correlation between trust and the joint outcome was .39 when integrative potential was 1, .26 when integrative potential was moderate (M =.53), and .09 when integrative potential was 0. Therefore, Hypotheses 5a and 5b were both supported.

The *level of trust* moderated the relationship between trust and integrative behaviors ($Q_B = 7.01$, p < .01), the joint outcome ($Q_B = 9.99$, p < .01), and distributive behaviors ($Q_B = 16.82$, p < .001) (see Table 3). The positive effects of dyadic trust were stronger than the effects of individual trust on integrative behaviors ($\bar{r} = .42$ vs. $\bar{r} = .30$) and the joint outcome ($\bar{r} = .37$ vs. $\bar{r} = .20$). Dyadic trust had a stronger negative effect on distributive behaviors ($\bar{r} = -.49$) than individual trust ($\bar{r} = -.29$). Accordingly, Hypotheses 6a and 6b were supported.

For the meaning and measure of trust (see Table 4), we found that perceived integrity had a stronger effect on distributive behaviors ($\bar{r}=-.41$) than a broad measure of trust ($\bar{r}=-.14$) ($Q_B=25.22,\ p<.001$). A broad measure of trust had a stronger effect on integrative behaviors ($\bar{r}=.42$) than perceived integrity ($\bar{r}=.17$) ($Q_B=29.55,\ p<.001$). However, a broad measure and perceived integrity did not

have different effects on the joint outcome ($\bar{r}=.26$ vs. $\bar{r}=.24$) ($Q_B=.10$, ns). Therefore, Hypothesis 7a was supported whereas Hypothesis 7b was partially supported.

DISCUSSION

The literatures on trust and negotiation have separately been among the most vibrant areas of research in recent decades. The present study examines the effects of trust in the context of interpersonal negotiations. In the subsequent paragraphs, we will highlight several contributions that are novel and important to these two literatures, including: (a) the integration and cumulation of existing empirical work, (b) insights into the complex effects of trust on negotiation processes and outcomes, (c) identification and quantification of several critical contingencies of these effects, (d) clarification of the implications of alternative definitions of trust, and (e) the articulation of how social exchange may serve as a framework for this area.

First, this study cumulates the empirical research to resolve several fundamental questions about the role of trust in negotiations. Specifically, trust is often assumed to be integral to the negotiation experience, but scholars have advanced different perspectives on its implications. Similarly, empirical studies designed to examine these issues have provided a range of findings for some outcomes while overlooking others. By identifying and integrating studies spread across several decades and literatures in which trust was a variable (typically, not the focal variable) and using meta-analytic procedures, we were able to address fundamental ques-

TABLE 3 Moderator Analysis of the Level of Trust

	Level of Trust	k	N	$ar{f r}_c$	95% CI (\bar{r}_c)	Q_B
Integrative behaviors	Individual trust	12	2,012	.30	[.25, .35]	
	Dyadic trust	2	182	.42	[.23, .58]	
	J					7.01**
Distributive behaviors	Individual trust	12	1,842	29	[34,23]	
	Dyadic trust	2	142	49	[65,28]	
						16.82***
Joint outcome	Individual trust	15	1,859	.20	[.14, .26]	
	Dyadic trust	4	358	.37	[.24, .50]	
	•					9.99**

^{*} *p* < .05

^{**} p < .01

^{***} p < .001

TABLE 4
Moderator Analysis of the Measure and Meaning of Trust

				0		
	Meaning of Trust	k	N	$ar{r}_c$	95% CI (\bar{r}_c)	Q_B
Integrative behaviors	Perceived integrity	6	956	.17	[.10, .24]	
	Broad measure of trust	8	1,238	.42	[.36, .47]	
						29.55***
Distributive behaviors	Perceived integrity	8	894	41	[47,34]	
	Broad measure of trust	6	1,090	14	[23,06]	
						25.22***
Joint outcome	Perceived integrity	12	1,555	.24	[.17, .30]	
	Broad measure of trust	7	734	.26	[.16, .35]	
						.10

^{*} p < .05

tions about the role of trust. For example, we confirmed that trust did "pay" in terms of the joint outcome and outcome satisfaction, and we identified situations under which trust was more impactful. This should provide confidence and justification for future research at the intersection of trust and negotiations, as well as for claims about the value of building trust for practice. At the same time, the findings for trustors' outcomes confirm the skepticism regarding the implications of trust and its potential risks. To address this skepticism, research is needed to understand the conditions under which trust yields higher versus lower or negative trustors' outcomes.

Second, we developed a path model that unpacked the complex effects and processes by which trust was related to key outcomes. This is important for several reasons. One reason is that, while research has examined a variety of outcomes, there has been little attempt to connect them, which has made it difficult to interpret current knowledge. Our path model directly addressed this issue, revealing that: (a) the effects of trust on these outcomes were of different magnitudes, with one being non-significant, and (b) the observed effects of trust on these outcomes were, in part, due to the role of other outcomes. A second benefit of the path model was that it revealed the countervailing forces by which trust operated on key outcomes. For example, students and managers seek out negotiation training with hopes of increasing their personal outcomes. Our study identified the different paths by which trust influenced the trustor's outcome and revealed the conflicting nature of their effects. Specifically, trust had a positive relationship with integrative behaviors, but integrative behaviors had

a negative relationship with the trustor's outcome. In contrast, trust had a negative relationship with distributive behaviors, but distributive behaviors had a positive relationship with the trustor's outcome. A final issue is that our path model demonstrated that trust was more strongly related to the joint outcome than the trustor's outcome, and identified why that was the case. In contrast to the countervailing effects for the individual outcome, the effect of trust on the joint outcome was more uniform. We found that trust inhibited distributive behaviors which reduced the joint outcome, while facilitating integrative behaviors which promoted the joint outcome. In sum, the present model provides a fuller picture of processes by which trust influences negotiation behaviors and outcomes, including ways in which the impact is positive and ways in which the impact is negative.

The latter issue may provide valuable insights not only for negotiations but also for the trust literature more generally. Although the vast majority of trust studies assume positive effects, trust scholars have recognized a "dark side" of trust in which one may be exploited by others (e.g., Langfred, 2004). However, these options tend to be treated as a stark dichotomy. Our analyses highlight that trust simultaneously sets in motion processes that can contribute to mutual and individual gains as well as mutual and individual exploitation; the outcome is not simply a gain or exploitation, but can be a complex amalgamation of both. Thus, the results of trust in even a single encounter may include positive and/or negative effects. These insights may apply to a range of situations in organizations and social dilemmas that are structured with concurrent incentives to co-

^{**} p < .01

^{***} p < .001

operate and compete. As an example, trust may increase the extent to which an individual collaborates with others to maximize the group outcome in a team, but it may simultaneously decrease one's personal outcome and related behaviors.

Third, the study offered insights into the conditions under which the effects may be stronger or weaker. One factor was the structure of the negotiation, assessed as integrative potential. The concept of integrative potential has been mentioned in the literature, but, to date, there has been limited empirical research on it. We found that, as the integrative potential of a negotiation increases, the relationship between trust and the joint outcome increases in a linear fashion. This finding is important because it can serve as a guideline for the types of situations in which negotiators might increase joint outcomes from building trust and those situations in which they should not expect an increase. The concept of integrative potential may travel to other contexts in which trust is studied. Previous work has highlighted that the effects of trust vary across situations (Dirks & Ferrin, 2001), but empirical research has provided few insights into the conditions. Our findings regarding integrative potential suggest that trust will have greater effects in interpersonal situations where there are more, different possibilities for partners to reach their goals. The concept may also be appropriate for work groups, where members may be pursuing different, nonexclusive goals.

Two other factors that determine the strengths of the relationships between trust and its consequences are the level and meaning of trust. Trust studied as a dyadic concept, rather than an individual-level concept, was more strongly related to negotiation behaviors and the joint outcome. In addition, trust conceptualized broadly was more strongly associated with integrative behaviors, as opposed to trust conceptualized more narrowly as perceived integrity (a frequent approach in studies). These findings should be considered as core research design issues in future research on trust in negotiations. Our findings on the meaning of trust highlight the importance of specifying the theoretically appropriate conceptual definition and using an established scale to measure trust as defined. Furthermore, a logical extension of the work on dyadic trust will be to consider the numerous possibilities for exploring asymmetries of trust (Tomlinson et al., 2009). Our results suggest that practitioners may want to shift their focus from training

negotiators how to earn the trust of the other party (or trusting the other party) to training them how to build dyadic trust, which is likely to yield more significant benefits. Likewise, in advising negotiators on the content of trust they need to establish, our results suggest that demonstrating a broader sense of trust—perhaps based on the array of integrity, ability, and benevolence, as opposed to only integrity—may yield stronger effects on integrative behaviors.

Finally, the current study outlines how social exchange theory can integrate existing work and provide a platform for future research on trust and negotiations. Social exchange theory complements behavioral decision and social cognitive theories that have served as key frameworks for negotiation research to date. It has been recognized as a "framework of reference within which many theories . . . can speak to one another" (Emerson, 1976: 336) and will allow findings to connect to and integrate with the many other literatures in organizational behavior that adopt social exchange theory (Cropanzano & Mitchell, 2005).

Limitations and Future Research

The theoretical framework, our findings, and our review of the literature provide the groundwork for a research agenda on trust in the context of negotiations. As a next step, given the evidence that trust can be beneficial, it will be worthwhile to understand how trust can be established in negotiations. In the course of reviewing research for this paper, we observed that there existed few studies on this topic and they examined a limited set of factors (e.g., small talk, trustors' social motives, and prior experience). Thus, we recommend that future studies examine the factors that build trust, as well as the processes by which trust changes and evolves.

A limitation of the existing research, which is reflected in our findings, is that most of the studies used samples from Western cultures. This raises the question of whether the results would change with samples from a different culture. In one of the few studies that has examined the issue, Gunia et al. (2011) modeled culture as directly influencing trust and, in turn, influencing negotiation behaviors and outcomes. Trust is inherently related to the cultural dimension of uncertainty avoidance or tightness—looseness (see Gunia et al., 2011; Kong, 2013). Future research should further explore the

cultural effects on trust and its relationships with other variables in negotiations.

A second limitation relates to the timing of measurement vis-à-vis the temporal nature of trust and negotiation behaviors/outcomes. As noted earlier, trust is a dynamic concept that unfolds and changes over the period of the negotiation. In our review of the studies included in our meta-analysis, we found that trust was frequently measured contemporaneously with negotiation behaviors or outcomes, rather than being measured/manipulated beforehand. A preliminary analysis of available lab study data indicated that trust measured contemporaneously had stronger relationships with integrative behaviors ($\bar{r} = .44 \text{ vs. } \bar{r} = .20, Q_B =$ 20.24, p < .001), distributive behaviors ($\bar{r} = -.32$ vs. $\bar{r}=-.14,~Q_B=7.53,~p<.01$), and the joint outcome (\bar{r} = .28 vs. \bar{r} = .11, Q_B = 9.30, p < .01) than trust measured or manipulated beforehand. Meta-analyses are not well suited to exploring temporal dynamics or the possibility of relationships being reciprocal. While we cannot establish the dynamics of trust changes over time or the possibility of reciprocal relationships between concepts, our confidence in the causal order is increased by two factors. First, we classified variables on the basis of theory and how they tend to be positioned in the existing literature. Second, laboratory studies that measured trust before its downstream variables provided a pattern of relationships with integrative behaviors and the joint outcome that was consistent with our predictions, despite their smaller magnitudes relative to effects of trust measured contemporaneously. One obvious and important direction for future research is for scholars to better align the timing of measurement with the temporal nature of predictions.

Third, we observed that studies of trust in interpersonal negotiations used a wide range definitions and measures of trust. Thus, the question raised by Ross and LaCroix (1996: 315)—"what exactly is meant by 'trust?'"-appears to be as appropriate today as it was more than 15 years ago. As noted above, although the trust literature has seen a variety of definitions—including trust as a belief, an expectation, a disposition, an intention, and even a behavior—researchers have recently made progress toward developing consensus on what trust is and how it should be operationalized (Dirks & Ferrin, 2002; Ferrin et al., 2008; McEvily & Tortoriello, 2011). However, our review of the studies informs us that these advances have made little headway into the negotiation literature, and yet these issues have an impact on results. Given the limitations of existing data, however, our findings should be interpreted with caution. We proffer two recommendations for future research. First, in designing studies, we suggest that researchers consider which form of trust is theoretically the most appropriate for the given research question. For example, should a study treat trust as a broader construct, or should it focus on a specific factor such as integrity? Second, once that decision is made, researchers should select a validated measure of trust instead of creating their own (see McEvily & Tortoriello, 2011).

CONCLUSION

Whether one is a researcher or a practitioner, one can hardly discuss negotiation without mentioning trust. However, until now, that discussion has not been informed by a systematic cumulation and analysis of the empirical literature. Our meta-analysis has provided strong evidence that the perceived relevance of trust in negotiations is indeed warranted and that the concern about trust being a liability for personal outcomes also has merit. In addition, our meta-analysis has identified and validated several critical contingencies that influence the effects of trust on negotiation behaviors and outcomes. Finally, our study has highlighted several opportunities for future research and, we hope, has also provided a strong platform for advancing such research on this important topic.

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