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# How Implicit Beliefs Influence Trust Recovery

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# How Implicit Beliefs Influence Trust Recovery

## **Abstract**

After a trust violation, some people are quick to forgive, whereas others never trust again. In this report, we identify a key characteristic that moderates trust recovery: implicit beliefs of moral character. Individuals who believe that moral character can change over time (*incremental beliefs*) are more likely to trust their counterpart following an apology and trustworthy behavior than are individuals who believe that moral character cannot change (*entity beliefs*). We demonstrate that a simple but powerful message can induce either entity or incremental beliefs about moral character.

## **Keywords**

trust erosion, deception, implicit beliefs

## **Disciplines**

Other Psychology | Other Social and Behavioral Sciences | Theory and Philosophy

## **Beyond Belief: How Implicit Beliefs Influence Trust**

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Beyond Belief: How Implicit Beliefs Influence Trust

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## Beyond Belief: How Implicit Beliefs Influence Trust

### Abstract

We demonstrate that implicit beliefs influence trust. In an experiment, we induced one of two types of implicit beliefs: *entity beliefs* about negotiation ability (a belief that negotiation ability is fixed over time), and *incremental beliefs* about negotiation ability (a belief that negotiation ability can change over time). We find that people induced with entity beliefs maintain trust in their counterpart even after they learn that their counterpart deceived them. Participants in the entity condition ignored and discounted negative information. Participants induced with incremental beliefs, however, significantly decreased trust in their counterpart when they learned that their counterpart had deceived them. In addition to changing how trust is harmed by violations, implicit beliefs are likely to influence the trust recovery process.

Trust plays a central role in negotiations. With trust, negotiators share information (Bazerman, 2006; Butler, 1999), are more cooperative (Kimmel et al., 1980), and are more likely to reach an agreement (Lewicki, 2006). Through increased information sharing, trust enables negotiators to reach efficient, integrative outcomes (e.g., Maddox, Mullen & Galinsky, 2008; cf. Tutzauer & Roloff, 1988; Thompson, 1991).

Despite the importance of trust for negotiators, trust is commonly violated, often by negotiators' use of deception (Schweitzer & Croson, 1999). In fact, prior work has found that deception pervades negotiations (O'Connor & Carnevale, 1997; Schweitzer & Croson, 1999; Schweitzer, Brodt, & Croson, 2002). Despite the prevalence of deception in negotiations, important questions remain regarding the relationship between deception and trust. We know little about how deception harms trust and what factors moderate this relationship.

Prior trust research has generally assumed that trust violations significantly harm trust (Boyle & Bonacich, 1970; Kramer, 1996; Lewicki, 2006). Recent work, however, has found that in some cases, violations cause surprisingly little harm (e.g., Elangovan et al., 2007; Miller & Rempel, 2004; Boles, Croson & Murnighan, 2000), and that some types of violations are more harmful than others (Kim et al., 2004; Schweitzer, Hershey & Bradlow, 2006).

In this paper, we explore the relationship between implicit beliefs (beliefs about whether personality characteristics are fixed or malleable) and reactions to deception. We demonstrate that negotiators' implicit beliefs significantly influence trust judgments following revealed deception. Specifically, deception harms trust only when negotiators believe that people's basic characteristics are malleable and therefore subject to updating. When negotiators believe that basic characteristics are fixed, violations have little effect on trust.

*Trust*

In this paper, we define trust as “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 party” (Mayer, Davis & Schoorman, 1995, p. 712). Perceptions of trustworthiness precede trust judgments, and in this work we consider perceptions of ability, benevolence and integrity (Mayer & Davis, 1999; Mayer et al., 1995). Consistent with prior work, we believe that different types of actions can independently violate different dimensions of trust (Kim et al., 2004). For example, a competent individual who engages in deception could demonstrate high ability, but low integrity.

Most prior work has studied trust as a static construct (e.g., Butler, 1999). This prior research has documented important differences in how people behave when they do or do not trust others. For example, Kimmel et al. (1980) found that negotiators with high trust use more cooperative tactics than do negotiators with low trust. More recent work, however, has begun to examine trust as a dynamic construct (e.g., Lewicki, Tomlinson & Gillespie, 2006). This work has found that trust readily changes over time. For example, trustworthy actions can build trust (Malhotra & Murnighan, 2002; Lewicki & Bunker, 1996), untrustworthy actions can harm trust and lead people to seek revenge (Bies & Tripp, 1996), and trust recovery efforts (e.g., a promise or an apology) can restore trust (Tomlinson, Dineen & Lewicki, 2004; Kim et al., 2004; Schweitzer et al., 2006).

*Deception*

In this work, we build on prior research by Bok (1980) and define deception as misleading communication that can include omissions (e.g., “action or inaction, even through



silence” p. 925). We conceptualize deception as violations of trust, and we expect that revealed acts of deception can harm trust.

Deception is common in negotiations. Misrepresenting information such as reservation points, aspirations or alternatives is often considered an acceptable (Robinson, Lewicki & Donahue, 2000) or even an expected part of negotiation (Friedman, 1994). For instance, in one study 28% of negotiators misrepresented their preferences on a common-value issue in order to improve their outcomes (O’Connor & Carnevale, 1997), while other research has shown that nearly 100% of negotiators would fail to disclose information that is harmful to their negotiating position unless directly asked to do so (Schweitzer & Croson, 1999). In fact, prior work has consistently found that negotiators are more likely to lie by omission than commission (Kramer, 1996; O’Connor & Carnevale, 1997). Related work has shown that negotiators’ actions, such as asking direct questions, and contextual factors within the negotiation, such as existing relationships and ambiguity, significantly influence rates of deception (e.g., Schweitzer & Croson, 1999; Schweitzer & Hsee, 2002).

Negotiators can often gain a short-term advantage by using deception. For example, in a single-shot negotiation, deceptive negotiators can claim more surplus than honest negotiators (e.g., O’Connor & Carnevale, 1997). Of course, negotiators who use deception can also incur costs. Deceived counterparts may retaliate against the deceiver (Boles et al., 2000), and revealed deception can significantly harm long-term trust (Schweitzer et al., 2006). These findings are consistent with related work that has theorized that a lack of behavioral integrity (i.e., a misalignment between words and deeds), harms perceptions of trustworthiness (Simons, 2002; Dineen, Lewicki & Tomlinson, 2006; Whitener, Brodt, Korsgaard & Werner, 1998).

There are, however, important individual and situational differences that are likely to moderate the relationship between untrustworthy behavior and trust. For example, Bottom et al. (2002) examined cooperation in a prisoner's dilemma game, and found that some people were quicker than others to lose trust in their counterparts following uncooperative behavior. Similarly, Boles et al. (2000) found that revealed deception in an ultimatum game led proposers, but not responders, to view their counterparts as less trustworthy.

While scholars have theorized about differences in how violations negatively affect trust (e.g., Lewicki & Bunker, 1996), relatively little research has directly examined trust erosion (Elangovan et al., 2007; Schoorman, Mayer & Davis, 2007). Existing research does, however, suggest that differences in trust erosion are likely and common (e.g., Kim et al, 2004). In a longitudinal study of romantic relationships, Miller and Rempel (2004) found that higher levels of initial trust in one's partner led individuals to hold a positive view of their partners' motives, even when the partner violated expectations or otherwise exhibited negative behavior. Similarly, Elangovan et al. (2007) found that trust erosion occurs when a violation is attributed to willful or intentional behaviors on the part of the violator, while violations attributed to the inability of the violator to fulfill expectations are less harmful. In related work, Robinson (1996) examined trust erosion following breaches of psychological contracts. Robinson (1996) found that high levels of initial trust in one's employer were negatively associated with perceptions that a contract breach had occurred and lower trust erosion even when a contract breach was perceived.

Taken together, prior research has found substantial variation in how trustors react to a real or perceived violation. A consistent finding is that attributions of a violator's behavior are critical in predicting whether trust erodes. One implication of this research is that other factors that influence attributions of behaviors may have similar effects on trust and trust erosion. One

such factor, from the trustor's perspective, is the implicit theory he or she holds regarding the fixedness or malleability of attributes and behaviors.

### *Implicit beliefs*

Researchers have long noted that individuals differ in their beliefs regarding the fixedness or malleability of key attributes such as personality and intelligence (Dweck, 1996; Dweck & Leggett, 1988). Recent work has found that these types of beliefs extend to abilities and emotions as well (Kray & Haselhuhn, 2007; Tamir et al., 2007). These lay theories are referred to as *implicit* theories or beliefs because "...unlike most scientific theories, these theories are rarely explicitly articulated" (Chiu, Hong & Dweck, 1997, pg. 19). Though rarely articulated, these implicit beliefs about the malleability of important characteristics have powerful effects on affect, cognition and behavior (Heslin, VandeWalle & Latham, 2006; Hong et al., 1997; Dweck, Hong & Chiu, 1993; Dweck & Leggett, 1988).

Implicit beliefs lie along a continuum, anchored at one end by *entity beliefs* and at the other by *incremental beliefs* (Dweck & Leggett, 1988). Individuals who hold entity beliefs perceive that key attributes are fixed, and that no amount of hard work can change a person's most basic characteristics. At the other end of the spectrum are individuals who adhere to incremental beliefs, believing that even the most basic qualities that characterize a person can be changed through effort and hard work (Chiu, Hong & Dweck, 1997; Dweck et al., 1993; Dweck & Leggett, 1988).

Some research (e.g., Chiu et al., 1997b; Heslin et al., 2006) suggests that people hold general "implicit person beliefs." These general beliefs reflect the idea that people can (or cannot) change their basic characteristics. Related work has found that people also hold domain-

specific implicit beliefs, such as the belief that negotiation ability can (or cannot) change (Chiu, Dweck, Tong & Fu, 1997; Hong et al., 1997; Kray & Haselhuhn, 2007; Tamir et al., 2007).

While research has typically treated implicit beliefs as trait-like characteristics of individuals (e.g., Chiu et al., 1997a; Heslin et al., 2006), an emerging literature has found that beliefs can be situationally induced, leading individuals to hold a particular belief for a period of time (Kray & Haselhuhn, 2007; Bergen, 1992).

Importantly, implicit beliefs affect the attributions people make for others' behavior. Entity theorists view people in terms of fixed traits (i.e., people cannot change). Incremental theorists are more likely to believe that situational moderators influence behavior (Dweck, Chiu & Hong, 1995; Dweck, Hong & Chiu, 1993). For instance, Hong et al. (1999) found that entity theorists attributed negative outcomes (e.g., poor test performance) to stable traits (e.g., innate ability), while incremental theorists attributed these negative outcomes to both stable and changeable factors, such as effort.

Because entity theorists believe that behavior stems from stable, underlying traits, they place a great deal of weight on even limited information about others and believe that this information has substantial predictive power (Dweck et al., 1993). For example, Chiu et al. (1997b) found that, relative to incremental theorists, entity theorists believed that a single observation of a behavior (e.g., being friendly or honest) suggested a high probability that the person would exhibit the same behavior in a completely different situation.

These findings suggest that initial impressions are very important for entity theorists, as these initial impressions are difficult to change. This is true even when entity theorists receive disconfirming evidence. While incremental theorists attend equally to belief-confirming and

belief-disconfirming information, entity theorists tend to focus primarily on information that confirms held beliefs about an individual or group (Plaks et al., 2001). For instance, Gervey et al. (1999) examined how implicit beliefs affected jury decisions in a fictional court case. Entity theorists based their verdicts primarily on the initial positive or negative surface descriptions of the defendant, largely ignoring whether the evidence supported this judgment. Incremental theorists, on the other hand, based their verdicts on the quality of the total body of evidence, regardless of their initial perceptions.

Similarly, Heslin et al. (2005) found that, in an organizational context, supervisors who held entity beliefs were slower to update initial perceptions of their subordinates (either positive or negative) in the face of new information suggesting that the subordinate's performance had changed. Plaks, Grant & Dweck (2005) argued that entity theorists avoid or attempt to debunk belief-inconsistent information not only because they believe it less likely to be true, but also because if it were to be true, it would violate their most basic beliefs that people cannot really change.

In sum, implicit beliefs have been shown to influence the knowledge people believe they have about others. Entity theorists believe that they can learn a great deal about other people from even single observations. They expect behaviors and attitudes to remain stable over time and across varied contexts, and are resistant to information that suggests that their initial impressions may have been incorrect. Incremental theorists, on the other hand, are more likely to attribute observed behaviors to situational forces, and are therefore receptive to information that either confirms or disconfirms their initial perceptions of others.

### *Implicit Beliefs and Trust Erosion*

We consider the influence of implicit beliefs on trust. In particular, we consider how implicit beliefs influence changes in trust after negotiators learn that they have been deceived.

During a negotiation, participants form initial trust judgments of their counterpart. These judgments are likely to persist during the negotiation. Unless the lie is quite obvious, participants who are being deceived in a negotiation are unlikely to recognize the deception during the negotiation. People are generally poor lie detectors (e.g., Ekman & O'Sullivan, 1991), and when people are deceived, they often learn that they have been deceived later in time from other sources (Warren & Schweitzer, 2008). Upon learning that they were deceived, negotiators may revise their trust judgments. We expect implicit beliefs to influence the extent to which negotiators revise their trust judgments. Specifically, we expect people who hold entity beliefs to be more likely than people who hold incrementalist beliefs to persist with their initial evaluations after learning that they were deceived.

Entity theorists are quick to reach conclusions about people's basic characteristics (e.g., trustworthiness) and slow to update these perceptions when they learn more information (Heslin et al., 2005). As a result, initial attributions of trustworthiness may be particularly enduring. Due to entity theorists' motivational desire to see the world as stable and dispositional (Plaks et al., 2005), we predict that early attributions of trustworthiness will lead entity theorists to ignore trust violations and to otherwise discount the discordant information (cf. Robinson, 1996). Conversely, incremental theorists are more likely to revise their beliefs. Incrementalists are more attentive to both belief-consistent and belief-inconsistent information. As a result, incremental theorists are more likely to recognize trust violations and update their beliefs.

In sum, implicit beliefs are likely to influence trust erosion in two ways. First, entity theorists will be less likely to recognize objective violations of trust. Second, even when controlling for differences in perceptions of trust violations, entity theorists will experience less trust erosion than will incremental theorists. Formally, we hypothesize:

H1: Entity theorists will be less likely than incremental theorists to recognize that they have been deceived.

H2: Entity theorists will experience less trust erosion following deception than will incremental theorists.

### Study

We tested our hypotheses in a Buyer-Seller negotiation exercise that often involves deception on the part of the Buyer (Bullard Houses; Karp, Gold & Tan, 2006). In our study, we examined how revealed deception harms trust, and how implicit beliefs moderate this harm.

We expected that our predictions would hold for a range of both general (i.e., implicit person beliefs; Heslin et al., 2006) and domain-specific implicit beliefs (e.g., implicit theories of moral character; Chiu et al., 1997b). However, because the present research examines trust in negotiation, we have chosen to examine the effects of implicit negotiation beliefs, or beliefs regarding the fixedness or malleability of negotiation ability (Kray & Haselhuhn, 2007). While other implicit beliefs (e.g., moral character) may link more directly to deception and trust in general, the unique negotiation context calls for implicit beliefs that are germane to that domain (see Chiu et al., 1997b). Our logic, however, still stands: individuals who believe that negotiators are unable to change their most basic behaviors and characteristics (i.e., entity theorists) will fail

to recognize and integrate information suggesting that they have been deceived by a previously trustworthy negotiating counterpart.

## Method

### *Participants and design*

Ninety-four MBA students at an East Coast university participated as part of a classroom exercise. The sample was drawn from a population with an average age of 28 and 6 years of work experience. The sample was 66% male. We randomly assigned participants to one of two roles (buyer or seller) and to one of two implicit negotiation belief conditions: incremental beliefs (malleable beliefs) or entity beliefs (fixed beliefs). Buyers and sellers were randomly assigned to negotiating dyads ( $n = 47$ ) with the qualification that partners had not previously negotiated with one another.<sup>1</sup> This resulted in the creation of 21 male-male dyads, 6 female-female dyads, and 20 mixed-sex dyads.

### *Materials and Procedure*

The entire experiment was conducted via computer in a computer lab. We administered the implicit negotiation belief manipulations and post-negotiation questionnaires using a web-based survey program and participants completed the negotiation exercise via e-mail. We assigned participants to roles approximately one week prior to the negotiation and distributed the negotiation materials at that time, giving participants ample time to prepare.

Participants began the experiment by reading one of two versions of our implicit negotiation belief induction. Following the implicit negotiation belief induction, we gave participants 80 minutes to complete the negotiation. After completing the negotiation or reaching



the time limit, participants answered questions about their negotiation. Following this survey, we presented sellers with an additional questionnaire that began with a full description of the buyers' true intended use of the property. After reading this information, participants once again answered questions about their negotiation. In the following class period, participants were fully debriefed regarding the nature of the exercise and the implicit negotiation belief inductions, thereby clarifying that deception was an expected part of the negotiation exercise (rather than an indictment of negotiators' personal morals), and that negotiation ability is, in fact, malleable.

*Negotiation exercise.* We used a modified version of the Bullard Houses negotiation exercise. This case involves the potential sale of a property. The seller is interested in selling the property only if the property will be preserved and not developed for commercial use. The buyer is interested in developing the property for commercial use—and keeping their plans secret. In our revised version of the case, we made the conflict of interest between the seller and the buyer very explicit.

This exercise is characterized by a positive bargaining zone in terms of financial concerns, but a negative bargaining zone in terms of each party's underlying interests. (In fact, only 14 of the 47 dyads reached an agreement.) Specifically, we instructed the seller in this case not to sell the property unless they were certain that the property would not be used for commercial use. We informed the buyer in this case that if they purchased the property they would certainly develop it for commercial use. We also informed buyers that they were not allowed to reveal their specific intentions for the property (the planned construction of a hotel). Deception in this case can include outright lies (lies of commission) and lies of omission. Prior work has found that both types of lies harm trust (Kramer, 1996).

*Implicit negotiation belief manipulation.* We randomly and independently assigned both buyers and sellers to the entity or the incremental negotiation belief condition. (Buyers' beliefs were not significantly related to any of the dependent measures and we focus on seller beliefs in the remaining analysis and discussion.) Following Kray and Haselhuhn's (2007) method for manipulating implicit negotiation beliefs, prior to negotiating, participants were asked to read an essay on negotiations, ostensibly to "put them in a negotiation frame of mind." Participants read an essay designed either to spur incremental or entity beliefs. The essays were titled "Negotiation Ability is Changeable and Can be Developed" and "Negotiation Ability, Like Plaster, is Pretty Stable over Time," respectively, and included reports from fictitious studies supporting the main thesis of the article. We include the text of our manipulation in Appendix I. After reading the essay, participants completed a short manipulation check by answering the question: To what extent are people's negotiating abilities stable? (1: Not at all stable, 9: Extremely stable). Following the manipulation check, participants began the negotiation.

*Perceived deception.* Researchers have noted that negotiators can misrepresent several different types of information. For instance, Lewicki (1983) identified four types of misrepresentation (factual information, intentions, positions, arguments), while Barry (1999) noted that negotiators can misrepresent their emotions as well. Based on these frameworks, we asked sellers to rate the extent to which they believed that their counterpart had engaged in deception along five dimensions (1: Definitely misrepresented, 3: Not sure, 5: Definitely did not misrepresent). The five dimensions included the counterpart's bottom line, preferences, emotions, intentions, and material facts (see Appendix II). We collected responses both immediately following the negotiation and after we revealed the buyers' true intentions, and the five dimensions were closely related at both points in time (both  $\alpha = .94$ ). In subsequent

analyses, we report results from the average of the five items, and we reverse-scored responses so that higher numbers indicate greater perceived deception.

*Trust measure.* We measured trust both immediately following the negotiation and after we revealed the buyers' true intentions. We expect deception to directly influence perceptions of integrity. Therefore, we measured the integrity component of trust (Mayer, Davis & Schoorman, 1995) using a three item scale adapted from Kim et al. (2004) and used extensively in previous research (Ferrin et al., 2007; Kim et al., 2006; see also Mayer & Davis, 1999). Specifically, participants indicated the extent to which they agreed with the following three statements: I like my counterpart's values; Sound principles seem to guide my counterpart's behavior; My counterpart has a great deal of integrity (1: Strongly disagree, 7: Strongly agree). The combined measure demonstrated high reliability at each point in time (both  $\alpha > .88$ ).

## Results

*Preliminary analyses.* As expected, participants in the incremental condition rated negotiation ability as significantly more malleable than did participants in the entity condition ( $M_s = 2.78$  vs.  $6.92$ ,  $sds = 1.20$  and  $1.91$ ),  $F(1, 45) = 78.04$ ,  $p < .001$ .

To allay concerns that actual differences in deceptive behavior might underlie perceptions of (and reactions to) deception, research assistants who were blind to the study hypotheses coded the negotiation transcripts along several dimensions. Based on a categorical measure of deception ( $\kappa = .87$ ), buyers committed deception (either through omission or commission) in 43% of the negotiations. We found no significant differences in degree of buyer deception between the seller entity and incremental conditions ( $\chi^2(1, 45) = 1.11$ ,  $p > .29$ ).

In addition, the overall behavior of the buyers was coded on a 4-point scale (1: Completely honest, 4: Very misleading; inter-rater  $\alpha = .83$ ). Once again, we found no significant difference in buyer deception between seller entity and incremental conditions ( $M_s = 2.54$  vs.  $2.24$ ,  $sds = .71$  and  $.81$ ,  $F(1, 45) = 1.87$ ,  $p > .17$ ).

*Trust erosion.* After participants completed the negotiation and recorded initial perceptions of trust, we revealed the buyer's intention to build a commercial hotel as part of a post-negotiation survey. Following this revelation, trust declined,  $F(1, 46) = 14.89$ ,  $p < .001$ . Across the two conditions, trust fell from an average of  $4.23$  ( $sd = 1.15$ ) to  $3.43$  ( $sd = 1.39$ ) on our 7-point scale.

Our thesis predicts that those in the incremental theory condition would trust their counterparts less after learning of the potential deception, while those in the entity theory condition would maintain their previous level of trust. Our thesis was confirmed by a significant interaction using a mixed-model ANOVA with implicit beliefs as a between-subjects factor and time (before or after the deception was revealed) as a within-subject factor,  $F(1, 45) = 10.81$ ,  $p = .002$ . We depict this interaction in Figure 1. Participants in the incremental theory condition trusted their counterparts significantly less once the buyers' true intentions were revealed ( $M_s = 4.48$  vs.  $3.04$ ,  $sds = 1.23$  and  $1.40$ ),  $F(1, 22) = 19.18$ ,  $p < .001$ . In contrast, participants in the entity theory condition showed no significant difference in trust upon learning the buyers' intentions ( $M_s = 3.99$  vs.  $3.79$ ,  $sds = 1.02$  and  $1.31$ ),  $F(1, 23) = 1.00$ , ns.

*Perceived deception.* Perceptions of deceptive behavior varied according to participants' implicit beliefs. We predicted that those in the incremental theory condition, but not those in the entity theory condition, would perceive greater deception on the part of the buyer upon learning

of their true intentions. The results of a mixed-model ANOVA, with belief condition as a between-subject factor and time as a within-subject factor, supported this prediction,  $F(1, 45) = 5.52, p = .02$ . We depict this interaction in Figure 2. Participants in the incremental condition perceived significantly greater deception by their counterparts after the buyers' true intentions were revealed ( $M_s = 2.46$  vs.  $3.41, sds = 1.08$  and  $1.28, F(1, 22) = 14.23, p = .001$ ), while the perceptions of those in the entity condition remained unchanged ( $M_s = 2.83$  vs.  $3.01, sds = .65$  and  $1.21, F(1, 23) = .77, ns$ ).

We found that greater perceptions of deception were negatively associated with ratings of integrity-based trust both immediately following the negotiation ( $r = .70, p < .001$ ) and following the revealed intentions ( $r = .75, p < .001$ ). To examine the relationships among implicit beliefs, perceived deception and trust erosion, we conducted a series of regressions focusing on levels of trust following the revealed intentions.

We expected that differences in trust erosion would emerge even when controlling for differences in perceived deception. However, logically, perceptions of deception may be a prerequisite for trust erosion. We tested this potential mediation by following the procedures of Baron and Kenny (1986). For these analyses, the incremental belief condition was coded as 1 and the entity condition was coded as 0; initial levels of trust and perceived deception were included as controls in all analyses. Controlling for initial ratings, the significant relationship between implicit beliefs and perceived deception remained,  $\beta = .682, t = 2.07, p = .04$ . The strong link between implicit beliefs and integrity-based trust remained as well,  $\beta = -1.08, t = -3.05, p = .004$ . When implicit beliefs and perceived deception was included as predictors of integrity-based trust, both perceptions of deception ( $\beta = -.69, t = -5.49, p < .001$ ) and implicit beliefs ( $\beta = -.60, t = -2.11, p = .04$ ) were significantly related to trust. A Goodman test

(Goodman, 1960) revealed a significant decrease in the effect of implicit beliefs when perceived deception was included in the model ( $Z = 1.97, p < .05$ ) suggesting that perceptions of violations partially mediated the relationship between implicit beliefs and trust.

### General Discussion

In this paper, we demonstrate that implicit negotiation beliefs moderate trust erosion. We induced entity (fixed) or incremental (changeable) negotiation beliefs, and we measured the extent to which these beliefs influenced changes in trust. Although people with entity and incremental beliefs trusted their counterparts similarly immediately after they completed their negotiations, we found that people with entity and incremental beliefs significantly differed with respect to the trust they held in their counterpart once they learned that their counterpart had deceived them. Compared to people with entity beliefs, people with incremental beliefs trusted their counterpart less following the revelation that their counterpart had deceived them. In contrast, people with entity beliefs maintained their initial (high) level of trust, even after learning of their counterpart's deception.

In this work, we focus on trust erosion. Negotiators in our study started with relatively high levels of trust in each other ( $M = 4.23$  on a 7-point scale). This is typical of North Americans who enter into new relationships (Glaeser et al., 2000). We postulate that implicit beliefs can also influence how trust is built when it starts at a low level, such as after trust has been broken. Recent research on trust recovery has explored different types of violations (e.g., Kim et al., 2004), the effectiveness of tactics violators can use to rebuild trust (e.g., Schweitzer et al., 2006), as well as combinations of violations and repair tactics (e.g., Kim, et al., 2006; Ferrin et al., 2007; Schweitzer et al, 2006). While this research has greatly advanced our understanding

of the mechanics of trust, relatively little is known about how social-cognitive factors affect the trust recovery process. We expect implicit beliefs to affect trust recovery in the following way. Unlike incremental theorists, entity theorists believe that people cannot readily change. As a result, we expect transgressors' attempts at trust recovery (e.g., apologies, explanations of previous behavior, promises that behavior will change in the future) to be relatively ineffective insofar as entity theorists are likely to be skeptical that change will (or can) occur. In contrast, incremental theorists are likely to be receptive to a transgressor's attempts to rebuild trust in the wake of a violation. Prescriptively, violators may regain trust most effectively by inducing incrementalist beliefs in their counterpart prior to taking a trust recovery action (e.g., making an apology).

Though our primary focus in this research was on trust erosion, we also found preliminary evidence to support the conjecture that implicit beliefs moderate trust recovery. At the conclusion of our study, we informed sellers of the strong situational forces that made it difficult for buyers to disclose their plans. Specifically, we informed sellers that the buyers were instructed not to divulge information about their intended use of the property. Following this revelation, we collected a third measure of trust. As expected, participants in the incremental theory condition displayed a significant increase in trust ( $F(1, 20) = 15.04, p = .001$ ), while entity theorists showed no change in their trust ratings ( $F(1, 20) = 1.51, ns$ ). These results are provocative, and suggest that future work should extend our investigation of the relationship between implicit beliefs and trust erosion to the study of implicit beliefs and trust recovery. As our preliminary results suggest, incremental theorists may be more receptive to attempts to restore trust than are entity theorists.

An intriguing complementary explanation for these results is that entity and incremental theorists make different attributions for the same behavior. In this case, incremental theorists may have viewed the buyers' role instructions as a situational constraint (i.e., the buyers were directed to be misleading), while entity theorists may have viewed these instructions as offering an ulterior motive for buyers' behavior (e.g., perhaps the buyer was motivated to fulfill the wishes of their client). Research exploring the relationship between suspicion and the correspondence bias (e.g., Fein, 1996; Fein, Hilton & Miller, 1990) has found that individuals tend to make dispositional attributions for behavior when informed that an actor was under strong situational constraints (Gilbert & Jones, 1986; Ross, 1977), but make situational attributions for behavior when they believe that an actor may have had ulterior motives. This suggests that entity theorists may be less suspicious than incremental theorists, and is consistent with previous research demonstrating that entity theorists are particularly susceptible to the correspondence bias (Chiu et al., 1997b).<sup>2</sup>

An additional contribution of this paper is the empirical evidence it provides with regard to trust erosion. Surprisingly little empirical work has systematically examined how negative actions harm trust (Elangovan et al., 2007). Extant research, however, has found trust erosion to be less likely in situations where trustors have a great deal of trust in their counterparts, or when they feel that they know their counterparts and have reasonable expectations of their behavior (Robinson, 1996; Lewicki & Bunker, 1996). These findings are consistent with entity theorists' perceptions of trust. Once entity theorists form initial beliefs, they may be unlikely to change these beliefs even when faced with new information.

Our results also demonstrate the importance of understanding how implicit theories affect information processing and behavior in organizations. Our work is consistent with previous



research showing that belief perseverance is relatively strong for entity theorists (e.g., Heslin et al., 2005; Chiu et al., 1997b). However, the work we present here extends this research by exploring how implicit theories affect belief perseverance in conflict situations. We expect that these links are important not only for perceptions of trust, but also for other beliefs that influence conflict and conflict resolution. For instance, judgments of justice and fairness are disproportionately affected by initial experience with an organization or individual (Lind, Kray & Thompson, 2001). Our results suggest that the influence of initial impressions will be particularly strong for entity theorists.

Apart from the theoretical contributions, our findings suggest a number of practical implications. First, our results suggest that trustors should be aware of how implicit beliefs influence their perceptual processing of a counterpart. Trustors, particularly those who are entity theorists, should take steps to reduce their risk of being deceived.<sup>3</sup> Conversely, negotiators who are tempted to use deception should consider how their counterparts' implicit beliefs will influence how their counterpart responds once the deception is revealed.

We found that implicit negotiation beliefs can be easily induced and that these inductions can have enduring effects. This is consistent with previous research showing that nonconscious priming of motives and goals can affect social interactions (e.g., Bargh et al., 2001). Negotiators should be wary of manipulative counterparts who prime entity beliefs, prior to engaging in deception, to preserve a trustworthy reputation. Similarly, our findings suggest that following revealed deception, negotiators may be able to make an apology more effective by prompting their counterpart to adopt an incrementalist view.

Our findings also raise interesting questions for future research. In this work, we focused on the influence of revealed deception and trust. Future work should consider different types of violations, different types of existing relationships, and different types of revelations (e.g., how deceived parties learn that they have been deceived). For example, it is quite possible that an existing relationship may prompt people to be more likely to adopt entity, rather than incrementalist, beliefs.

A related question has to do with how face-to-face communication might influence the relationship between implicit beliefs and trust.<sup>4</sup> Though negotiators are likely to be more confident in their ability to detect deception face-to-face, some types of deception may actually be more successful in face-to-face settings (e.g., Schweitzer et al., 2002). It is possible that the relationship between implicit beliefs and trust that we find in our context is even stronger in a face-to-face setting.

In our study, negotiators had important, asymmetric information. By design, sellers in our study needed to know what the buyers intended to do with the property, and if sellers learned the truth they would not be able to sell the property. This context enabled us to study an important type of deception. With complete information, the normative solution for negotiators in this case is an impasse. Not surprisingly, impasse rates were very high in our study (only 14 dyads reached a deal). When negotiators did reach an agreement, this was often because the buyer either explicitly lied (2 cases) or provided information that our coders characterized as misleading (10 cases). In the remaining two cases, the buyer simply omitted information about their intended use for the property. Future research should consider other types of negotiation contexts with other types of deception. For example, the relationship between implicit beliefs and trust may be different depending upon the magnitude of the deception.

Future work could also extend this investigation to study other types of outcomes. In this work, we focused on trust. Previous research, however, has found that negotiators who trust their counterparts evince a desire to negotiate with their counterpart in the future (e.g., Curhan et al., 2006). We expect revealed deception to harm intentions to negotiate with the same counterpart in the future. Similarly, since trust involves a willingness to make oneself vulnerable (e.g., Mayer et al., 1995; McAllister, 1995), it could be the case that revealed deception influences risk taking behavior differently for people who hold entity versus incrementalist beliefs.

### Conclusion

In this work, we demonstrate that implicit negotiation beliefs influence how people react to revelations that they have been deceived. After making an initial assessment about their counterpart, people with incremental beliefs (beliefs that people can change) reduce their trust in their counterpart more than people with entity (fixed) beliefs. People with entity beliefs deny that a violation has occurred and discount negative information. Our results offer important insight into the social-cognitive understanding of trust, and call for increased research into the links between implicit beliefs and trust.

Footnotes

<sup>1</sup> We note that though participants had never negotiated with one another prior to this exercise, it is possible that initial impressions may have developed from previous interactions.

<sup>2</sup> We thank an anonymous reviewer for this suggestion.

<sup>3</sup> We thank an anonymous reviewer for this suggestion.

<sup>4</sup> We thank an anonymous reviewer for this suggestion.

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Figure 1: Integrity-based trust following deception

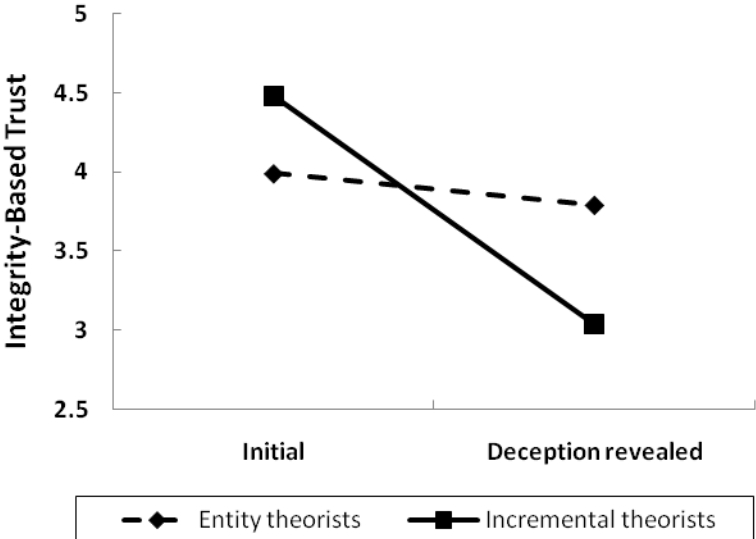
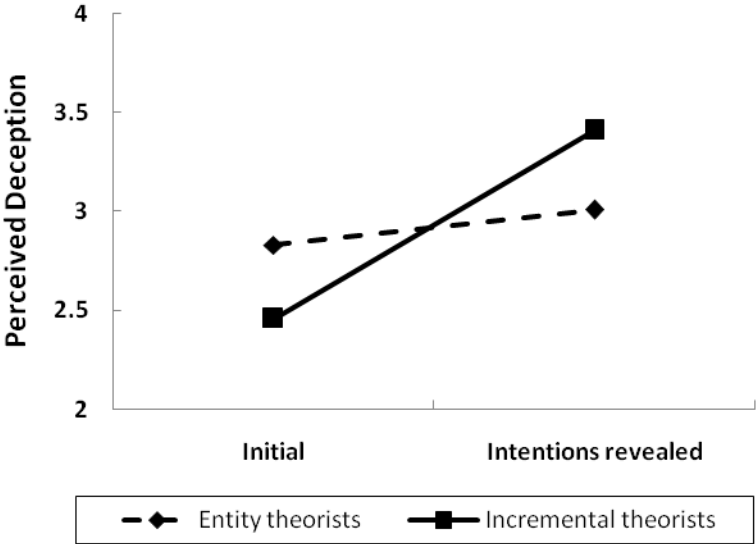


Figure 2: Perceived deception as a function of implicit negotiation beliefs



## Appendix I

Incremental Theory Manipulation**Negotiation Ability is Changeable and Can Be Developed**

Negotiations are personally relevant to college students who will one day be interviewing for jobs. While most people think of negotiating as something that is done solely in a business context, it is actually much more of an every day activity. Negotiating effectively is an important skill that extends beyond the business environment to all sorts of social interactions. For example, two friends who have different tastes in food and film may have to negotiate when they make plans for dinner and a movie for a Friday night. Because there are so many domains for which conflict can come into play, understanding how to negotiate effectively is a key life skill.

Given the importance of negotiations to every day life, it is perhaps not surprising that a great deal of research has been conducted to identify the key determinants of negotiating ability. While it used to be believed that negotiating was a fixed skill that people were either born with or not, experts in the field now believe that negotiating is a dynamic skill that can be cultivated and developed over a lifetime.

In a recent paper (Smith & Wilson, 2001) summarizing a wide range of longitudinal studies that address this question it was determined that the vast majority of a person's negotiation ability is due to environmental factors that can change over time. For example, effort, opportunity, and education were determined to account for up to 88% of a person's performance in negotiations. About 10% of negotiation ability seems to be influenced by informal interactions with family, friends, and colleagues. This means that only about 2% of a person's negotiation ability was traced to stable personality characteristics.

Consistent with this view is a presentation given in July, 2002 at the International Negotiation Research Forum (INRF) in Washington D.C. by Dr. Terry Batty, a business school professor specializing in negotiation research. In his talk, Dr. Batty argued that "no one's negotiation character is hard like a rock that cannot be changed. Only for some, greater effort and determination are needed to effect changes." He reported numerous large longitudinal studies which show that people can mature and change their negotiation ability. He also reported research findings showing that people's negotiation ability can be changed even in their late sixties. For example, in a recent study of senior-level executives from major companies around the world who engaged in intensive negotiation training, 95% improved their negotiation agreements by a noticeable amount in the 2-year period following the training. A voluminous body of evidence indicates that the manner in which people approach conflict situations is changeable.

### Entity Theory Manipulation

#### **Negotiation Ability, Like Plaster, Is Pretty Stable Over Time**

Negotiations are personally relevant to college students who will one day be interviewing for jobs. While most people think of negotiating as something that is done solely in a business context, it is actually much more of an every day activity. Negotiating effectively is an important skill that extends beyond the business environment to all sorts of social interactions. For example, two friends who have different tastes in food and film may have to negotiate when they make plans for dinner and a movie for a Friday night. Because there are so many domains for which conflict can come into play, understanding how to negotiate effectively is a key life skill.

Given the importance of negotiations to every day life, it is perhaps not surprising that a great deal of research has been conducted to identify the key determinants of negotiating ability. While it used to be believed that negotiating ability was a bundle of potentialities, each of which could be developed, experts in the field now believe that people possess a finite set of rather fixed negotiating skills.

In a recent paper (Smith & Wilson, 2001) summarizing a wide range of longitudinal studies that address this question it was determined that the vast majority of a person's negotiation ability is due to personality factors that remain stable over the course of a person's lifetime. For example, intelligence, internal motivation, and conflict style were shown to account for up to 88% of a person's performance in negotiations. About 10% of negotiation ability seems to be determined by patterns of interactions set early in life with one's family. This means that negotiation ability may be increased or decreased by only about 2% during most of a person's adult life.

Consistent with this view is a presentation given in July, 2002 at the International Negotiation Research Forum (INRF) in Washington D.C. by Dr. Terry Batty, a business school professor specializing in negotiation research. In his talk, Dr. Batty argued that "in most of us, by the age of ten, our negotiation ability has set like plaster and will never soften again." He reported numerous large longitudinal studies which show that people "gain experience and develop in negotiations, but they do so on the foundation of enduring dispositions." For example, in a recent study of senior-level executives from major companies around the world who engaged in intensive negotiation training, 95% failed to improve their negotiation agreements by a noticeable amount in the 2-year period following the training. A voluminous body of evidence indicates that the manner in which people approach conflict situations is not changeable.



## Appendix II

*Using the scale below, indicate the extent to which you believe that your counterpart misrepresented information along the following dimensions.*

1	2	3	4	5
Definitely Misrepresented		Not sure if they Misrepresented		Definitely did NOT Misrepresent

1. \_\_\_ his/her bottom line.
2. \_\_\_ his/her preferences.
3. \_\_\_ his/her emotions.
4. \_\_\_ his/her intentions.
5. \_\_\_ the material facts of the case.