

DECEPTION, TRUST, AND CREDIBILITY:  
A GRICEAN EXPLORATION

by

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## ABSTRACT

This research lays out the theoretical foundations and rationale for conducting an experimentally designed study to explore the effects of deception on trust in a negotiation context. Grice (1975) claimed all conversation is governed through an implicit rule known as the cooperative principle. The cooperative principle is satisfied when all the expectations of each conversation partner are met. These expectations include the four maxims of conversation: quantity, quality, relation, and manner. McCornack (1992) later included that intentional violation of the maxims of conversation to mislead another is a deceptive act, which is framed as information manipulation theory (IMT). Through operationalizing the concepts of Grice's maxims under IMT and deceptive communication, this study relied on an experimental design to measure perceptions of trust, message honesty, and message competency after deception had occurred in a context of negotiation. The findings suggest violations of Grice's maxims will be perceived as dishonest when the ground truth is known. There was a lack of findings in comparing the violations of Grice's maxims to perceptions of affective trust. This study also found the use of deception within a negotiation can negatively impact the perceived competency of the deceiver. Not only that, but there is a significant correlation between perceived honesty and perceived competency. Implications to further research and practitioners are discussed.

## DEDICATION

This thesis is dedicated to you, Mom and Dad. You have always seen the potential in me to succeed in what I do. Your love and support inspired this project.

## LIST OF ABBREVIATIONS AND SYMBOLS

$\alpha$	Cronbach's index of internal consistency
$df$	Degrees of freedom: number of values free to vary after certain restrictions have been placed on the data
$F$	Fisher's $F$ ratio: A ration of two variances
$M$	Mean: the sum of a set of measurements divided by the number of measurements in the set
$p$	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
$r$	Pearson product-moment correlation
$<$	Less than
$=$	Equals to

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## CHAPTER 1: RATIONALE

What happens when people encounter language that goes against their expectations and assumptions? These encounters violate principles that are implied through repeated behaviors in conversation (Grice, 1975). However, when these principles are thought to have been purposefully violated, the message created is perceived as a lie (Levine, 2014; Matsumoto, Frank, & Hwang, 2013; McCornack, 1992). Most people would likely believe deceptive tactics utilized in communication negatively impacts trust in a relationship, yet research has shown that this is not always the case. The influence lying has on trust in a relationship can be positive; in the case of an altruistic lie, that is a deception which benefits both parties—the lie can increase trust (Levine & Schweitzer, 2015). As is commonly viewed, lies, do not always function for the benefit of the receiver or a relationship. There are times when the only person benefiting is the one who is developing the falsifications. More specifically, the purpose of this study is to evaluate how deceptive messages impact perceptions of trust (see Swift & Hwang, 2013), credibility, and competency within the context of negotiation. The study seeks to statistically test how the violations of each of the four maxims of conversation coined by Grice influence a receiver's perception of the sender's trustworthiness.

Research has found that intentional violations of Grice's maxims lead to a decrease in perceptions of message honesty (McCornack, Levine, Solowczuk, Torres & Campell, 1992; Yeung, Levine, & Nishiyama, 1999). This means that violating Grice's maxims can make a

person seem deceptive, yet research does not tell us how this impacts the perceptions of trust receivers have for the deceiver, nor does research tell us how these perceptions of honesty and competency differ when in the context of negotiation. This study will seek to measure trust via the manipulation of information through violations of Grice's maxims during interaction. In addition, this study seeks to apply the context of negotiation to the literature on violations of Grice's maxims by adapting previous research (McCornack et al., 1992; Yeung et al., 1999) to a negotiation context. In summary, this study aims to expand the research on Grice's maxims through the additions of trust and negotiation as variables of interest.

## CHAPTER 2: LITERATURE REVIEW

*Do you solemnly swear to tell the truth, the whole truth, and nothing but the truth? So, help you God.* That is the probable question witnesses must answer in front of lawyers, jurors, and the judge in a court of law. What is telling the truth? How does that differ from telling the *whole* truth? These are academic questions worthy of further explication. In academia, researchers try to uncover constructs and concepts that lead to a greater understanding of a certain truth and ascribe value in these explorations in truth-seeking. *Telling* the truth requires knowing (or believing) something to be true and disclosing information in such a way that others can craft an understanding of a shared reality (see Masip, Garrido, & Herrero, 2004).

Truth-telling operates differently depending on context and relationships between communicators. For example, in the medical field, effective truth-telling differs from other contexts because a physician may not have access to all information needed to tell the *whole* truth related to a patient's well-being (Surbone, 2006). Within negotiation, the goal is to compete towards mutually beneficial goals. In this way, truth-telling has been shown to increase cooperation through competitive behavior. Thus, the more competitive the negotiation becomes, each party tends to cooperate more (Paese, Schreiber, & Taylor, 2003). The amount of truth people disclose with one another changes with the context, and this principle of negotiation impacts understanding in these interpersonal interactions.

## Deception

Matsumoto, Frank, and Hwang (2013) define deception as a superordinate-category that encompasses many actions, including lying. Matsumoto and others determine that the deliberate nature of lying can mean that deception is not always a lie. Instead, deception is an alteration of perception, with lying being a sub-type of deception that is specifically an intentional alteration of reality. As an illustration, a rabbit (e.g., prey) does not consciously choose its fur when employing camouflage, yet deception occurs nonetheless. According to Matsumoto and others, lying requires a lack of prior notification in the target, meaning that the receiver of the lie cannot know deception is occurring. A lie is a purposeful (Levine, 2014) deceptive act. However, deception does not require premeditation, and at times, deceivers may not realize the nature of their message until after it has been sent.

Researchers from disciplines such as psychology and sociology are interested in definitional constraints of the deception construct. Masip and others (2004) created a definition for deception using research from the fields of semantics, psychology, and communication to operationalize deception. The first component that makes deception unique is the notion of intentionality. This makes lies and deception differ from other forms of communication because deceivers are trying to warp the information they are giving in the hopes of misleading others (Masip et al., 2004). The second component of deception is the concealment, fabrication, and manipulation of information. Deception includes much more than just intentionally providing information that is not true, and Masip and others argue that there is a difference between *concealment* and *fabrication/manipulation*. Both concealment and fabrication are lies, but operate differently. *Concealment* is like a lie of omission, where crucial information is omitted from the message whereas *fabrication* is the presentation of false information as if it were true

(Masip et al., 2004). The final component of Masip and others' definition is that deception's purpose is to maintain a belief in other individuals that the deceiver knows or thinks to be false. However, the information presented does not have to be false information, rather the sender of the information must believe the information to be false (Masip et al., 2004).

The problem with Masip and others' (2004) definition of deception is that it loops lying and deception into the same category. As previously shown with the definitions from Matsumoto and others (2013) and Levine (2014), not all deception is intentional, but all deception alters the perception of the receiver. Lies also alter the perception of the reader *with* intention. For this manuscript, lying will be considered a sub-category of deception as in Matsumoto and others and Levine.

#### *Language and Deception.*

The impact language has on deception can be found in the way liars and deceivers fit the fabricated information into reality. Newman, Pennebaker, Berry, and Richards (2003) argue that there are three dimensions to deceptive language. First, Newman and others argue that deceivers reference themselves less because of a lack of ownership over their own statements. Second, they find that deceivers' guilty emotions leak out in their language. Finally, Newman and others point out that fabricating information requires large amounts of cognitive ability, meaning that deceivers' language is less complex. Overall, their research has shown that liars have less complex language, use less self-references, and show more negative emotions than truth-tellers.

McCornack (1992) suggested that research has two approaches to thinking about deceptive language. In the first approach, deceptive messages are seen as unique, strategic messages or as different types of messages. In the other approach, McCornack explains that deceptive messages are perceived as message forms that occur because the information within

the messages has been manipulated. McCornack argues that conceptualizing deceptive messages as strategies or types is problematic since the same types of deceptive messages can manipulate information differently.

*Grice's Maxims.*

Grice (1975) argued there are norms within conversation that humans follow. He referred to these principles as *conversational implicatures*, and explained that these norms penetrated conversations. He frames this argument around the idea that if people talked with phrases that were not fluent or common within their own language, then human communication would not make any sense—Grice refers to this as the “cooperative principle” (p. 45). There are four different categories that human conversations can be organized into, and by fulfilling these categories, a person will satisfy the norms subjected to them in society. These *maxims*, are quantity, quality, relation, and manner. Each of these four categories also have *submaxims*, that dictate norms followed in conversation.

*Quantity.* The amount of information an individual shares in dialogue falls under the maxim of quantity (Grice, 1975). Quantity is about having a balance of information that does not overwhelm the other person, but is not too vague. Grice admits that over-informing someone does not directly violate the cooperative principle, but it can cause confusion or bring up topics that are not relevant, which can violate the other maxims (see below). McCornack (1992) argues that the manipulation of the maxim of quantity includes information that satisfied the other maxims of quality, relevance, and manner, yet omitted information that may be harmful to disclose. Violating the maxim of quantity makes the producer seem to be straightforward and truthful without really disclosing anything dangerous, similar to a lie of omission. The importance of the maxim of quantity is in how the amount of information shared over language

really impacts the perception of the receiver. Oversharing or under-sharing violates what the receiver is expecting to get from the sender. For illustration purposes, consider the professor whose course meets during a fifty-minute period, yet they attempt to fit two hours-worth of information into the allotted class time. The students of the class are not able to keep up with the amount of information shared and may feel negatively towards the professor who violates an expectation of quantity of information.

*Quality.* Telling the truth and ensuring shared information is accurate is governed by the maxim of quality (Grice, 1975). Violations of quality stem from inaccurate messages, intentional or not. Fallis (2012) points out that the maxim of quality has an “important connection” (p.565) with the act of lying. Although the violation of the maxim of quality *is* lying if done purposefully, deception can be produced through violating the other maxims (Dynel, 2011). Evidence that the maxim of quality is perceived as deceptive, even across cultures (Yeung, Levine, & Nishiyama 1999), points to the impact violations of quality make on perceptions of honesty.

Quality’s importance in conversations shows in the usefulness of the information shared. Imagine an individual sharing information that is inaccurate, regardless if the sender recognizes the factual basis of their claim. The receiver is now suffering from poor fidelity in their reception of *facts*, possibly leading to poor performance of a task or perpetuation of ignorance. Violating quality fails the cooperative principle through the receiver’s lack of knowing truthful information since the receiver enters the conversation with the understanding that the information presented will be true or believed to be true.

*Relation.* The maxim of relation can be influenced by quantity because it relates to the relevancy of the information being shared (Grice, 1975). Relation is violated by irrelevant

information, although Grice admits that this maxim can change in the middle of a dialogue, making it difficult to be considered a norm since there may be several topics being addressed in the conversation with multiple people. As McCornack (1992) points out during an evaluation of deceptive messages, violations of relation may fail to provide any harmful or sensitive information that impacts the relationship, making these violations of relation more like extreme violations of quality. Irrelevance of information takes away from the meaning of the exchange between two people since it changes the topic so abruptly and without cause. It forces the receiver to address the new topic at hand, taking away from the previous topic being discussed. This increases the equivocal nature of speech—potentially being interpreted as a deceptive maneuver.

*Manner.* The last maxim is not about the information that is exchanged, but rather how the information is exchanged (Grice, 1975). Organization of information is key in the maxim of manner, as Grice thinks that order, brevity, and clarity are all essential to satisfying manner. Manner is important to maintaining the cooperative principle because the receiver expects the information to be presented in a clear way that is understandable. An example of manner being violated would be like an employer explaining a task to their employee, yet the employer keeps jumping back and forth between different steps of the task. The employee has the expectation that the employer will explain how to accomplish the task step by step, yet the information is difficult to navigate since it is so jumbled. Manipulating manner is accomplished through the use of ambiguity, which can still satisfy the other maxims fully when employed in speech. As mentioned before (Levine, 2014; Masip et al., 2004; Matsumoto et al., 2013), the intent of the deceiver is what makes violations of manner a lie or form of deception.

*Information Manipulation Theory.*

McCornack (1992) suggests that deception functions through the violation of norms in exchanges. Information manipulation theory (IMT) explains how deceptive messages form in conversation, and examines what happens to information while being processed into a communicative message (McCornack, 1992). IMT claims that when humans consider that a message might be deceptive, a conclusion is reached because the message directly violates one, or more, of the Gricean maxims (McCornack, 1992). Violating maxims, thus violating the cooperative principle, caused the information being shared to be irrational or disconnected, so IMT makes the claim that the lack of logic and connection is the foundation of deception (McCornack, 1992). Additionally, IMT explains why deception works. Not only does the speaker believe that his or her audience is adhering to conversational norms, but the audience assumes that the speaker will follow those same principles, making it possible to manipulate the information through what McCornack (1992) labels “covert deviations” (p.6).

McCornack, Levine, Solowczuk, Torres, and Campbell (1992) found that violations of the maxims reduced perceptions of honesty within the context of romantic relationships. Specifically, quality was seen as a more deceptive strategy in conversation than the other maxims even though each of the violations were viewed as less honest than the completely honest statement. Yeung and others (1999) replicated the “Committed Chris” scenario from McCornack and others in Hong Kong to see how deceptive messages would be perceived interculturally. They found that the participants also perceived violations of quality as less honest than any of the other violations.

### *Deception Detection.*

DePaulo and others (2003) reviewed relevant literature using a meta-analysis on cues to deception and found several consistent clues across studies about lie detection. They found that across all studies available at the time, and on average, liars provide less information than truth-tellers. This finding is in line with McCornack's (1992) notion that the purposeful violations of Grice's maxims are how messages function deceptively. This finding also points to the notion that liars tend to violate quantity more than truth-tellers.

DePaulo and others (2003) also discovered that lies sound less plausible, seem less likely to be structured, and are more likely to make people have doubts about the information. This notion fits the violation of quality as a deceptive act; the information that the sender is providing is purposefully faulty. Along with presentation, liars seem to care less about the conversation and are more ambiguous in nonverbal gestures. DePaulo and others did find that, according to impressions, liars sound more uncertain than truth-tellers.

The last finding illustrated by the work of DePaulo and others (2003) is that liars disclose negative messages more than truth-tellers. Liars also tend to stick to the key component of their stories that are lies, meaning that they keep coming back to the specific part of their story that is false or fabricated. It is important to note that although their findings are statistically significant, DePaulo and others admit that most of their explorations resulted in insignificant or unimpressive conclusions. What is also of importance, is that the findings shared by these researchers are vague and lack utility; that is, they are difficult for communicators to pick up on in conversation.

Research into deception detection has also extended to dodging questions. Research suggests that people can detect certain types of topic avoidances and these avoidances can impact

trustworthiness (Clementson, 2018). Detection of these avoidances also differ with party affiliation, given that a stronger affiliation with a political party will significantly lower the ability to detect topic avoidance.

### Trust

Olekalns and Smith (2009) argue trust emerges from an individual's expectations of intentions from another. Essentially, trust is how people expect to be treated by others, with a low amount of trust being an expectation of harmful intentions. They also argue judgements of intentions often happen rather quickly through first impressions. Trust can be found in interpersonal relationships when the individuals involved find competence and vulnerability within each other (Pearce, 1974). This lays the groundwork for the subcomponents of trust—cognitive and affective trust (McAllister, 1995). Cognitive and affective trust function differently, with different consequences (Olekalns & Smith, 2009).

For certain types of relationships (e.g. co-worker, school teacher, students in the same class etc.) to function, there must be an understanding of the other's competence and intelligence. McAllister (1995) writes “the amount of knowledge necessary for trust is somewhere between total knowledge and total ignorance” (p. 26). Knowledge is the foundation for the start of trust, and the more knowledge people have, the less they need to rely on trust. Research into trust has led scholars to believe that competence, responsibility, reliability, and dependability all are central to the establishment of trust in relationships (McAllister, 1995), supporting Pearce's (1974) conceptualization of interpersonal trust. Swift and Hwang (2013) argue cognitive trust is used to reduce uncertainty because of its growth through shared experiences. Pearce (1974) and McAllister (1995) show that cognitive ability is not the only trait trust is placed in, but it is also found in emotional (i.e. affective) connections.

Affective trust is what Pearce (1974) labeled as *trusting behaviors*, and these behaviors increase vulnerability within a relationship. Affective trust is grown through emotional experiences where individuals express compassion and concern for the well-being of the other (McAllister, 1995). Swift and Hwang (2013) note that “affective trust is a result of personality cues and sensory connections” (p. 24). Affective trust, essentially, is a series of emotional connections made with another individual that increase trustworthiness in a relationship. Counter to cognitive trust, affective trust is the trust individuals have in others to do what is best for them.

Affective and cognitive trust may have opposite impacts on deception in negotiation (Olekalns & Smith, 2009). High cognitive trust was found to increase the use of deception while high affective trust decreased deception. Olekalns and Smith (2009) argue that high affective trust combined with a lack of accountability can have negative implications on team performance in negotiations. High affective trust is also believed to increase the use of misrepresentation within the context of negotiations.

### Negotiation and Deception

Negotiation is used to communicate value. These interactions can occur within formal functions and within informal relationships. What this means is that negotiation can be a form of communication between two economic entities (individuals, groups, corporations, etc.), or just a form of communication for managing conflict within relationships (platonic or romantic). Putnam and Roloff (1992) argues that all communication involves negotiation; both are intertwined. Negotiation is a context rich with opportunities for communicators to strategically rely on information-sharing, omission, and misinformation (i.e., deceptive tactics) to accomplish their goals. Similar to how deception is enacted in interpersonal relationships, verbal statements (i.e., lying) is not the only way communicators might deceive each other. Deception, hiding

prices, not seeming too eager to reach an agreement all play into the success of a negotiator (Boles et al., 2000). Actions such as bluffing and misdirection are ways individuals manipulate information during negotiations.

Negotiators can use an arsenal of strategies when trying to gain the upper hand in a negotiation; however, bluffing is one specific form of deception negotiators may use when discussing price. Carson (1993) writes about bluffing in negotiation in this way:

There are various ways in which the seller might attempt to bluff the buyer in order to mislead her about his position. 1. He might set a very high “asking price,” for example, \$100,000. 2. He might initially refuse an offer and threaten to cut off the negotiations unless a higher offer is made while at the same time being prepared to accept the offer before the other person breaks off the negotiations. (I have in mind something like the following. The prospective buyer offers \$80,000, and the seller replies: “I want more than that; I’m not happy with \$80,000 why don’t you think about it and give me a call tomorrow.”) 3. He might misrepresent his own bargaining position. (p. 319)

According to Carson, scenarios 1 and 2 are not lies because there is not fabrication of information, but a misrepresentation of bargaining position found in scenario 3 is a fabrication, resulting in a lie. However, according to previous definitions discussed above related to lying and deception (Levine, 2014; Masip et al., 2004; Matsumoto et al., 2013), scenario 1 and 2 are deceptive. Scenario 2 *is* a lie since the seller is deliberately misrepresenting his feelings towards the asking price of a buyer. Scenario one would not be a *lie* but be *deceptive* because the seller is not intentionally misleading a potential buyer, but instead setting a high price in the hopes that someone attempts to purchase the house for more than it is worth. Bluffing is also believed to be consciously making a misstatement, hiding important facts, and exaggerating one’s position or

power, which are all tactics under considerable scrutiny and close to lying (Provis, 2000).

Bluffing, however, is not the only deceptive tactic negotiators use to gain an upper hand, they often rely on misinformation.

In order for negotiations to function, (mis)information is shared between the two or more parties. The desire, and need, to use information as a commodity allows negotiators to consider the use of deception (Boles et al., 2000). As seen in scenario 3 presented by Carson (1993), misrepresentation is a considerable strategy for negotiators where they can present “highly desirable outcomes as the only outcomes a negotiator might accept” (Boles, et al., 2000, p. 236). This observation points back to the argument that deception is an alteration of perception (Matsumoto et al., 2013) since the negotiator is trying to alter the perceived outcomes of their negotiation partner. However, deception in negotiation is an effective communication strategy that does not always result in a loss of cooperation from the other party.

#### *Deception Increasing Trust.*

Research has also shown that in certain situations, deceptive messages can actually increase trust between partners. Olekalns and Smith (2009) measured deception and trust within a negotiation scenario and found that some uses of deception increase trust. They found that when negotiators are in a relationship with high dependence and low amounts of optimism is expressed, direct lies are more likely to be used. This study, as well as a set of studies by Levine and Schweitzer (2015) point to the benefit of deception in negotiations where both parties understand each other’s bargaining positions. Levine and Schweitzer found that altruistic lies (specifically lies that would result in a payout for both parties) increased trust between partners. Even more, participants in the study trusted altruistic liars more than selfish truth-tellers—specifically truth-telling that would result in the truth-teller receiving payout while the partner

received nothing. These studies show that there may be an increase in trust when participants believe that the other is lying for mutual benefit, thus illustrating the complex nature of deception and supporting the proposition that deception is not always a negative communicative strategy.

Based on the previous literature and theoretical underpinnings on Grice's maxims and trust, the following questions guide this thesis:

*RQ1: How does the use of deception in negotiations influence perceptions of trust?*

To further examine how deception and trust interact with one another in the context of negotiation, a more refined analysis of trust is warranted. That is, as mentioned previously, trust is a two-dimensional construct; affective trust and cognitive trust are concepts which make up overall trust. Therefore, to examine if violations in expected speech might influence trust the following two questions were asked:

*RQ2a: How do violations of Grice's maxims influence perceptions of affective trust in negotiations?*

*RQ2b: How do violations of Grice's maxims influence perceptions of cognitive trust in negotiations?*

### Honesty and Competence

McCornack and others' (1992) empirical test on IMT evaluated perceptions of message honesty and message competency. The study evaluated honesty and competency to evaluate whether information could be manipulated in ways other than veracity (i.e. by violating the other maxims of conversation rather than just quality). Their findings point to the notion of honesty and competency being negatively impacted by the violation of Grice's maxims. For this study, competency is defined as the possession of traits which improve intellectual standing such as cleverness, creativeness, efficiency, and knowledgeable (Liu & Lin, 2018). Therefore, the

transfer of IMT to the context of a negotiation needed to be measured for consistency, therefore the following hypotheses were formed as a replication of previous work by McCornack and his colleagues:

*H1: Violations of Grice's maxims will cause a decrease in perception of honesty within a negotiation context.*

*H2: Violations of Grice's maxims will cause a decrease in perception of competency within a negotiation context.*

These two hypotheses predict that the variables of honesty and competency will decrease as deception occurs because the use of deception is often a violation of expectations, and therefore tends to lower perceptions of how one feels about another person. The assumption that these two previous hypotheses are supported dictates that a correlation between honesty and competency should be present. To further examine these variables and the relationship of the previous two hypotheses, a third hypothesis is posited:

*H3: Perceptions of honesty and perceptions of competency will be positively correlated in a context of negotiation.*

Two essential differences between McCornack and others (1992) and this current study is the inclusion of the measurement of trust and the application of IMT/Grice's maxims into a context of negotiation; however, the concept of cognitive trust is similar to the concept of competency. In this study, cognitive trust is defined as the trust placed in another intellect or ability while competency, as mentioned before, is defined as the possession of traits which improve intellectual standing such as cleverness, creativeness, efficiency, and knowledgeable (Liu & Lin, 2018). Because of this similarity, a fourth hypothesis was created:

*H4: Cognitive trust and perceptions of competency will be positively correlated.*

All of the above guide this study in its pursuit to understand deceptive language and its interaction with trust, perceived honesty, and competency. Now that the three research questions concerning Grice's maxims and trust, as well as the four hypotheses which extend the research of McCornack and others have been discussed, the methodology of this study will be covered.

## CHAPTER 3: METHOD

### Participants and Procedure

After obtaining Institutional Review Board approval, 195 participants were recruited for this study. Participants were recruited from two introductory public speaking courses at a large Southeastern university. Ages of participants who volunteered ranged from 18 to 24 years ( $M = 19.65$ ,  $SD = 1.08$ ). Sixty percent of participants self-reported their gender identity as female, while 40 percent self-reported as males. Ethnicity was distributed as would be expected by the student body at this university with 74.9% of participants being White/Caucasian, 15.4% African-American, 3.6% Hispanic, 1.5% Asian, and 4.6% reporting that other ethnicities make up their identity.

The researcher attended class at the start of the lecture and made an in-person announcement to the students in the class inviting them to participate in a study on language and trust. No student was required to participate in the study. After reading the consent form and agreeing to participate the students completed the study via paper format. The professors of the two large lecture classes where participants were recruited awarded the student-participants minimal extra credit for participating in the study.

The study relied on a between-subject design with five conditions (see Appendix A). This was accomplished by randomly distributing the negotiation scenario, message example, and evaluation on paper to the participants during the class period. Each student randomly received one of the five conditions in their paper packet containing the negotiation scenario, the controlled

response (one of five conditions) and all of the relevant measures and covariates (e.g., demographic questions; see Appendix D)

### Measures and Covariates

#### *Deception (Grice's Maxims).*

In McCornack's original article on IMT, he generated a list of three scenarios where deception was operationalized using violations of Grice's maxims. For this study, messages from the empirical test of IMT by McCornack and others (1992) were adapted to fit into a negotiation context. Messages have been adapted from the "Committed Chris" scenario. Instead of being a conversation from a romantic relationship, this study's messages were structured around a negotiation on purchasing (see Appendix A). Instead of the name "Chris," this study used the name "Taylor" in order to better control for gender neutrality (i.e., the perception that *Taylor* is male or female). The participant is asked to take on the role of the manufacturer in the business negotiation scenario and *Taylor* is described as a purchaser for another company. After reading the scenario, which ends with the participant addressing *Taylor's* recent decline in purchases, the participants then read one of four message responses that violate one of the maxims, or they received and read a fifth control message that does not violate any of them—that is, the control condition/truthful message (see Appendix A for all of the conditions and messages).

#### *Trust.*

Cognitive and affective trust are two dimensions that make up the construct of trust (see McCallister, 1995; Swift & Hwang, 2013; Olekalns & Smith, 2007; Levine & Schweitzer, 2015). Accordingly, participants were asked to rate the trust they have in *Taylor* after reading the negotiation scenario and *Taylor's* response using a seven-point Likert scale measurement

(Strongly Agree—Strongly Disagree) adapted slightly from Swift and Hwang (2013) to fit this negotiation context.

#### *Honesty and Competence.*

Participants were asked to rate message honesty and competence using a seven-point semantic differential borrowed from McCornack and others (1992) that measures the message's honesty and competence (see Appendix B). This study relied on a negotiation context whereas the previous study was from a relationship conflict context. However, the items fit this context as both require interpersonal negotiations to take place. To evaluate *H1*, the mean score of message honesty were compared among the conditions, while *H2* was evaluated by comparing the mean score of message competency among the conditions.

#### *Demographic Variables.*

To examine and control for demographic variables (i.e., covariates), participants reported their age, gender, and ethnicity.

### Research Design and Analyses

The study was conducted during class and on paper, so each participant received a packet that includes the negotiation scenario, one randomly assigned condition, and evaluation questions and scales/measures for trust, honesty, and competence (dependent variables). After reading the negotiation scenario, participants read the response from *Taylor* that either violates one of Grice's maxims (independent variable) or is an honest message (control group). Participants then reported their responses via a Likert-scale based measurement survey where they reported their trust of *Taylor* and the message's honesty and competence.

Upon collection of data, the impact of deception on trust (i.e., *RQ1*) was examined by calculating the mean trust score for all of the four maxim violations and comparing it to the mean

trust score of the control group (i.e., truthful condition). The mean trust score was calculated by combining the scores for affective trust and cognitive trust. Given trust is a two-dimensional construct comprised of cognitive and affective trust concepts, each was calculated independently as well via the means of the Likert-scale responses from the questions making up those measures. Combining both components and examining the relationship of overall trust to the conditions allowed for an initial and broad examination of how uses of deception (e.g., violating Grice's maxims) in general might differ from honesty.

To examine potential differences that violations of the individual maxims may have on trust (i.e., *RQ2a & b*), and to add a deeper level of granularity in the study's analysis, a statistical ANOVA inferential test was used to compare the mean trust scores across each of the four types of violations (and the control condition) to determine if differences in levels of trust exist across the different types of violations during negotiation. This allowed for differences in trust across the different types of deceptive maneuvers (i.e., the maxims violations) to be examined.

In order to evaluate *RQ2a*, a comparison of means across the conditions was conducted to examine differences of the cognitive trust scores. Accordingly, to examine *RQ2b* the same inferential examination was conducted to test for differences in the cognitive trust scores across the conditions.

The testing of *H3* and *H4* was executed by calculating a Pearson correlation coefficient for each. For *H3*, the relationship between the mean perceived message honesty score and the mean perceived message competency score was calculated. The evaluation of *H4* examined the relationship between the mean cognitive trust score and mean perceived message competency score to check for a correlation between the two. Now that this study's methodology has been explained, the results will be covered.

## CHAPTER 4: RESULTS

After data collection and imputation of the raw scores from participant's responses, Microsoft Excel was used for ease of input and transferability of the raw data. Next, the data was transferred into IBM's software program SPSS to compute all descriptive statistics and analyze and compare means for inferential statistics.

### Testing Data Assumptions and Removing Outliers

In order to examine the data visually, all measures were checked for normalcy, skewness, and kurtosis and scatter plots of variables were observed. The results of this process was that all of the study variables were within acceptable parameters; that is, all variables were normally distributed.

For the analysis of *RQI*, three participants were temporarily removed (just this single exploration) because their average trust score (affective + cognitive score) were more than two standard deviations from the mean, which made them outliers. According to Bakker and Wicherts (2014), outlier removal should have a predetermined rule before analysis. The rule used in this study was Chebyshev's inequality, or any individual mean score outside of two standard deviations from the group mean for the individual variable in question (Amidan, Ferryman, & Cooley, 2005). No outliers were present for the variables: affective trust, cognitive trust, message honesty, and message competence. After removing the outliers for the computation of the overall trust score comparisons, all individuals remained in the dataset for the remaining inferential tests.

## Trust

The reliability of Swift and Hwang's (2013) measure for affective and cognitive trust was evaluated. Affective and cognitive trust are concepts that make up a two-dimensional construct, trust, therefore a Confirmatory Factor Analysis (CFA) was used to examine whether the measures were reliable in the context of this study. Analysis revealed affective and cognitive trust correlate well overall based on the determinant score of .26, and no significantly high correlation scores for individual items. A Bartlett test of sphericity (Jackson, 1993) also determined a statistical significance ( $p < .001$ ). According to March and Hocevar (1985) and based on the conceptual and methodological constraints of CFA the 7 items making up trust (4 items for affective trust and 3 items for cognitive trust), all the questions loaded onto each of the two factors and there was sufficient reliability across each of the two concepts (alpha score reported below).

The pretest means of participants who received five different conditions were compared using a one-way ANOVA. No significant differences were found ( $F(4, 188) = .529, p > .05$ ). For means and standard deviations, see Table 1 (see Appendix D).

### *Affective Trust.*

Cronbach's Alpha was used to test internal consistency for this measure (Matkar, 2012), which determined that affective trust was not within an acceptable percentage ( $\alpha = .57$ ). To further examine whether the pretest means of participants who received five different conditions might differ, these were compared using a one-way ANOVA. No significant difference was found ( $F(4, 190) = 1.12, p > .05$ ). For means and standard deviations, see Table 2.

### *Cognitive Trust.*

The reliability of the measures for cognitive trust were within acceptable parameters ( $\alpha = .73$ ). A one-way ANOVA was computed comparing the cognitive trust scores of participants who were given the different conditions (violations of Grice's maxims or complete honesty satisfying the maxims). A significant difference was found among the conditions ( $F(4,188) = 3.4, p = .014$ ). A Bonferroni post hoc test was used to determine the nature of the differences between the conditions (Keppel & Wickens, 2004). This analysis revealed that participants who were given the violation of quantity reported a lower cognitive trust score than participants who were given the violation of manner ( $p = .03, r = .065$ ). Participants who were given the control message, violation of quality, and violation of relation were not significantly different from either of the other groups. Means and standard deviations can be found in Table 3 (Appendix D).

### Message Honesty

The scale for perceived message honesty had an acceptable reliability score ( $\alpha = .88$ ). A one-way ANOVA was computed comparing reported perceptions of message honesty of participants who received different message conditions. A significant difference was found among the conditions ( $F(4, 180) = 27.01, p < .001, r = .375$ ). The means and standard deviations can be found in Table 4 (Appendix D). Further analysis using a Bonferroni post hoc examination determined the specific differences between the conditions. Participants who received the control condition reported higher perceived message honesty than participants in the quality violation ( $p < .001, r = .375$ ), relation violation ( $p < .001, r = .375$ ), and the manner violation ( $p < .001, r = .375$ ). Participants who received the quantity violation were not significantly different from those who received the control. Participants who received the quantity violation reported higher message honesty than those who received quality violations ( $p$

< .001,  $r = .375$ ), relation violations ( $p < .001$ ,  $r = .375$ ), and manner violations ( $p < .001$ ,  $r = .375$ ). Participants who received quality violations reported lower perceived message honesty than those who received relation violations ( $p = .02$ ,  $r = .375$ ) and manner violations ( $p = .002$ ,  $r = .375$ ). Participants who received relation violations were not significantly different from those who received the manner violations.

### Message Competence

The scale for perceived competence had an acceptable reliability score ( $\alpha = .83$ ). A one-way ANOVA was computed using the perceived competency scores of participants across the conditions. Means and standard deviations can be found in Table 5 (Appendix D). A significant difference was found among the conditions ( $F(4, 183) = 6.1$ ,  $p < .001$ ). A Bonferroni post hoc test compared the means across all conditions. Analysis revealed participants who received the control condition reported higher message competency than those who received the quantity violation ( $p = .001$ ,  $r = .127$ ) and the quality violation ( $p < .001$ ,  $r = .127$ ). Participants in the control group were not significantly different from those who received relation violations and manner violations. Participants who received quality violations reported lower message competency than participants who received manner violations ( $p = .019$ ,  $r = .127$ ). Participants who received quantity violations reported lower message competency than those who received the manner violations ( $p = .042$ ,  $r = .127$ ).

Participants who received quantity violations were not significantly different from those who received quality violations and relation violations. Participants who received quality violations were not significantly different than those who received relation violations. Participants who received relation violations were not significantly different than those who received manner violations.

## Correlations

The relationship between perceived honesty and perceived competence was evaluated. In order to evaluate *H3*, a Pearson correlation coefficient was calculated for the relationship between participants' perceived message honesty mean score and perceived message competency mean score (Adler & Parmryd, 2010). *H3* was supported. A positive correlation was discovered ( $r = .439, p < .001$ ), indicating a significant and positive linear relationship between message honesty and message competence. Participants who perceived more truth-telling tend to perceive more competence in the message source.

The relationship between cognitive trust and perceived competency was also evaluated through *H4* and was tested using a Pearson correlation coefficient to find a relationship between participant's mean cognitive trust score and mean perceived message honesty score. This hypothesis was supported. A positive correlation was discovered ( $r = .456, p < .001$ ), indicating a significant and positive linear relationship between message competence and cognitive trust of *Taylor*. Participants who perceived more message competency tend to have more cognitive trust in *Taylor*.

## CHAPTER 5: DISCUSSION

This study evaluated the influence deception has on trust, honesty, and competency within the context of a negotiation. Conversational norms known as Grice's maxims were used and violated in order to distinguish between honest and dishonest language. Quantity, quality, relation, and manner were all separated to operate as specific types of deceptive behavior through violating their premises (McCornack, 1992; Yeung, Levine, & Nishiyama, 1999). Because deceptive behavior can often bring negative assumptions, this study sought to test the influence deceptive language has on trust. Trust was defined as two separate concepts which correlate together to form the construct of trust: affective and cognitive. Affective trust was defined as the emotional capital shared between two people, while cognitive trust was defined as the trust one person holds in another's intellectual ability (Pearce, 1974; McAllister, 1995; Olekalns & Smith, 2009; Swift & Hwang, 2013). This study also sought to discover how information manipulation theory (IMT) would function within the context of a negotiation and served as a replication of some of McCornack's previous work. Specifically, this study replicated how the intentional violations of Grice's maxims during a conversation change the perceptions of the message's honesty and competency.

This study was formed on the premise that deception happens everywhere around the world (e.g., Global Deception Research Team, 2006) and in many types of conversations. The importance of studying deception is found in how prevalent the act of deceit is in every form of

communication from interpersonal, intercultural, and organizational. Therefore, a greater understanding of deceptive communication will lead to a greater understanding of human communication through the analysis of variables influenced by deceit. This study also focused on the context of negotiation because there is little research that takes concepts and frameworks from the discipline of communication studies and applies them to the field of negotiation. It is important for the concepts manufactured in the field of communication studies to translate to other disciplines in order to maintain validity and practicality.

This study found that violating Grice's maxims have a small impact on trustworthiness within the context of negotiation. It also found that violating Grice's maxims changes the way people perceive competency within a negotiation. Specifically, intentionally violating Grice's maxims will negatively influence a person's perception of the communicator's competency. All of these findings come with the assumption that the message receiver knows the ground truth, as they did in this study. However, most of the time targets of lies and observers of deception do not know the actual information that is privy to the person lying. Now that the study's definitions, methodology, and finding have been briefly covered, the findings generated and led by the research questions and hypotheses are discussed and explained.

#### The Construct of Trust and the Concept of Affective Trust

Trust was broken down into two concepts in this study, and the findings point out each concept differs from the other. The lack of findings for *RQ1* and *RQ2a* point to an idea about establishing trust. Swift and Hwang (2013) used the measures for affective and cognitive trust in an experiment where the participant evaluated the trust they had in an actual co-worker. In their article, cognitive and affective trust could be evaluated not through a vignette, but a concrete relationship. This may explain the difficulty in establishing affective trust between a human

being and a character over the course of a paragraph. The concept of affective trust is difficult to measure when applying it to a negotiation scenario with a character whom there is little context to the relationship. Affective trust is measured through emotions, feelings, and social history (Swift & Hwang, 2013), and each of these three components were missing within the vignette. This study controlled for ambiguity by disclosing the ground truth to the participant, which could explain the lack of findings with affective trust since the participant knows *Taylor* has started to purchase product from another company. In addition, *Taylor* had been purchasing product from the participant for over a year, which could come with an expectation of loyalty. Affective trust may have been compromised before *Taylor* responded if this is the case. All of these findings point to the complexity of affective trust. Although the confirmatory factor analysis revealed that affective and cognitive trust made up the larger trust construct from the data, affective trust may have been much more difficult to report for participants – because as mentioned previously, they may have lost it before ever getting to the end of the vignette.

#### Cognitive Trust and Deception

The evaluation of the relationship between violating the maxims of conversation and cognitive trust produced results which are significant yet contain very little practicality. *RQ2b* did have a significant finding between quantity and manner violations. This finding suggests a lie that is more thought out (e.g. a lie that dodges the questions through creating ambiguity) is seen as more intelligent or appropriate than a violation of quantity. In this study, the violation of quantity did not provide the expected amount of information, which could explain the lack of cognitive trust reported by participants. Another explanation could be that the violation of manner implemented ambiguity by disclosing that business has been successful. By eluding the accusation, *Taylor* instead inserted a report of success, which could have increased participant

trustworthiness in his/her intellectual ability. Interestingly enough, the control message (complete disclosure and honesty) did not have any statistical significance to the other conditions when comparing cognitive trust. This could be another place where knowing the ground truth may have manipulated the expectations of the participant. Negotiation, as previously mentioned, is used to communicate value. Participants may have been expecting *Taylor* to lie because they knew the ground truth and were possibly impressed with *Taylor's* violation of clarity. Other research has pointed to the idea that deceptive strategies in negotiations will decrease trustworthiness, especially if the deceiver is using a known tactic of deceptive negotiation (Wong and Howard, 2018). Although cognitive trust is higher for violations of the maxim of manner, it does not mean that the participant would be willing to negotiate again with *Taylor*.

#### Perceptions of Honesty

The first research hypothesis has interesting implications to the literature because of its context, applying a previously found relation between perceived message honesty and perceived message competency in the negotiation. The findings support *H1*, and suggest when the ground truth is known within a negotiation, intentionally violating the maxims will be perceived as deceptive. Since the violation of quality was statistically lower in perceived message honesty than any other condition, it supports the notion of quality as a lie. One interesting finding was the lack of statistical difference between the control condition and the violation of quantity. Not only that, but the mean message honesty score of the violation of quantity was higher than the mean score of the control. This lack of statistical difference between the control message and violation of quantity message can be explained since, in this study, the violation of quantity was not a lie (see Appendix B).

The first research hypothesis was also important to the replication of McCornack and others' (1992) empirical test on information manipulation theory. The measures for message honesty were taken directly from the McCornack and others study, and this study's results were similar. The violation of quality had the lowest mean score. The difference between the two studies is in the comparison of the control and quantity violation. McCornack and others recorded a significant difference between the control and quantity violation, whereas this study did not. An explanation for this is that they used two different types of quantity violations, though it seems unlikely that since the alternate message in their study is not perceived as a lie as well. This suggests perhaps that the nature of a negotiation context comes with the expectation of transparency and brevity when telling the truth.

#### Competency and Truth-Telling

The second research hypothesis for this study had findings that could explain much of the perceptions participants have of liars when the ground truth is known. The control condition in this evaluation recorded the highest mean, pointing to the idea that participants perceive truthful messages as most competent within the context of a negotiation. This could also explain that participants believe telling the truth is an intelligent act within a negotiation scenario. This notion supports previous research in which participants were willing to negotiate with the partner again when the truth is told (i.e., Wong & Howard, 2018). Violations of quantity and quality were significantly the lowest, which suggests lying can be considered incompetent by those who know the ground truth—and absolutely logical way of seeing this pattern. This finding in particular suggest the value of knowing the ground truth as meaningful. Previous research also claims that ground truth can be crucial in high-stakes deception such as crime stories or business negotiations (Porter & Brinke, 2010). Another finding was that violations of manner scored

significantly higher than quantity and quality violations on competency. This supports other research which claims liars have to carefully manipulate the information so that it will appear truthful (Newman, Pennebaker, Berry, & Richards, 2003). Manner violations would fit this category since they require the most information without being false. As previously mentioned, the manner violation included *Taylor* disclosing how successful his/her company was. Overall, it makes complete sense that if someone knows the ground truth this will entirely alter not only their judgments of deception (as truthful or deceptive) but also other related variables such as competency as we see in the current study.

The relationship between truth-telling, or veracity, and competency was also found to be a positive correlation. This finding supports *H3* and the moderate (albeit significant) correlation strength explains some of the findings seen in previous research on IMT (McCornack et al., 1992; Yeung, Levine, & Nishiyama, 1999). Not only do the maxims govern conversations, but also assumptions of conversation partners. Grice mentioned in his work that without the satisfaction of the maxims, conversations would lose organization and rationality. This notion is supported by the findings of *H3*.

The findings for *H2* and *H3* point to the importance of ground truth in negotiations. Ground truth can not only influence the ability to successfully deceive, but also negatively influence the opinions negotiation partners have about their counterpart's intellectual ability. Ground truth is essential knowledge because whether or not a person is implementing suspicious activity, the ground truth will not change (Leal, Vrij, Warmelink, Vernham, & Fisher, 2015). This is what makes the findings of the second and third hypotheses crucial to the implementation of deception in negotiation. Within this study, the ground truth was known by both parties, yet *Taylor* decided to intentionally violate an expectation in conversation (i.e. the maxims), therefore

enabling the participant to perceive his/her message as dishonest or deceitful. Ground truth, in this case, can eliminate the ability to successfully deceive within a negotiation. This idea is important to the context of negotiation because the use of ground truth can become a strategy. Lying within a negotiation, at its core, is a gamble that risks many facets of a negotiator's reputation and success.

### Cognitive Trust and Competency

As discussed, cognitive trust and competence are two concepts which explain very similar ideas. Without competency, it was assumed that cognitive trust would decrease. This assumption was supported by the evaluation of *H4*. The positive correlation between cognitive trust and competency may explain how language influences the perceptions others have in each other's intellect. Through this study, the more competent participants felt the message was, the higher cognitive trust scores they reported. This correlation can also explain the major difference between cognitive and affective trust because cognitive trust was allowed to develop over the course of a paragraph in a pattern while affective trust was not. This could suggest that cognitive trust does not need as much time to develop as affective trust does. Since affective trust is driven by emotion requires repetitive behaviors in order to establish rapport, it is not as easily obtained as cognitive trust is. This idea is similar to first impressions, as impressions can easily be tainted within minimal time (Veletsianos, 2010), and may hint at a possible correlation between cognitive trust and impression.

In review, the findings in this study suggest that deceivers caught telling lies (or being less than honest and forthcoming, e.g., using equivocation) will be seen as less competent than those who tell the truth when in a negotiation scenario. This study was able to show how deceptive language influences trust, perceptions of honesty, and perceptions of competence

within the context of negotiation. This will allow future research into deception and negotiation to consider trust another variable worthy of consideration.

### Limitations

As with any research, the present study contained limitations. One limitation in this study was the range of ages recruited for the questionnaire. The oldest participant of the study was 24 years of age. Although the age demographic of 18-24 provided a surplus of available participants (convenience sample), it may not fully represent the negotiation community. These persons were not asked about their experience in negotiation contexts and in business and it is likely many lack the necessary experience to really understand the nuances at play in negotiation (and deception). Another limitation regarding the participant sampling used for this study was that all participants were students enrolled in undergraduate programs. Again, there lack of business negotiation experience within this population. The next limitation would be in the violation of quantity. By definition, quantity governs the amount of information exchanged (Grice, 1975). This means there are two separate ways to violate quantity: under-inform and over-inform. For this study, the way the quantity violation operated was through under-informing the participant. By violating quantity in only one way, it may have not caused the correct effect in manipulating the vignette. Had the quantity violation been one of over-sharing, the perceived deceptiveness of the message may have changed.

The final limitation to the study was the inability to establish trust over the course of a single paragraph of text via the vignette. This study's goal was to measure the way deceptive language changed trust, even if not at all. After data analysis, it became evident that affective trust may not come as easy as simply reading the name of a character and applying a fictional relationship. Affective trust may be easier to measure through taking an actual relationship and

asking participants to evaluate the trust they have in their friend. Perhaps asking them to think of someone they know, then applying the context from this study might have activated changes in affective trust, but we quickly learned that you cannot tap into a variable that is so rich and based on relationships.

### Implications for Future Research and Practitioners

There are so many directions this research could go next, and each of these directions can touch many different disciplines, following are a sample of these contexts/disciplines. One future possibility for this research would be to replicate a study among business executives who experience negotiations multiple times in a week. As mentioned in the limitations, the demographic of college students limits the practicality of the research, whereas a professional who negotiates regularly would be a better representation of specific types of business negotiations. This may lead to more robust and interesting findings.

Another direction could be to apply the cooperative principle and Grice's maxims to a new context. This study sought to explain how Grice's maxims would transfer to the context of negotiation, and it was successful. The next step would be to apply it to different topics where conversational norms are present. One topic Grice's maxims would function well with, especially because of the findings in this study, would be first impressions. Evaluating how Grice's maxims operate when individuals first meet would couple well with the concept of cognitive trust and competency. Another could be within instructional communication and how the violations of Grice's maxims impact student learning.

The final implication for future research would be to measure a different concept within the context of negotiation using Grice's maxims. For this study, trust was the construct that took priority; however, there are many different variables that are influenced by the intentional

violation of Grice's maxims. For example, the influence violations of Grice's maxims have on negotiators willingness to negotiate again. Another direction would be to take negotiation and use it in a different context like grade negotiation to see how Grice's maxims play a role in students negotiating grades with their instructors.

This study also presents practical evidence for negotiators in the field. This evidence can be organized into three main lessons. The first is that whatever the negotiation is about, the negotiator must discover whether or not their negotiation partner knows the disposition, ability, and power of the company the negotiator works for. The reason for this is through the influence ground truth has on the perceived competency of the deceiver. If the ground truth of a given topic is known, it is clear that telling the truth will bring a more positive interaction between negotiators.

The second lesson this study presents is to not expect trust within the context of a negotiation. This study defined negotiation as communication about value. Within that definition, trust may, or may not have a place. In other words, negotiators would be wise to not expect trust to play a part within the negotiation. Even though there were no significant findings within the analysis of *RQI*, it is still important to realize that trust is not something to be counted on within a negotiation. However, more research is warranted to test these claims and assumptions.

The final lesson found within this study is the ability to pick up, even the inexperienced, on the deceptiveness of a message that negotiators have. Most individuals have negotiated in their lifetime; whether in negotiations about punishments with parents, to romantic partnerships, and even the purchasing of goods, most people have some experience in negotiating with others. However, these experiences may not consciously transfer over to a business experience. Perhaps

future research can make this bridge clearer for participants and this might influence their use of a business context in examining trust. Experience is a great teacher for any negotiator, and this study suggests that if the negotiation partner knows ground truth, then those engaged in the negotiation may want to remain as honest as possible (i.e., *truthful*), because any movement away from what is perceived to be forthcoming and honest may result in a loss of credibility.

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## APPENDICES

Appendix A: Flow of Experiment

Appendix B: Message Examples for Independent Variables

Appendix C: Scales and Measures for Dependent Variables

Appendix D: Tables

Table 1. Trust Score (Affective & Cognitive), Means and Standard Deviations

Table 2. Affective Trust, Means and Standard Deviations

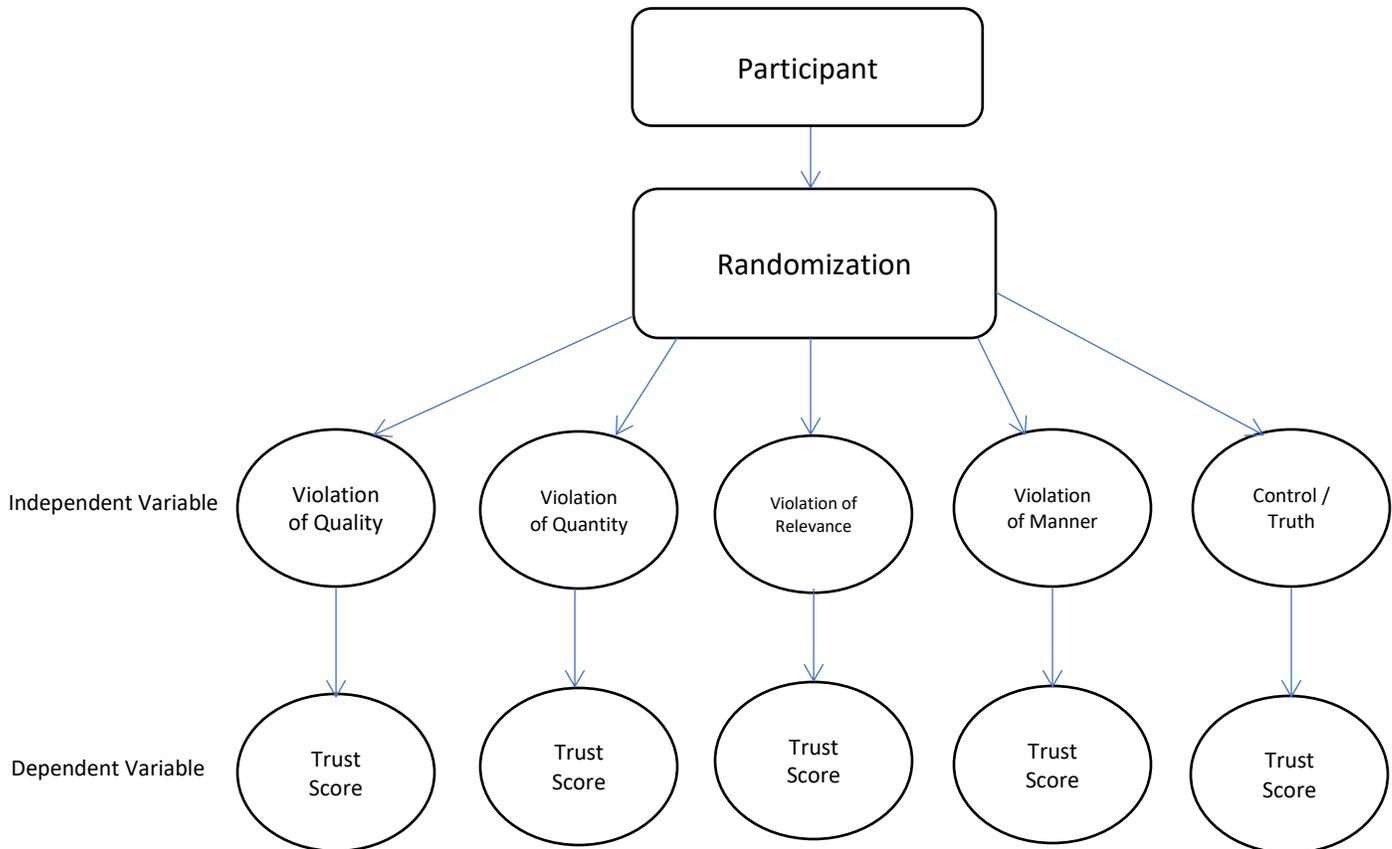
Table 3. Cognitive Trust, Means and Standard Deviations

Table 4. Message Honesty, Means and Standard Deviations

Table 5. Message Competency, Means and Standard Deviations

## Appendix A: Flow of Experiment

Figure 1: Flow of the Experiment



## Appendix B: Message Examples for Independent Variable

*Negotiation Scenario* (adapted from McCornack et al., 1992)

You work for inside sales in a small company. Your job consists of filling invoices for the account holders through interacting with their purchasers. One of the purchasers at another company you consistently work with is named Taylor, who you have known for over two years and has been purchasing product from you for over a year. Because of the length of the relationship, you feel very close to them. Although Taylor has not told you, their feelings about the product and its price have begun to change. Although you are in a place where a long-term agreement is a possibility, Taylor feels like they want to compare prices with other companies. Unknown to you, Taylor's company has begun to buy a similar product from somewhere else. Although this product has the same function and similar price, Taylor has had a much better relationship with the other company than with yours.

One day when you and Taylor are meeting to fill an invoice, you notice that your interaction with Taylor has changed. You suspect that Taylor is purchasing from another company because of the decrease in amount of product they are purchasing. You decided to confront the issue, and so you suddenly say to Taylor "lately you've been purchasing less and less."

Taylor responds: \_\_\_\_\_ (blank will be filled with violations below)

*Quantity Violation*

"Yep."

*Quality Violation*

“No, I don’t know what you mean. I think that I have just been under a lot of stress recently, with my company struggling so much.”

*Relation Violation*

“You saying that just reminded me of something! My boss was talking about business partnerships and how businesses stop working together and it was the most depressing conversation I have ever been a part of! Have you ever talked with your employees about that?”

*Manner Violation*

Example One: “I’ve been buying a lot of product lately. Business is good for me.”

*Control Group (completely honest message satisfying all four maxims)*

“I haven’t really been honest with you. I don’t feel the same about your product or this purchasing agreement any more. I know I was wrong in waiting this long to tell you. I have started purchasing from another manufacturer, and they have become my primary supplier. I know this might hurt your company by telling you this, but there is really no easy way to do this.”

Appendix C: Scales and Measures for Dependent Variables.

*Trust* (adapted from Swift & Hwang, 2013)

*Affective-Based Trust*

- I would be willing to have a sharing relationship with Taylor. I would freely share my ideas, hopes, and feelings.

Strongly Disagree - Disagree - Slightly Disagree - Neutral - Slightly Agree – Agree - Strongly Agree

- I could talk freely with Taylor about difficulties I am having with the negotiations and know that they would listen.

Strongly Disagree - Disagree - Slightly Disagree - Neutral - Slightly Agree – Agree - Strongly Agree

- I would feel a sense of loss if I was no longer able to negotiate with Taylor.

Strongly Disagree - Disagree - Slightly Disagree - Neutral - Slightly Agree – Agree - Strongly Agree

- I feel that Taylor wants my party to benefit from negotiating as well as his or hers.

Strongly Disagree - Disagree - Slightly Disagree - Neutral - Slightly Agree – Agree - Strongly Agree

*Cognitive-Based Trust*

- Taylor approaches negotiations with professionalism and integrity.

Strongly Disagree - Disagree - Slightly Disagree - Neutral - Slightly Agree – Agree - Strongly Agree

- Given Taylor’s track record, I see no reason to doubt their competence and preparation for negotiations.

Strongly Disagree - Disagree - Slightly Disagree - Neutral - Slightly Agree – Agree - Strongly Agree

- I can rely on Taylor to make negotiations less difficult by being prepared and focused.

Strongly Disagree - Disagree - Slightly Disagree - Neutral - Slightly Agree – Agree - Strongly Agree

*Honesty and Competence* (adapted from McCornack et al., 1992)

*Honesty*

Taylor’s response was:

Dishonest—1—2—3—4—5—6—7—Honest

Deceitful—1—2—3—4—5—6—7—Truthful

Deceptive—1—2—3—4—5—6—7—Not Deceptive

Misleading—1—2—3—4—5—6—7—Not Misleading.

*Competence*

Taylor’s response was:

Ineffective—1—2—3—4—5—6—7—Effective

Inept—1—2—3—4—5—6—7—Skillful

Incompetent—1—2—3—4—5—6—7—Competent

Mismanaged—1—2—3—4—5—6—7—Well Managed

Appendix D: Tables

*Table 1*

*Trust Score (Affective + Cognitive), Means and Standard Deviations.*

Condition	<i>n</i>	M	SD
Control	36	3.89	.79
Quantity	37	3.68	.98
Quality	37	3.86	1.05
Relation	40	3.86	.95
Manner	39	3.98	.89

*Note:* Maximum score is 7

Table 2

*Affective Trust, Means and Standard Deviations*

Condition	<i>n</i>	M	SD
Control	37	4.28	.89
Quantity	39	4.00	1.07
Quality	40	4.21	1.22
Relation	40	3.89	1.01
Manner	39	3.92	1.02

*Note:* Maximum score is 7

Table 3

*Cognitive Trust, Means and Standard Deviations*

Condition	<i>n</i>	M	SD
Control	36	3.39	1.14
Quantity	37	3.25	1.19
Quality	37	3.32	1.29
Relation	40	3.83	1.24
Manner	39	4.06	1.13

*Note:* Maximum score is 7

Table 4

*Message Honesty, Means and Standard Deviations.*

Condition	<i>n</i>	M	SD
Control	37	4.87	1.37
Quantity	35	5.03	1.50
Quality	38	2.34	1.04
Relation	38	3.30	1.33
Manner	37	3.49	1.36

*Note:* Maximum score is 7

Table 5

*Message Competency, Means and Standard Deviations.*

Condition	<i>n</i>	M	SD
Control	37	4.26	1.29
Quantity	38	3.03	1.25
Quality	40	2.96	1.33
Relation	39	3.58	1.31
Manner	38	3.91	1.43

*Note:* Maximum score is 7

## Appendix E: IRB Approval



February 6, 2018

Heath Howard  
Department of Communication Studies  
College of Communication & Information  
Sciences Box 870172

Re: IRB # 18-OR-043, "Language and

Trust" Dear Mr. Howard:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of written documentation of informed consent. Approval has been given under expedited review category 7 as outlined below:

*(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.*

Your application will expire on February 5, 2019. If your research will continue beyond this date, please complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, please complete the Modification of an Approved Protocol form. Change in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the Request for Study Closure form.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your  
research. Sincerely,



Carpartato T. Myles, MSM, CIM, CIP  
Director & Research Compliance Officer  
Office for Research Compliance

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