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Interpersonal Trust and the Reversal of Attribution Error

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Abstract

Attribution error occurs when an individual misperceives causality in a situation. Often outcomes are erroneously attributed to organizational or environmental causes (Ross, 1977). However, recently scholars have demonstrated that attribution error is not universal. Indeed, Menon, Morris, Chiu and Hong (1999) have demonstrated that people living under the rubric of more communal eastern cultures are more likely to attribute outcomes not to individuals but to organizations. Similarly, I hypothesize that attribution error is not universal but is affected by interpersonal trust. I explicate the affects of this reversal in the context of inter-organizational alliances wherein attribution errors can result in the premature deterioration or detrimental continuation of inter-organizational trust. This theory is tested with a lab experiment.

Individuals have been shown to incorrectly attribute observed actions to properties of actors (Kelley, 1973). This phenomenon is so widespread that it has been labeled “the fundamental attribution error” (Ross, 1977). It has further been described as a universal human tendency (Gilbert & Malone, 1995). This error often results in individuals underestimating the importance of situational causes, while simultaneously overestimating the affect of personal factors in determining others personal motivation. (Nisbett, Caputo, Legant, & Marecek, 73). For instance, Morris, Larrick and Su (1999) found that an individual involved in a negotiation often misinterprets situational constraints as a manifestation of a personality trait. Heidler (1958) addressed the underlying reason for this error. He posited that this incorrect construction of causation helps individuals to navigate a complex social environment because, by attributing causation to the actors, individuals are allowed to construct a stable view of their environmental situation, establishing a false but stable sense of reality.

More recently the universality of the fundamental attribution error has been called into question as scholars have begun to notice striking differences across cultures. For example, Menon, Morris, Chiu and Hong (1999) found that the attribution error was reversed for individuals from Japan and Hong Kong. In their study, participants in eastern countries were more likely to attribute causality to groups rather than individuals. Some have argued that the mechanisms driving this reversal stem from the mental orientation of the individuals. Krull (1993) posited that individuals from collectivist cultures are likely to focus on the primacy of the collective and thus attribute causation to situations rather than to individuals.

In this paper I address another factor that calls into question the universality of the attribution error. I hypothesize that interpersonal trust alters the attribution error. Specifically, I

argue that the effect of interpersonal trust is dependent on whether the trust is cognitive or affective and whether the situation confirms or violates the trust.

Cognitive and Affective Interpersonal Trust

Although it is generally agreed that interpersonal trust is important, there is little consensus on the definition of trust (Rousseau, Sitkin, Burt, & Camerer, 1998). I define interpersonal trust as the confidence of an individual in another individual that he or she will not take advantage of him or her when given the possibility. Thus, a trustworthy individual not only has positive intentions but also lacks negative intentions (Lewicki, McAllister, & Bies, 1998). This is similar to Lewis and Weigert's (1985) definition, "trust is confidence in the face of risk." Further, interpersonal trust is built by individuals embedded in environmental processes (Dyer, 1996a) and structures (Williamson, 1975) that may affect the formation of trust. Interpersonal trust can be either cognitive based trust or affective based trust depending on the motivation of the individuals (McAllister, 1995). Even though cognitive and affective trust are not mutually exclusive, indeed McAllister noted that they are highly correlated, this distinction is important because the underlying mechanisms are different for the two types of trust.

Cognitive trust is generated from signals that provide good evidence of trustworthiness (McAllister, 1995). Individuals interpret tangible signals such as structures or processes and intangible signals such as reputation, familiarity, reliability and dependability when building cognitive trust. This trust is based on the competent behavior of others (Mayer, Davis, & Schoorman, 1995). Individuals with cognitive trust typically pursue opportunities while simultaneously monitoring the interaction (Lewicki, et al., 1998). Even though, cognitive trust is similar to competence, cognitive based trust is slightly different. It can be based on both the

positive reputation, which is often associated with competence and also on the lack of incompetence, which is different than competence. (Lewicki, et al., 1998)

Affective trust is trust based on emotion. Lewis and Wiegert (1985) describe affective trust as “the bonds between individuals.” Discussion about personal issues and feeling a loss if the relationship is distanced are signs of affective trust. Because affective trust usually requires repeated interactions over time, cognitive trust is often an antecedent of affective trust (Rouseseau, et al., 1998).

Both cognitive and affective trust rely on “proof sources” or signals of trustworthiness (Doney, Cannon, & Mullen, 1998). Once trust is established it affects an individual’s attribution; however, there is a reciprocal relationship between trust and attribution. Attribution is used in the interpretation of signals as trust is built and attribution also sustains or destroys trust.

Misattribution of signals can have both individual and organizational consequences. For individuals, it can bias an individual unnecessarily against their counterparts which will harm their relationship without just cause. Individual bias may also have organizational implications if an individual is a knowledge broker—fills a structural hole—and misperceives the trustworthiness of a partner. That misperception may be reinforced in their organization as they share their perceptions with others. (Burt, 1995)

Interpersonal trust is indirectly linked to attribution. Rather than immediately affecting attribution, trust will facilitate an individual in adopting the perspective of their counterpart. Perspective is a primary mechanism of attribution (Regan & Totten, 1975). The result of taking another individual’s perspective results in what Aron, Aron, Tudor and Nelson (1991) call “self-other merging”. As self and other merge, individuals are much more likely to look for complex causes of another’s actions rather than merely viewing the individuals as objects and attributing

their outcomes to behaviors. Adopting a self-other perspective has allowed individuals to overcome biases (Galinski & Moskowitz, 2000). In this study, I posit self-other merging indicates the presence of interpersonal trust; thus, attribution will be modified in the presence of trust.

Individuals who have developed a personal relationship with their counterpart are likely to base their trust on affective measures while individuals with more personal distance are likely to base their trust on cognitive measures. In situations where an individual may have affective and cognitive trust simultaneously, the affective trust will trump cognitive trust and the actions of the individual will follow the affective trust typology. I hypothesize that individuals with cognitive trust are likely to follow the fundamental attribution error in situations that violate their trust and attribute cause to individuals. For example, if an alliance partner required a contract renegotiation it is likely that an agent having cognitive trust would attribute this act to personal characteristics of their counterpart (i.e. they were short sighted in the original negotiation) rather than to any changes in the environmental structure or processes.

Second, I hypothesize that in situations where cognitive trust is present and the trust is confirmed, we can expect to see a reversal of attribution error such that individuals will attribute cause to situations rather than behaviors. Along these lines, Malholtra and Murnighan (2002) have shown that individuals with cognitive trust are likely to attribute the confirmation of trust to situations rather than to individuals. Specifically, they have demonstrated that an individual given a contract (signal of cognitive trust) attributes their trust in the exchange to the situation and not to individual offering the contract. I reverse their findings in my hypothesis given the reciprocal nature of trust and attribution.

Third, I hypothesize that in situations where an individual has affective trust for his or her counterpart and trust is violated, the individual will erroneously attribute causality to situations and not to their counterpart. Affective trust is indicative of emotional and personal friendship between individuals. In this situation the agent is likely to take the perspective of their counterpart and assume their counterpart would not behave opportunistically but, attribute the activity to situational causes even when this supposition is incorrect.

Finally, in situations where affective trust is present and that trust is confirmed, I hypothesize that individuals will likely attribute this to their counterpart and thus, fall into the typical attribution error. For instance, if an alliance partner receives a favor such as a rushed shipment; the agent is likely to attribute this favor to their individual counterpart rather than to the organizational or situational factors that may actually be responsible for the favor.

Organizational Implications of Trust and Attribution Errors

Previous work has shown that attribution error has left organizations attempting to change employees through training, rather than changing the environmental or organizational frames (Roese & Olson, 1995a). For instance, individuals often seek to undo an accident by simulating how the accident could have been averted if the individuals had acted slightly differently, rather than on the problems with equipment that may have been the cause of the situation (Roese & Olson, 1995a).

In addition to the intra-organizational issues this model has important inter-group and inter-organizational implications. For instance, in the case of an inter-organizational alliance when trust is violated between individuals with cognitive trust, the attribution error may result in falsely attributing poor performance to an individual and thus falsely preserve the alliance partner's reputation. This misattribution could result in the continuation of an alliance where the

alliance is detrimental to the firm. This maximizes the organizations risk by falsely preserving perceived organizational trustworthiness.

Conversely, in a situation where individuals have affective trust and the trust is violated, the individual is likely to attribute this violation to their counterpart's organization. If this attribution is incorrect the firm may face significant consequences because the individual's false report of opportunistic behavior at their alliance partner's firm will spread distrust of their alliance partner's organization throughout the firm. The result of this misattribution will be a precipitated decline in trust between the organizations when an individual alone may be untrustworthy. In this situation the agent may be blinded by affective trust. This is supported by Uzzi (1997) who found that affective trust might not cause a reduction in the mistrust of the individual despite signs for contrary.

Method

Overview and Design

I use a 2x2 experimental design. The experiment involved two conditions: a cognitive trust condition and an affective trust condition. The individuals were then given a situation that violated or confirmed that trust. (See Figure 1) The process involved the creating of a scenario in which cognitive trust and affective trust condition was randomly created in individuals and then this trust was randomly violated or confirmed.

Participants

A sample of 100 MBA students enrolled in an elective class on inter-organizational alliances at Kellogg School of Management participated in this study as partial fulfillment of their course requirements.

Procedure

Participants were randomly assigned to read one of two alliance partner vignettes. The vignettes included the same historical and performance information. They differed only in the description of the relationship that the “supplier” had with their counterpart “buyer”. While in both situations, the relationship duration and frequency of business interaction did not change, in one instance the relationship was describe in as “strictly professional” and in the other situation the two were described as “personal friends”. The vignette for affective trust read as follows:

Your firm, Speedy Supply Corporation has had a 15 year relationship with Magnificent Corporation. Business has steadily grown between your companies. Currently, business with Magnificent Corporation accounts for nearly 20% of your firm’s total business. You began your career at Speedy nearly 12 years ago as a customer service representative. Your current job at Speedy Supply is to manage this key account. You have held this assignment for nearly 3 years. Your duties include negotiating price, determining delivery timelines and insuring product quality. You are held directly responsible for any problems that may emerge and your substantial annual bonus is dependent on the profitability of this account. Sue Renolds is your counterpart at Magnificent. She has held the job for 5 years but, you have known her for nearly 10 years. *You have found working with her to be enjoyable. She recently sent you flowers after your father’s death. Two years ago, you won an award based on your joint efforts to eliminate waste and reduce the time that contracts take between your firms.* (She has worked her way up the organization at Magnificent. Many within her organization consider her to be a “rising star.” She has often stayed late at the office to work with you on problematic scheduling issues. Once when you were on vacation she worked out a complex problem with your staff in your absence. Two years ago, she won an award at Magnificent based on your joint efforts to eliminate waste and reduce the time in the contracting process between your firms. You well know that her team is committed to a corporate policy that makes various pledges, and this is part of their incentive system.) Magnificent was recently acquired by a large international conglomerate that has a notorious, much more individualistic employee bonus compensation plan. Under this plan an employee who performs well can make millions of dollars. The former owners of Magnificent feel the company will be better off under the new owner because of increasing industry competition and a gradual

redefining of the market place. [*You have spent the last month discussing with her how the recent acquisition of Magnificent might affect both of your businesses*]. She is slightly nervous about what the acquisition will mean for her. (The difference between the cognitive trust vignette is in parenthesis. The difference of the affective trust vignette is italicized and in brackets)

After reading the paragraphs the participants were asked to answer a questionnaire developed by McAllister (1995) designed to determine if trust in a given situation is cognitive or affective. This measure consists of 6 items used to assess levels of cognition-based trust and 5 items to measure affective-based trust. Respondents indicated on a scale of from 1 (strongly disagree) to 7 (strongly agree) their agreement level with statements about their dyad partner. The measures have a Cronbach's alpha of .91 for cognitive-based trust and .89 for affective-based trust (See table 1).

Upon completion of the trust measurement questionnaire, half of those that were assigned a cognitive trust vignette and half that were assigned the affective trust vignette were handed a message that violates trust. The message read:

MEMO FROM SUE RENOLDS

I regret to inform you that effective immediately your contract must be renegotiated. Consider this a formal RFP. Magnificent is facing significant industry pressures and as a result all suppliers are asked to reduce prices by 10% within the next 60 days. Those suppliers unable to meet this request will be replaced. We appreciate your responsiveness in the past and we look forward to future business with you. Thanks for your understanding and superior past performance.

The other half of both the cognitive and affective trust groups were given the following message. The message read:

MEMO FROM SUE RENOLDS

I wanted to thank you for your superior performance. Despite the recent acquisition of Magnificent, our organization is committed to our relationship. To reward you for your excellent performance we wish to extend our contract with you for an additional 12 months. Thanks for you hard work and superior past performance.

Following the memo participants were asked to complete a questionnaire. This questionnaire asked both sets of participants a series of questions aimed at uncovering the underlying attributions of the memo, if they thought the various structures and processes at Magnificent were responsible or if they thought Sue Renolds was responsible (See table 2).

Table 1
Interpersonal Trust Measures
(Based on a 1 to 7 scale)

Affect-based trust

- 1) We have a sharing relationship. We can both freely share out ideas, feelings, and hopes.
- 2) I can talk freely to this individual about difficulties I am having at work and know that (s)he will want to listen.
- 3) We would both feel a sense of loss if one of us was transferred and we could no longer work together.
- 4) If I shared my problems with this person, I know (s)he would respond constructively and caringly.
- 5) I would have to say that we have both made considerable emotional investments in our working relationship.

Cognition-based trust

- 1) This person approaches his/her job with professionalism and dedication.
- 2) Given this person's track record, I see no reason to doubt this/her competence and preparation for the job.
- 3) I can rely on this person not to make my job more difficult by careless work.
- 4) Most people, even those who aren't close friends of this individual, trust and respect him/her as a coworker.
- 5) Other work associates of mine who must interact with this individual consider him/her to be trustworthy.
- 6) If people knew more about this individual and his/her background, they would be more concerned and monitor his/her performance. (reverse scored)

Table 2

Attribution Measures

(Based on a 1 (completely disagree) to 7 (completely agree) Scale)

Sue Renolds

- 1) Sue is renegotiating supplier contracts to for her personal gain.
- 2) Sue is only a pawn of Magnificent's new management.
- 3) Sue can be trusted.
- 4) Sue has both our firms' best interests in mind.
- 5) Sue is motivated by prestige.
- 6) Sue is only interested in a bigger annual bonus.
- 7) Sue have complete control over how she handles the alliance partnership.
- 8) Sue has no say in how she does her job.
- 9) Sue is a great person.
- 10) Sue is independently responsible for a good relationship between our companies.
- 11) Sue likes to personal achievement at any price.
- 12) Sue is concerned with maintaining trust.
- 13) Sue is lying.
- 14) Sue is violating a trust.

Magnificent's Structures and Processes

- 15) Magnificent is greedy.
- 16) Magnificent is forced to respond to industry pressures.
- 17) Magnificent has the right to renegotiate contracts with any supplier.

- 18) Magnificent often violates its trusting relationship with suppliers by renegotiating.
- 19) We can trust Magnificent because of our contract with them.
- 20) We can trust Magnificent because we have developed joint processes that help facilitate our work.
- 21) Magnificent is trustworthy.
- 22) Magnificent would forego some profits to help our firm.
- 23) Magnificent would never forego profits even to help a supplier in need.
- 24) Magnificent is responsible for most of the actions their employees take.
- 25) A strong contract with Magnificent is key to be able to trust them.

Figure 1: The Reversal of Attribution

	Violation of Trust	Confirmation of Trust
Cognitive Trust	Attributed to the person	Attributed to the situation
Affective Trust	Attributed to the situation	Attributed to the person

References

- Brewer, M. B., & Kramer, R. M. (1986). Choice Behavior in Social Dilemmas: Effects of Social Identity, Group Size, and Decision Framing. *Journal of Personal and Social Psychology*, 50(3), 543-549.
- Doney, P. M., Cannon, J. P., & Mullen, M. R. (1998). Understanding the influence of national culture on the development of trust. *Academy of Management Review*, 23(3), 601-620.
- Dyer, J. H. (1996a). Specialized Supplier Networks as a Source of Competitive Advantage: Evidence from the Auto Industry. *Strategic Management Journal*, 17, 271-292.
- Elangovan, A. R., & Shapiro, D. L. (1998). Betrayal of Trust in Organizations. *Academy of Management Review*, 23(3), 547-566.
- Gulati, R. (1995). Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances. *Academy of Management Journal*, 38(1), 85-112.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Kelley, H. H. (1973). The Process of Causal Attribution. *American Psychologist*, 28, 107-128.
- Kelley, H. H., & Stahelski, A. J. (1970). Social Interaction Basis of Cooperators' and Competitors' Beliefs About Others. *Journal of Personal and Social Psychology*, 16(1), 66-91.
- Krull, D. S. (1993). Does the grist change the mill? The effect of the perceiver's inferential goal on the process of social inference. *Personality and Social Psychology Bulletin*, 19, 340-348.
- Lewicki, R. J., & Bunker, B. B. (1996). Developing and Maintaining Trust in Work Relationships. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in Organizations: Frontiers of Theory and Research*. Thousand Oaks: Sage Publications.

- Lewicki, R. J., McAllister, D. J., & Beis, R. (1998). Trust and Distrust: New relationships and realities. *Academy of Management Journal*, 23(3), 438-458.
- Lewis, J. D., & Weigert, A. (1985). Trust as a Social Reality. *Social Forces*, 63, 967-985.
- Malhotra, D., & Murnighan, J. K. (2002 (In Press)). The Effects of Contracts on Interpersonal Trust. *Administrative Science Quarterly*.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative Model of Organizational Trust. *Academy of Management Review*, 20(3), 709-734.
- McAllister, D. J. (1995). Affect- and Cognition-Based Trust as Foundations for Interpersonal Cooperation in Organizations. *Academy of Management Journal*, 38(1), 24-59.
- Menon, T., Morris, M. W., Chiu, C.-y., & Hong, Y.-y. (1999). Culture and the Construal of Agency: Attribution to Individual Verses Group Dispositions. *Journal of Personality and Social Psychology*, 76(5), 701-717.
- Morris, M. W., Larrick, R. P., & Su, S. K. (1999). Misperceiving negotiation counterparts: when situationally determined bargaining behaviors are attributed to personality traits. *Journal of Personality and Social Psychology*, 77(1), 52-67.
- Morris, M. W., & Su, S. K. (1999). Social Psychological Obstacles in Environmental Conflict Resolution. *American Behavioral Scientist*, 42(8), 1322.
- Nisbett, R. E., Caputo, C., Legant, P., & Marecek, J. (1973). Behavior as seen by the actor and as seen by the observer. *Journal of Personality and Social Psychology*, 27(2), 154-164.
- Roese, J., & Olson, J. M. (1995a). What might have been: The social psychology of counterfactual thinking. In J. Roese & J. M. Olson (Eds.), *Counterfactual Thinking: A Critical Overview*. Mahway, NJ: Lawrence Erlbaum.

- Ross, M. (1977). The intuitive psychologist and his shortcomings. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 174-220). New York: Academic Press.
- Ross, M., & Sicoly, F. (1979). Egocentric Biases in Availability and Attribution. *Journal of Personality and Social Psychology*, 37, 322.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross discipline view of trust. *Academy of Management Review*, 32(3), 393-404.
- Shapiro, S. P. (1987). The social control of impersonal trust. *American Journal of Sociology*, 93, 623-658.
- Uzzi, B. (1997). Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness. *Administrative Science Quarterly*, 42(1), 35-67.
- Zaheer, A., McEvily, B., & Perrone, V. (1998). Does Trust Matter? Exploring the Effects of Interorganizational and Interpersonal Trust on Performance. *Organization Science*, 9(2), 141-159.