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UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

TOWARD A THEORETICAL CONSTRUCT OF THE FACTORS OF
DECEPTIVE COMMUNICATION

A Dissertation

SUBMITTED TO THE GRADUATE FACULTY

In partial fulfillment of the requirements for the

Degree of

Doctor of Philosophy

By

JULIANN CHRISTINE SCHOLL

Norman, Oklahoma

2000

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**TOWARD A THEORETICAL CONSTRUCT OF THE FACTORS OF
DECEPTIVE COMMUNICATION**

**A dissertation APPROVED FOR THE
DEPARTMENT OF COMMUNICATION**

BY

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ABSTRACT

This study constitutes the fourth phase of a research program designed to explore the factors that influence the choices people make regarding deceptive communication. The research program leading up to this study produced five factors of deceptive communication—acceptance of deception, ethics, motives, intentionality, and upbringing—that may represent the thoughts people have about communication, which in turn may influence when one deceives, who is deceived and how deceptive messages are formulated. By applying the Theory of Planned Behavior (Ajzen, 1985, 1988; Ajzen & Madden, 1986), this study determines the extent to which these five constructs constitute a mental conceptualization of deception. In addition, this study intends to determine the internal consistency and dimensional structure of the factors confirmed through this project. The results of this study will have several implications, including future studies examining how this relationship makes a link between one's attitudes about deception and one's actual deceptive behaviors. This report reviews relevant literature, outlines the methods carried out in this study, reports the findings, and discusses the limitations and implications of the findings.

CHAPTER 1

Introduction

All men [*sic*] are born truthful, and die liars.

--*Vauvenarges*

A little inaccuracy sometimes saves tons of explanations.

--*Saki*

People are often confronted with situations in which they must choose their words carefully. Individuals making that choice often must weigh the objective of conveying accurate and veracious information against the need to preserve that relationship or to save face (McCornack, 1992). When individuals wish to be truthful, these two goals may seem incompatible. In order to resolve this incompatibility, one objective is often forsaken for the other, which often means that the intent to preserve face and maintain the relationships wins out.

Communicators make these decisions constantly, some when they “fudge” on their income tax returns, others when they lie about their sexual history to a prospective dating partner (Pawlowski & Dunbar, 1999). Such decisions may involve judging whether the target can be duped, whether the deceiver will enjoy lying, or if the deceiver can morally justify deceiving the target. These are examples of the thoughts people may have when they are confronted with a situation in which they feel uncomfortable telling the truth. The thoughts people have as they are planning and formulating their messages are influenced by such things as one’s social motives, upbringing, ethical stance, awareness of one’s

communicative behaviors, or perceptions of the acceptance of deception (O'Hair & Cody, 1994; Scholl, 1999; Scholl & O'Hair, 1998). Influences such as these have a powerful impact on how truthful or deceptive that person is (Rowatt, Cunningham, & Druen, 1998) in a given situation.

While people often frown on deception in general, research indicates that people feel compelled to commit deceptive acts at least once or twice a day (Buller & Burgoon, 1994, 1996; Camden, Motley, & Wilson, 1984; DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996; O'Hair & Cody, 1994; Scholl & O'Hair, 1998). According to Buller and Burgoon (1994), "Society and most conversations rest on an assumption of veracity in information exchange . . . In actual practice, though, communicators frequently decide that honesty is not the best strategy" (p. 191). In fact, Buller and Burgoon (1996) found that at least one quarter of all conversations they studied contained some element of deception or suspected deception. Furthermore, many individuals see deception as a useful, often necessary part of their communication repertoire. Not only do individuals view deception as an efficient solution to many interpersonal communication problems (Camden et al., 1984; Deetz, 1990), but they see it as an adaptive strategy essential for survival against such issues as face threats, punishments, embarrassing situations, loss of material things, and harm toward themselves and others (DePaulo & Bell, 1996; DePaulo et al., 1993; Goffman, 1974; McLaughlin, Cody, & O'Hair, 1983; O'Hair & Cody, 1994; Robinson, Shepherd, & Heywood, 1998).

Many studies have attempted to increase our understanding of interpersonal deception by examining the verbal and nonverbal cues that signal deception (e.g., Buller & Aune, 1987; Buller, Comstock, Aune, & Strzyzewski, 1989; Ekman, 1985; Hocking & Leathers, 1980; Turner, Edgley, & Olmstead, 1975; Vrij, Semlin, & Bull, 1996; Zuckerman, Spiegel, DePaulo, & Rosenthal, 1982), and by attempting to conceptualize and operationalize the act (Hopper & Bell, 1984; Rowatt, Cunningham, & Druen, 1999). Studies of the 1970s and 1980s in particular have addressed deception cues by studying arousal, emotion, and social cognition in order to understand the true nature of deception, how it may be linked to communicative behavior (e.g., Greene, O'Hair, Cody, & Yen, 1985; Levine & McCornack, 1996), and what behaviors successful deceivers display (Riggio, Tucker, & Widaman, 1987).

Recently, researchers such as Buller and Burgoon (1994; 1996) and McCornack and colleagues (McCornack, 1992; McCornack, Levine, Solowczuk, Torres, & Campbell, 1992; Yeung, Levine, & Nishiyama, 1999) have answered the call for more theoretically based studies by attempting to learn more about the process of deception and determine what constructs lead to deceptive behavior. More specifically, researchers (Buller & Burgoon, 1994, 1996a; O'Hair & Cody, 1994; McCornack, 1992, 1997) have provided models of and theoretical explanations for deceptive behavior by identifying the possible underlying mechanisms or factors that contribute to deceptive communication.

Perhaps the most visible developing theory of deception is Buller and Burgoon's (1996; Buller et al., 1994; Buller, Burgoon, Buslig, & Roiger, 1996;

Burgoon, Buller, Ebesu, White, & Rockwell, 1996) interpersonal deception theory (IDT). Buller and Burgoon (1996) claim that deception involves a mutual, interdependent relationship between the deceiver and the target, and they suggest that there is a multiple-step process that shapes and influences the interaction between both deceivers and targets. In general, IDT locates an interpersonal deception encounter between two actors, and embedded within that encounter are pre-interaction aspects that influence communication outcomes. Moreover, “receiver cognitions and behaviors influence subsequent sender cognitions and behaviors . . . which feed into subsequent receiver adjustments” (Buller & Burgoon, 1996, p. 211). Finally, the resulting deceptive encounter leads to post-interaction cognitions and thoughts, which will influence future deceptive encounters.

Buller and Burgoon (1996) identify and test constructs they claim influence the deception encounter. Such constructs are classified as pre-interaction (e.g., personal background, relational history, communication repertoire), interaction (e.g., suspicion, behavioral leakage, behavioral adjustments), and post-interaction (e.g., perceived deception success, deception detection). IDT also offers several propositions that attempt to address the relationship among common deception variables (e.g., suspicion, nonverbal leakage, and relational history). An additional facet of IDT is that deceivers engage in information management that requires attention to environmental stimuli and careful execution of certain verbal and nonverbal tactics (Buller & Burgoon, 1996; Burgoon et al., 1996).

Despite IDT's attempts to make deception research more explanatory and theoretical, IDT has had plenty of criticism. McCornack (1997), for example, argues that IDT's propositions do not address the mechanisms and processes leading to the decoding and encoding of deceptive messages, and that many of IDT's claims are unfalsifiable (Levine & McCornack, 1996b; McCornack, 1997). Stiff (1996) and DePaulo et al. (1996) argue that IDT does not present a unifying causal mechanism or group of mechanisms that shape the deceptive interaction. Perhaps the harshest criticisms of IDT make reference to the methods used to test the theory. DePaulo et al. (1996) point out that the results found in the IDT studies could have been a product of their complicated experimental designs, particularly in the way research participants were asked to formulate excessively elaborate messages, which may be shaped by very elaborately fabricated treatment conditions and manipulations. In examining the common critiques of IDT, one may conclude that this theory has not really reached "theory" status (Stiff, 1996), or that it still does not contribute significantly to the deception literature.

The previous discussion illustrates the deception literature has yet to demonstrate predictive and explanatory power consistently. In particular, the literature has been unsuccessful in identifying the factors or predispositions that influence the way people shape and execute their deceptive messages. Perhaps this is because deception research has mostly been concerned with solving practical problems rather than developing theoretical postulates that "identify

behavioral correlates of truthful and deceptive communication” (Stiff, 1996, p. 295).

One could look to potential reasons for the dearth of viable deception theory outlining deceptive constructs, one of which may be the strictly deceiver- or target-sided perspective many deception studies have employed. For example, Buller and Burgoon (1996) argue that most social scientific research has employed noninteractive scenarios in which deceivers (confederates designated to this role) formulate messages to be read at a later time by their targets. This approach has been said to disregard the interactive nature of deceptive communication. This approach also focuses mainly on the effect on a target and not on the factors that influenced the way the deceiver constructed his or her message.

An additional reason for the lack of viable theories may be that deception studies are still, by and large, measuring *intent* to deceive, rather than actual deceptive behaviors. For example, in Neuliep and Mattson’s (1990) study, about one-half of their respondents were asked to write about what they *would* say to another person to make that person comply with a request, while the other half were asked to write out what they *would* say without disclosing the real reason for the request. In other words, this study examined people’s *intentions* of what they would say in a future interaction that called for compliance from another person.

One way to overcome these limitations is to approach deception from a more cognitive perspective. According to Greene (1984), cognition is “most closely associated with the information processing approach to mind, which

assumes a sequence of structures and processes linking inputs to the processing system with the outputs of that system” (Greene, 1984, p. 241). An understanding of these inputs and outputs allows us to describe and explain the processes that produce or lead to certain behaviors. Cognitive approaches attempt to develop falsifiable (Stiff, 1996), powerful theories that apply to a wide range of contexts (Greene, 1984). What makes these approaches so widely applicable is that their ultimate objective is to determine underlying causal mechanisms that are common across many phenomena (DePaulo, Ansfield, & Bell, 1996a; Greene, 1984). The identification of such causal mechanisms may provide a springboard from which to propose and test viable predictions of deceptive behavior that are truly representative of “real life” and of the way people think about deception.

A cognitive approach can tell us many things about how mere thoughts and cognitions lead to communicative behavior:

[The foremost assumption of a cognitive approach] is that of an active, purposeful organism capable of formulating behavioral alternatives and choosing among those alternatives on the basis of expected outcomes . . .

A second assumption, which represents an extension of the first, is that the individual acts upon the basis of the meanings which s/he assigns to stimuli and social situations. (Greene, 1984, p. 242)

Based on this cognitive approach, people do not engage in deception merely for its own sake. Rather, deception is often a strategy individuals use when serving their own or others’ goals or when reacting to a situation (Dillard & Schrader, 1999; Schrader & Dillard, 1999). For the potential deceiver, there may be a

process or several processes that lead deceivers from mere thoughts they have about deception toward an actual deceptive message. What makes this a communication problem is that knowledge of common thoughts people have when they consider deceiving may give us insight into developing the type of process models that explain and illustrate a “speaker’s ability to lead the listener to a predefined thought or action” (Deetz, 1990, p. 230). For example, such a model may inform us of the direction in which one mentally progresses from one thought to another (e.g., ethics, importance of one’s relationship to the target), or may inform us, based on the situation, which thought or thoughts will stand out as more important influences of deceptive behavior.

The attention to such thoughts and their potential relationship within such a process model says something about deception as a decision-making strategy (Buller & Burgoon, 1994, 1996; O’Hair & Cody, 1994; Scholl & O’Hair, 1998). Much like other forms of communication, deception serves a purpose (Goffman, 1974) that is motivated by people’s needs and wants. These words and tactics stem from thoughts motivated by our perceptions of the situation, needs, and wants that generated them. What would add to our understanding of deception as a communication activity is knowing whether there is a set of deception-related thoughts that people have, and whether one or more thoughts take on more importance than others in particular situations. Having an understanding of the set of thoughts or factors that shape our encoding of deceptive messages may shed light on why people deceive others, when they do it and under what conditions,

what types of deception they engage in, and who they believe are the best targets of deception.

An important step in understanding the thoughts that influence deceptive communication is to articulate “a set of constructs that are likely to be important to our understanding of the phenomenon of interest” (DePaulo et al., 1996, p. 297), which is deception. An identification and understanding of these constructs, or factors, may tell us something about how deceptive decision-making is accomplished. This approach would view these identifiable factors as those representing the predispositions that move people to communicate in certain ways. Beyond the initial identification of these factors, it would then be informative to learn how these factors are related to each other to mediate the specific deceptive behaviors in which individuals engage (Buller & Burgoon, 1994).

The main implication here is that deception research would benefit greatly from the development of sound theoretical models that identify the factors underlying deceptive behavior and “make accurate predictions about the outcomes of future observations” (DePaulo et al., 1996, p. 298). There is a crucial need for a more cognitive approach to studying deception that moves the scholarship above and beyond mere speculation about certain aspects of deception (Hyman, 1989) toward identifying the communication-related structures that shape the deceptive messages we transmit. Just as Seiter (1997) proposed a model that reveals people’s constructs of events that help them make judgments of veracity and deceptiveness, this approach would add to our overall understanding

of the link between deceivers' factors (or communicative predispositions) and actual communicative behaviors (Prislin & Kovrlija, 1992).

To respond to this need, the current study was intended to be the fourth phase of a research program designed to test the existence of the factors that serve as the link between thoughts or cognitions about deception and actual deceptive communication (Scholl & O'Hair, 1998¹). In addition, this study sets out to verify that the factors emerging from this study are unidimensional and internally consistent. The results of such a study could serve as a springboard for future investigations, such as those that test the relationship among these factors, as well as those that make predictions of people's deceptive behaviors as influenced by such factors.

Before proceeding with this study, the previous stages of this research program should be explained. In the first phase of this program, the author and a colleague (Scholl & O'Hair, 1998) conducted focus groups in an attempt to understand people's deception-related thoughts and perceptions, or more simply, "what they think about when they think about deception". This phase was intended to be very inductive and emically-derived. Rather than infer information from observable behavior, Scholl and O'Hair (1998) chose to explore intrapersonal issues of deception by conducting the focus group interviews in order to gather deception-related thoughts from individuals themselves. Through a constant-comparative analysis (Glaser & Strauss, 1967; Patton, 1990; Strauss & Corbin, 1990), Scholl and O'Hair discovered 17 frequently occurring categories

emerging from the group discussions about communication and deception (see Scholl & O'Hair, 1998).

In a subsequent phase included in that study, Scholl and O'Hair (1998) submitted the 17 themes to an exploratory factor analysis from which eight themes emerged. These themes were further tested through another exploratory factor analysis (the third phase—Scholl, 1999), which yielded four retained factors—upbringing/background, motives, acceptance of deception, and intentionality.

The purpose of the current study is to determine through more systematic means the factors influencing individuals' deceptive communication, and to generate a set of factors that are unidimensional in nature. Along with the four previously mentioned factors, a fifth one—ethics—will be tested. Ethics has been addressed at length in the focus groups (Scholl & O'Hair, 1998) as well in some of the deception literature (Buller & Burgoon, 1994; Deetz, 1990; O'Hair & Cody, 1994). It is for these reasons that this factor has been added to the current investigation.

A theoretical approach that provides a viable framework for this and subsequent studies is Ajzen's (1985, 1988) theory of planned behavior (TPB), which attempts to explain the link between attitudes and behavior. The TPB is an extension of the theory of reasoned action (TRA—Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), which has a limitation in dealing with people's behaviors over which they have incomplete volitional control (Ajzen, 1985, 1988; Kurland, 1995; Prislin & Kovrlija, 1992; Raats, Shepherd, & Sparks, 1995).

According to TPB, actual behaviors can be predicted from one's intentions to perform the behavior, which is mediated by subjective norms, attitudes toward the behavior, and perceived behavioral control (Ajzen & Madden, 1986; Doll & Ajzen, 1992). Conner and Armitage (1998) point out that both TRA and TPB were designed to predict how information and motives could influence behavior. However, while TRA assumes that perceived behavioral control is completely mediated by intention, which directly influences actual behavior, TPB considers the possibility of a direct link between perceived behavioral control and behavior (Ajzen & Madden, 1986).

Such a theoretical perspective may shed light on the attitude-behavior relationship with regard to the identification of factors or predispositions underlying communication within deceptive contexts. TPB and TRA attempt to identify specific constructs or causal mechanisms that illustrate how certain cognitions work together to influence behavior. As will be discussed later, TPB illustrates specific relationships among its components and predicts causal links between certain constructs. This approach is in keeping with the current study because of its emphasis on antecedent constructs, the relationship among these antecedents, and how they ultimately lead to the formulation and transmission of certain messages. The TPB is not being applied here for its predictive purposes, but as a model that addresses thoughts and constructs that eventually guide the choices people make when carrying out their communicative behaviors. Also, the constructs or factors identified in the TPB have interesting similarities to the factors being tested in this study; these similarities will be discussed later on.

Keeping this general theoretical framework in mind, this study was intended to test the viability of five deception-related factors—acceptance of deception, ethics, intentionality, motives, and upbringing. Thoughts such as these eventually may be shown to capture adequately the thoughts and cognitions people have that influence their deceptive practices. The understanding gained from this study could have far-reaching implications for deception research from both a theoretical and practical standpoint. First, this study may serve as a springboard for making predictions about deceptive communication based on the knowledge of individuals' commonly held thoughts and perceptions about deceptive communication. Furthermore, this type of theory building may lead to the discovery of certain mechanisms that exist across various deception encounters. This implication may pave the way for the possibility of a unifying deception theory that is generalizable and falsifiable (Buller & Burgoon, 1996a; DePaulo et al., 1996; McCornack, 1997; Stiff, 1996). The identification of deceptive factors and the subsequent test of their relationship also increase the application of such theoretical frameworks as the Theory of Planned Behavior. Such a framework would contain a viable set of thoughts or predispositions that represent a construct underlying a communication behavior across a wide variety of situations.

In terms of applied and practical implications, knowledge of a set of identifiable predispositions influencing deceptive communication eventually may increase people's ability to predict others' deceptive attempts, or to understand better their own deceptive tendencies. For example, knowledge of the constructs

that exist in a deceptive encounter may be useful in workplace settings. For example, relatively successful attempts have already been made through the development of the Reid Report (Ash, 1971; Cunningham, Wong, & Barbee, 1994; Rowatt et al., 1998; Sackett & Harris, 1984), which is widely used to predict employees' tendencies to lie, cheat, and steal. In general, a viable theoretical framework that outlines core deceptive constructs may help individuals foresee the deceptive tendencies of others, help them know what thoughts weigh heavily in the minds of their communicative partners, and increase their ability to protect themselves from harmful deceptive activities based on what they know about the persons deceiving them.

To accomplish its current purpose and to provide a basis for future studies that will help scholars and laypeople better understand the nature of deceptive communication, this study addresses the five deceptive factors identified in previous phases of this program and reviews the literature behind them. Next, this report outlines the research questions guiding this study and the methods that will be used to answer these questions. After revealing the results, this report discusses the findings, identifies the study's limitations, and draws implications for future research.

CHAPTER 2

Literature Review

In order to explore the factors that influence deceptive communication, this report first reviews the deception literature pertaining to the factors currently under investigation—acceptability of deception, ethics, intentionality, motives, and upbringing. What follows is a discussion of the theoretical framework that provides the rationale and direction for this study.

Factors of Deceptive Communication

Before presenting a discussion of the factors influencing deceptive communication, an explication of deception as a concept is necessary. Many scholars have set out to provide definitions of deception that are inclusive of a variety of behaviors. For example, Buller and Burgoon (1996) define deception as "a message knowingly transmitted by a sender to foster a false belief or conclusion by the receiver" (p. 205). Also, deception has been viewed by most researchers as an intentional act deceivers knowingly commit (Buller & Burgoon, 1994, 1996a; Camden et al., 1984; Ekman, 1985; Greene et al., 1985; Hample, 1980; Knapp & Comadena, 1979; O'Hair & Cody, 1994). Defining deception as an intentional activity may imply that deceivers use communication to adapt to their changing environment or social conditions, or that they use deception to accomplish certain communicative objectives. This type of definition also implies that unintentional lies cannot really be defined as lies at all, an issue that will receive further discussion later on.

In order to conceptualize deception, some scholars (Bavelas, Black, Chovil, & Mullett, 1990; Camden et al., 1984; Eisenberg, 1984; Hopper & Bell, 1984; Knapp, Hart, & Dennis, 1974; O'Hair & Cody, 1994) have formulated and tested various types, such as lies (Hopper & Bell, 1984), exaggerations (DePaulo & Bell, 1996; Hopper & Bell, 1984), "white" lies (Camden et al., 1984), equivocation and ambiguity (Bavelas et al., 1990; Eisenberg, 1984), "crimes" (Hopper & Bell, 1984), and jokes (Hopper & Bell, 1984) in order to capture deception as it exists across several contexts. While typologies may help identify the extent to which deceptive acts depart from the truth, categories tell us little about the underlying mechanisms behind deceptive acts. Furthermore, many types of deception appearing in the literature were formulated by researchers who consulted dictionaries or formulated the categories themselves before testing them, rather than consulting the individuals to whom those results are generalized (see, for example, Hopper & Bell, 1984). Although these types have been tested and generalized to the population, it is difficult to say whether these typologies truly reflect the thoughts or conceptualizations with which people operate when they rationalize or engage in a deceptive act.

After considering the research that has attempted to conceptualize and define deception, this study presents a more general definition: Deception is the act, motivated by past knowledge or upbringing, motives, ethics, and subjective norms, in which a person, having some level of intentionality, attempts to draw the target away from what the deceiver believes to be true. This definition sets the agenda for the rest of this report in that it incorporates the five factors to be tested

in this study. The following is a discussion of these five factors and the theoretical framework used to rationalize their study.

Upbringing. One factor under consideration is the upbringing or background of individuals and how this influences when and how they deceive others. Upbringing is referred to as an individual's set of habits, communicative behaviors, or typical reactions to situations as learned from parents, mentors, and other influential persons. Upbringing consists of the collection of past experiences and "lessons" that individuals collect and carry with them toward future encounters. These past experiences and lessons learned from important others have a large hand in shaping people's abilities and likelihood to deceive. For example, Cole and Mitchell (1998) assessed children's ability to be convincing in an act of deception. Their results suggest that there are significant associations between family background and deceptive ability. An example of this type of association is if parents are able to display nonverbal cues that make them appear credible, then it is likely that their children will acquire these abilities and use them successfully. The traits and behaviors that individuals have are very much a product of what they learn from their parents or caretakers, peers, and educational experiences. These traits and behaviors have most likely been tried and/or confirmed in prior interactions, which are subsequently stored in one's repertoire for future use (Wood, 1993).

Another way to look at upbringing is to consider parents' or influential others' *opinions* or *reasons* for deception and to know whether or not these aspects carry over to the person under influence. Upbringing, as it is seen from

this perspective, emerged from the Scholl and O'Hair (1998) focus group participants, who identified upbringing as an important influence on the reasons people engage in deception. In fact, these focus group participants found it quite easy to talk about what parents, school, and peers taught them about lying and fibbing. This suggests that people receive many messages as they develop their background information. Some people who are influential to us tell us that deception can be hurtful, while others teach us how to get what we want more easily by avoiding or altering the truth (O'Hair & Cody, 1994).

Upbringing can have a tremendous impact on one's view of deception (Buller & Burgoon, 1996; Cole & Mitchell, 1998; O'Hair & Cody, 1994; Scholl & O'Hair, 1998). Wood (1993) points out that communicators do not "come to an encounter with a blank slate" (Wood, 1993, p. 69); they bring to the interaction those traits and behaviors that have worked for them in the past. Communicators learn to attach certain communicative behaviors with certain aspects of the situation (e.g., type of situation involved, affinity towards potential target, environment, emotional climate) in order to formulate an effective and appropriate message (Buller & Burgoon, 1994, 1996).

Research suggests that upbringing shapes a person's communication skills, particularly those that relate to communicative competence (Buller & Burgoon, 1994, 1996a; Spitzberg & Cupach, 1984). "Those with greater communication skills and greater self-monitoring are better able to minimize leakage, increase facial animation and head movements, increase verbal fluency, increase eye contact, use more "we" pronouns, and present a believable lie"

(Buller & Burgoon, 1994, p. 217). Perhaps one's upbringing provides opportunities for developing and fine-tuning certain skills that lead to success in communicative competence or success in deception, which enables people to get what they want out of their interactions with others.

Also, it would be reasonable that character or personality is at least in part shaped by one's upbringing, and these aspects as well influence what type of deceiver a person is. These characteristics, in conjunction with certain personality traits, such as Machiavellianism (O'Hair & Cody, 1987, 1994), self- and other-serving tendencies (Goffman, 1974; Kashy & DePaulo, 1996), or the amount of trust put in others' action (Wrightsman, 1964, 1974) are learned from others to a certain extent. They not only influence a deceiver's behavior or tactical choices, but also may be present in the minds of individuals who may be targets of deception.

However prevalent this development is in one's upbringing, what people have learned in the past often does not help them resolve their conflicting feelings between their general attitude toward deception and their willingness to engage in it. This type of mental struggle could be a partial product of what individuals are told by people who teach and influence them, and it also could be a product of what these individuals see others do. The point here is that people acquire certain characteristics, traits, and beliefs, and learn what communicative behaviors should match those beliefs in a given situation. Sometimes this matching of traits to behaviors will lead to the truth; at other times, it will result in some form of deception.

Ethics. Having discussed upbringing as a factor, this brings us to a related factor, which is ethics. Ethics is defined as the values, moral principles, and beliefs that guide people's communicative behavior. Ethics is what an individual currently possesses, and which may be in constant flux as one undergoes novel experiences.

The ethics factor is included here partly because of the prevalence of ethics statements emerging in the original focus group interviews (Scholl & O'Hair, 1998), and because deception is often an emotionally-charged issue fueled by discussions and debates over when it is right or wrong, appropriate or inappropriate, or even justifiable (Backbier, Hoogstraten, & Terwogt-Kouwenhoven, 1997; Deetz, 1990; O'Hair & Cody, 1994). Also, for purposes of this study, ethics is considered a personal issue, meaning that ethics is viewed here as the factor that represents an individual's own beliefs, principles, or values of deception being right or wrong, and is considered to be different, although not interdependent with others' views of what is right or wrong about deception. Perhaps the most important reason for including ethics is that, while it is a ubiquitous topic within deception-related writings and discussions (Backbier et al., 1997; Buller & Burgoon, 1994; Deetz, 1990; O'Hair & Cody, 1994), it is rarely included as an observed or measured construct in deception-related studies and experiments. This study is an attempt to account for a variable or factor that is often written about, but not as often considered, observed, or measured, in very systematic ways.

Scholars agree that people experience dissonance when they perceive a necessity to engage in deception (Burgoon, Buller, Floyd, & Grandpre, 1996).

Hample (1980) explains:

The typical liar is torn by a felt need to lie on one hand and by the force of social proscription on the other. A consistent finding . . . is that liars are . . . substantially more satisfied with the lie than with themselves . . . The liar knows that lies should not be told at all and so lies only when rewards are both assured and large. (p. 45)

This culture has a general negative view of lying (Deetz, 1990; O'Hair & Cody, 1994; Sims, 1992; Smith, 1988). Individuals normally expect that the people with whom they interact will be honest and sincere, and they often enter into a relationship with the expectation that they will be able to trust their relational partners (Burgoon et al., 1996). Deetz (1990) argues that this reliance on trust is important for effective and appropriate communication. He also claims that if people think deception will obstruct the shared meaning or quality of the message, then deception would be undesirable. This is because, according to Deetz (1990), lying obstructs the communicator-receiver relationship that leads to shared meanings. In addition, Kant (1964; 1996) has argued that lying violates maxims that are necessary for living. One particular maxim, the categorical imperative, states that if people are contemplating a particular action, they must decide whether they would have other people engage in that action, especially if that action is done toward them. If so, then that action is permissible; if not, they should avoid it (Rachels, 1993).

Not everyone views deception in this manner; many individuals subscribe to perspectives that allow them to justify deceiving others. One such perspective, ethical subjectivism, posits that our moral opinions are based on the feelings we happen to experience (Rachels, 1993). Because a universal rule may not adequately represent an individual's personal feelings, communicators must look internally for the reason or motivation behind a potentially deceptive act. Based on the selfishness or selflessness of one's feelings, the communicator may decide whether or not the act truly represents the feeling, not necessarily something that is universally true or false. Another perspective, utilitarianism, stipulates that whenever we have a choice among various courses of action, we should pursue the action that promotes the best possible consequences for everyone involved (Rachels, 1993). When attempting to justify deception, "the only thing that matters is the amount of happiness or unhappiness that is caused. Everything else is irrelevant" (Rachels, 1993, p. 102). Based on this view, weighing all the possible consequences may allow one to conclude that deception is the most advantageous strategy to use in a given situation.

However justifiable some forms of deception seem to be, some scholars ask whether deception is merely a form of convenient communication rather than a wisely chosen act. According to Camden et al. (1984), "[We often find ourselves] treating the lie as the most efficient solution to interpersonal communication problems" (p. 309). The choice to deceive may be guided by the selfish objective of the communicator, rather than any personal belief about what is right or wrong. Furthermore, an individual may not want to put forth the

cognitive effort required to formulate a truthful message that is both effective and appropriate; therefore, a person may lie if it is easier or more convenient than telling the truth, not because it is the right thing to do. Issues such as these need more exploration, and the determination of ethics as an exclusively distinct category may shed light on the role of ethics in deception-related communication.

Motives. The next factor under examination is motives. Motives are defined here as reasons underlying deceptive activities. To make this factor more distinct from the other factors, this study views motives as a group of reasons or motivations that are tied to the situation or the other person with whom one interacts. Motives are not necessarily concerned with personal attitudes or morals, but with how one's actions will coincide or conflict with the situation or the target.

Goffman (1974) identifies two motivational types of deception: Benign fabrications are based on the interests of the person being deceived. If they do not directly interest the receiver, the deception at least does not work against that person. Exploitive fabrications, on the other hand, are those which serve the interests of the deceiver and may produce harmful consequences for the target.

Individuals may have several reasons to deceive others, but some scholars suggest that motives fall into one of two categories: self-orientation or other-orientation. On the one hand, deceivers may choose to deceive because the act of lying will directly benefit themselves, i.e., self-oriented deception (Buller & Burgoon, 1994, 1996a; Goffman, 1974; O'Hair & Cody, 1994). Such cases may include omitting information that may embarrass the deceiver, twisting facts

to avoid punishment or sanctions, or providing false information to gain a tangible benefit.

Conversely, other-oriented deception involves deceiving a target in such a way that will benefit that target (Goffman, 1974). Examples include saving the target's face or avoiding hurting the target's feelings (Buller & Burgoon, 1994, 1996a; O'Hair & Cody, 1994). Although some lies and deceptive acts may have the purpose of hurting others:

Lies do not appear to be an aggressive weapon in competitive or threatening exchanges. Instead, they appear to be a (successful) answer to a challenge. Assuming that challenges are more likely to come from dominant interactants, the typically responsive nature of lies underscores their usually self-defensive purposes. (Hample, 1980, p. 45)

Despite the convenience of placing all deceptive motives in either self-oriented or other-oriented categories, many aspects underlying deceptive motives deserve closer examination. For instance, the nature and intimacy level of a relationship often motivates people. It has been found that lies are told more often in casual relationships than in close ones (Burgoon et al., 1996). DePaulo and Bell (1996) present somewhat contradictory information when they suggest that people who are called on for feedback or criticism by someone they liked tend to use deception to prevent hurting that person. In their study, DePaulo and Bell (1996) argue that this happens more often with close interactants than with those not as well liked. These studies suggest that, while deception itself is viewed as a negative activity, it may be perceived as an effective tool for maintaining or

salvaging close relationships, sparing others' feelings and face (Buller & Burgoon, 1994; DePaulo & Bell, 1996; DePaulo & Kashy, 1998; O'Hair & Cody, 1994), or providing some benefit to the other person (O'Hair & Cody, 1994; Buller & Burgoon, 1994).

In addition to the nature of a relationship, the deception literature suggests that the consideration of positive and negative consequences may influence whether or not people engage in deception (Buller & Burgoon, 1994; Camden et al., 1984; Deetz, 1990; Hample, 1980; Lippard, 1988; O'Hair & Cody, 1994). Therefore, they are included here and viewed as motives of a "post-interaction" nature. According to O'Hair and Cody (1994), there is less current research that addresses consequences of deception. They claim that many deceptive attempts start out as positive or altruistic motives, but may lead to negative results. Truths can damage relationships, and this damage can either be subtle or catastrophic. For example, a spouse's motive to hide an adulterous affair may be that she/he does not want to jeopardize the marriage or hurt the other spouse's feelings. What is important about consequences is that we do not know exactly when they will come about, we cannot predict the circumstances under which those consequences may emerge, and it is very difficult to know, until after the fact, the amount of damage the discovered deception can cause (O'Hair & Cody, 1994). If consequences seem to be difficult to predict or foresee, potential deceivers may decide that the truth is the best choice to make. Another reason to avoid deception is that the consequences themselves are inherently negative.

The literature consistently points out certain negative consequences of deception. One consequence is that deceivers may feel guilty about their dishonesty or lose self-respect (Deetz, 1990). Also, when the deceiver is detected, he or she may lose the target's respect as well (Buller & Burgoon, 1994; Deetz, 1990; O'Hair & Cody, 1994). Perhaps the most serious negative consequence is the obstruction of the communicator-receiver relationship, which prevents the true sharing of meaning between both deceiver and receiver (Deetz, 1990). Overall, if consequences such as these are too great, the deceiver may conclude that deception may be more trouble than it is worth. The perceived negative consequences of deception may serve as a significant motive for someone to stick to the truth.

There are positive consequences of deception as well, which may serve as a motive to engage in the act. First, deception may benefit the deceiver in that punishment of or harm toward an individual may be avoided (Camden et al., 1984; Hample, 1980; O'Hair & Cody, 1994). Second, some individuals may see deception as a way to improve a relationship or avoid conflict (Camden et al., 1984), especially if being completely truthful is seen as inconvenient, time-consuming, or even hurtful. Lippard (1988), in particular, points out that lying to friends could help maintain loyalty, especially in order to save face. Finally, a positive consequence of deception could be getting caught, especially if the motive for deception was altruistic. According to O'Hair and Cody (1994): Those who are exposed for giving other people credit for their own good deeds or competent performance not only benefit from an exposure of their altruistic intent, but also profit from getting credit when it is due. Moreover, detection might lead

to positive long-term consequences involving self-concept and/or relational development. (pp. 198-199)

Consequences are a very significant group of motives because they serve as post-interaction reasons that deceivers use to make predictions about the future. Furthermore, the type of deception used (e.g., exaggeration, total lie, omission of information) is shaped by the valence and nature of the consequences foreseen. Finally, consequences can be valuable motive-oriented tools because the more predictable the consequence, the easier it may be for a communicator to decide when and/or how to use deception.

Several studies have identified the situational or contextual constraint as a construct that influences deceptive communication. The situation may comprise of "(a) access to social cues, (b) immediacy, (c) relational engagement, (d) conversational demands, and (e) spontaneity" (Buller & Burgoon, 1996a, p. 214). The situation can have a tremendous impact on the decision to deceive. For example, three-quarters of the subjects in Hample's (1980) study reported that they find themselves in situations in which it is "impossible" to tell the truth. This "requirement" to deceive could be better understood if studies attempted to comprehend the event-schemata people use when they attend to certain elements of the situation. However, just because the situation may "require" deception, this does not necessarily make it "easier" to do so, especially if one's communicative skills are limited (Buller & Burgoon, 1994, p. 191).

Bell and DePaulo (1996) have focused extensively on situations in which potential deceivers find themselves "trapped" in situations that "force" them to lie

or engage in some type of deception. One situation in particular is when a liked or highly regarded person is asking someone for an evaluation. “These kinds of situations can be especially challenging to truth-telling when the person seeking the appraisal is personally invested in it” (Bell & DePaulo, 1996, p. 244). Bell and DePaulo (1996) tested this notion by having research participants choose paintings they liked and disliked and having them discuss their assessment with the “artists” (i.e., confederates) whom they were told painted the pieces they liked and disliked. Their findings were not very surprising:

[W]hen participants disliked a work of art that was painted by an artist they liked, they were inclined to make no explicit evaluative statements at all. In contrast, the same participants (i.e., those who liked the art student) were especially eager to state in no uncertain terms their evaluations of the paintings they disliked that were painted by *other* artists. The participants who disliked the art student, on the other hand, showed no special lust for trashing the work of the other artists. Instead, they evenhandedly offered the same proportion of kind and unkind sentiments about the artists’ own work and the other artists’ work. (Bell & DePaulo, 1996, pp. 261-262)

A notion driving a deceiver to react in such a way may be that the deceiver cares more about the emotional impact of their comments than about adhering to the truth (DePaulo & Bell, 1996). As DePaulo and Kashy (1998) put it, “By lying, the liars may be saying that they care more about the other person’s feelings than the truth” (p. 64).

Concern for one's interactional partner or the relationship represents another aspect of motives—maintaining relationships. People closely involved with each other do not always want the truth from their partners. DePaulo and Kashy (1998) claim:

[P]eople can collaborate to maintain rather than discover each other's lies.

Partners in close relationships, more so than those in casual ones, come to know each other's sensitive and taboo topics . . . By steering clear of such treacherous turf, they can reduce their partners' temptations to lie. (p. 64)

Collaborative lies (when both people agree to accept one explanation for an event, when at least one of them knows that the explanation is false) in particular can become a very functional part of the relationship (O'Hair & Cody, 1994).

In summary, motives are viewed here as the reasons why people engage in deception or choose not to. Motives are an important part of the deception thought process because in deception, as well as in any type of communication, our messages have an impact on others and the situation. Also, we consider our motives for deceiving because our deceptive acts will affect us as well, with regard to those with which we interact and the circumstances that surround us.

Acceptance of deception. This study examines a fourth factor, acceptance of deception, which constitutes individuals' perceptions of how people we know or individuals who are important to us view deception. Most scholars agree that deception is a prevalent phenomenon and that most people acknowledge their willingness to engage in it in various situations (Buller & Burgoon, 1994, 1996a; Camden et al., 1984; DePaulo & Bell, 1998; Hample, 1980; Hopper & Bell, 1984;

Knapp & Comadena, 1979; Knapp et al., 1974; O'Hair & Cody, 1994). If a communicator believes that deception is by and large accepted by a culture, then its prevalence in everyday life may not necessarily be viewed as a bad thing. Examination of this factor or predisposition is warranted because people rely on subjective norms to guide their communicative behaviors. Communicators think of the opinions about deception held by people who are important to them, and if those important others have an overall favorable opinion of deception in a particular situation, communicators may take that information into account. In other words, if deception in a given situation would be okay for other people, then it may be seen as permissible for the person who considers it at that time.

As stated earlier, many researchers (Backbier et al., 1997; O'Hair & Cody, 1994) attest to the acceptance of deception as a norm in everyday interactions. This was perhaps the most prevalent during the Scholl and O'Hair (1998) focus group discussions. Without hesitation, most participants agreed that deception occurs "all the time" and "everyday", and that society seems to accept deception as a common and useful communication tool to help people get what they want. More importantly, deception can be useful in getting along with others and being polite. Being polite may require communicating in a less-than-truthful manner (Brown & Levinson, 1987). In their study examining people's deceptiveness toward those they like, DePaulo & Bell (1996) make an important argument: No one needs to tell us to be polite when discussing an ugly painting with the artist who created it. Disagreements and criticisms are face-threatening and will

be communicated only very politely, if at all—but even positive communications . . . can be face-threatening (e.g., compliments that cause embarrassment). (p. 704)

O’Hair & Cody (1994) support this notion by stating, “[M]ost people do not want to voice direct interpersonal disagreement, rather they will be deceptively polite in order to go along with the flow of social interaction . . . The person who is brutally honest will be a very lonely person” (p. 192). The point made is that deceiving others to save their face is a common communicative strategy and is rarely discouraged in some contexts. Because politeness is a widely encouraged practice, most people will uphold politeness, even if it means being less than truthful. These expectations suggest that in order to get along interpersonally and professionally, individuals must forego a certain amount of honesty in order to save face, communicate appropriately in a variety of situations, or to tailor our communication to accomplish what we set out to do (Buller & Burgoon, 1994; O’Hair & Cody, 1994).

One issue regarding the acceptance of deception may be how often people engage in this behavior. DePaulo and colleagues (DePaulo & Kashy, 1996, 1998; DePaulo et al., 1996) have attempted to determine quantitatively the frequency with which people deceive. DePaulo et al. (1996) conducted a diary study with college students and community members and found that college students told two lies per day, while community members told one each day. In another study, DePaulo and Kashy (1998) discovered that participants lied less often to those with whom they felt relationally close. Based on these findings, one may argue

that if deception were not so accepted and welcomed in some interactions, people would not engage in it so frequently.

Deception may be viewed not only as a common practice in everyday interactions, but also in work-related contexts. The acceptance of deceptive communication may be seen in the number of occupations that often require deceptive acts in order for individuals to properly perform their occupational duties. Police officers (Vrij, 1994), customer service representatives (Elangovan & Shapiro, 1998; Ellingson et al., 1999), airline attendants (O'Hair & Cody, 1994), receptionists (Elangovan & Shapiro, 1998; O'Hair & Cody, 1994), physicians (Robinson et al., 1998), and other professionals must create and maintain a certain public image that may be deceptive in order to serve their employers', employees', customers', and clients' best interests. Additionally, many government officials have deceived agencies, Congress, and constituencies for purposes of serving the public interest or maintaining national security (O'Hair & Cody, 1994).

The prevailing acceptance of deception has implications for how researchers study this act and how it is measured in communication research. For one thing, it is not accurate to assume that deception is always more arousing than truth telling. According to Feeley (1996), "A long standing assumption in deception research would suggest that, by definition, lying causes significant increases in autonomic and physiological arousal" (p. 171), when in fact, deception may not be as arousing as once believed (Feeley, 1996). This may be because, as implied earlier, deception in interpersonal and other types of

relationships is not only common but deemed acceptable and necessary (Lippard, 1988). As Lippard (1988) states, “deception is seen as a “normal” part of interpersonal communication rather than as a form of social or moral deviance” (p. 91). Because deception is a common and accepted form of communication, this notion may influence people to deceive because they may think that it is generally accepted.

While deception may be seen as a common and accepted practice, there is still a sentiment that reveals people’s general discomfort with committing deception. Indeed, people violate the norm of honesty more often than they care to think (Lippard, 1988). Perhaps our general acceptance of deception as a common practice shares a particular relationship with other factors, such as ethics or motives. For example, the need to adhere to moral norms of truthfulness is often overshadowed by the need to prevent hurt feelings, avoid unnecessary physical harm, to maintain important relationships, or to serve others’ interests (Burgoon et al., 1996). Determining the prevalence of the construct acceptance may shed light on this issue in future studies.

Intentionality. Inherent in many definitions and conceptualizations of deception is intentionality, or the level of intent or mindfulness behind a deceptive message (Buller & Burgoon, 1994, 1996a; Camden et al., 1984; Ekman, 1985; Greene et al., 1985; Hample, 1980; Knapp & Comadena, 1979; O’Hair & Cody, 1994). In Scholl and O’Hair’s (1998) study, a constant comparative method revealed that intentionality was a common topic among the Scholl and O’Hair

(1998) focus group discussions and through the second and third phases of this research program; thus, it serves as one of the five factors examined in this study.

In the context of this study, intentionality implies being mindful of goal achievement, communicative skills, and sensitivity to situations and people (Spitzberg & Cupach, 1984). Another way to conceptualize intentionality is to view it as personal causation (deCharms, 1992). Personal causation in this means intentionally doing something to produce a change. deCharms (1992) sees personal causation, or intentionality for this study's purpose, not as a motive or personality disposition, but something that every human has; humans experience themselves as a cause. Other scholars, such as Ajzen and Fishbein (Ajzen, 1985, 1988; Ajzen & Fishbein, 1980; Ajzen & Madden, 1986), claim that intention is a function of an individual's attitudes toward a behavior and the subjective norms as perceived by the individual. Moreover, individuals weigh these two components differently when assessing their behavioral intentions.

Intentionality assumes an amount of strategic message formulation. Chisholm and Feehan (1977) in particular set out to explain what it means to intend to deceive. In their explanation, they distinguish all deceptive acts as those of commission or omission, positive (*adding* to a stock of false beliefs) or negative (*losing* the whole or part of a true belief), and simpliciter (helping the target acquire the false belief) or *sedundum quid* (continuing the target's acceptance of the false belief). To Chisholm and Feehan (1977), the intent to deceive may imply consciously constructing a message based on valence and the

absence or presence of information, implying intent to be synonymous with strategy and information management.

Many intentional deceptive messages assume a certain amount of planning and management of the message being conveyed. Message management can include employing specific verbal tactics employed (e.g., past-tense verbs, vague statements--) or controlling nonverbal cue leakage (Buller & Burgoon, 1994, 1996; Ekman, 1985; Knapp & Comadena, 1979; O'Hair & Cody, 1994). In fact, Lindsfold and Walter (1983) assert that deception is only termed as such when there is intent:

By definition, lies are intentionally deceptive statements . . . Untruths told by accident, therefore, are not lies nor are falsehoods told by persons who are not held responsible for their action or who are not considered able to perceive consequences, such as young children or mentally incompetent individuals. (p. 129)

In partial support of this statement, a study conducted by Burgoon et al. (1996) revealed that deceivers reported modifying their behaviors when telling lies. For example, they remembered being more expressive, more attentive, able to manage the conversation more smoothly, and being less anxious when telling the truth. Burgoon et al. (1996) further report that, "Senders perceived themselves as making a better impression during their truthful response . . . than during their deceptive response . . . and as more believable when being truthful . . . than when being deceptive" (p. 732). Based on studies such as these, it may be argued that

for a message to be considered deceptive, the deceiver must convey it with complete consciousness and intention.

However, it is possible that there are varying levels of mindfulness or intentionality within deceptive communication. Some situations may work to heighten or diminish one's level of awareness that he or she is deceiving another person. For example, when an individual must respond to probing questions, the need to avoid giving the wrong answer may elicit a deceptive response (Lippard, 1988). This may occur even before the deceiver is aware that his or her message is less than sincere. Another interesting finding emerged in Scholl and O'Hair's (1998) focus group interviews when several participants testified that it is possible to be in the middle of deception and not be totally aware or conscious of deceiving. Other focus group members (Scholl & O'Hair, 1998) stated that they have been in the middle of uttering a deceptive statement only to realize the deception after they made the statement.

Toward a Theoretical Framework of Deception Factors

Having reviewed the five factors that may represent individuals' thought patterns or conceptualizations of deception communication, this study intends to determine how relevant these factors are. Of the factors deemed relevant, it is also the intent of this study to determine how internally consistent each factor is in capturing its own aspect of people's deception concepts. While there are implications this study has for making and testing predictions, or formulating causal models, this study sets out to provide a springboard for such investigations in the future. Before valid, causal predictions can be made about the influences of

deception, one must identify a certain group of factors that adequately represent what it is people think about when they think about deception.

For these factors to make a significant contribution to the area of deception, scholarship must examine them from a more theoretical standpoint. Recent deception research has called for more theoretical frameworks and models that provide an accurate conceptualization of the deception constructs that may eventually be used to predict deceptive behavior. We already know a great deal about such deception topics as deception detection (e.g., Buller, Strzyzewski, & Hunsaker, 1991; Buller & Aune, 1987; Burgoon, Buller, Grandpre, & Kalbfleisch, 1998; Cody & O'Hair, 1983; deTurck & Miller, 1990; Feeley & deTurck, 1995; Fiedler & Walka, 1993; Levine & McCornack, 1992; O'Hair, Cody, & Behnke, 1985; O'Hair, Cody, Goss, & Krayner, 1988; Riggio et al., 1987; Zuckerman et al., 1982), suspicion (Bond & Fahey, 1987; Buller, Strzyzewski, & Comstock, 1991; Levine & McCornack, 1991; Stiff, Kim, & Ramesh, 1992), behavioral adaptation and information management (e.g., Buller, Stiff, & Burgoon, 1996; Burgoon, Buller, Guerrero, & Afifi, 1996; deTurck & Miller, 1985; Dulaney, 1992; Greene et al., 1985; Levine & McCornack, 1996), characteristics and traits (Kashy & DePaulo, 1996; O'Hair & Cody, 1987), situational constraints on deceptive behavior (e.g., DePaulo & Bell, 1996; DePaulo et al., 1996; Pawlowski & Dunbar, 1999; Rowatt et al., 1999), types of deception (Bavelas et al., 1990; Hopper & Bell, 1994), and deception on the job (Elangovan & Shapiro, 1998; Ellingson, Sackett, & Hough, 1999; Robinson et al., 1998; Vrij, 1994). While knowledge of behavioral correlates and situational constraints may be shed light

on what we observe about deception, what is missing from this research is a viable theory or set of theories that illuminate the constructs that can be used to represent and explain the processes that influence individuals to engage in deception. More specifically, scholars need to apply their developed categories of situational constraints and typologies of deceptive behaviors and move toward uncovering conceptual models that move us closer to being able to predict people's deceptive tendencies across various contexts (DePaulo et al., 1996; Stiff, 1996).

McCormack (1992; McCormack et al., 1992) and Buller and Burgoon (1996) have attempted to answer the call for more theoretical work. In particular, McCormack (1992) and colleagues (McCormack et al., 1992) developed and tested the information manipulation theory (IMT), which mirrors Grice's conversational maxims of quality, quantity, manner, and relevance. McCormack uses Grice's theory to explain how violations of these four maxims constitute deception. However, McCormack (1997) later on criticizes his own theory for not being able to advance any plausible propositions or predictions regarding these conversational maxims and deceptive communication.

Buller and Burgoon (1996) have taken on an extensive program of research in developing their interpersonal deception theory (IDT), which describes the relationship between the deceiver and the target as mutually interdependent, one that involves a multistep process that influences the interaction between both deceivers and targets. As outlined earlier, their model breaks the deception encounter down into pre-interaction factors (e.g., prior

knowledge, communication repertoire), interaction factors (e.g., suspicion, behavioral leakage), and post-interaction factors (e.g., perceived deception success, detected deception). Furthermore, IDT attempts to explain how these factors emerge throughout the interaction and cause both interactants to make adjustments that enable them to accomplish deceiver- and target-specific goals. Critics of IDT point out the lack of falsifiability of the theory (DePaulo et al., 1996), the contradictions among its propositions (Stiff, 1996), and its inability to explain the encoding and decoding of deceptive messages (McCornack, 1997). While IDT critics do not hesitate to point out its many problems, researchers must acknowledge the contributions of IDT—the attempt to incorporate an extensive background of literature into the current theory, and the continued focus on uncovering underlying causal mechanisms of deceptive communication.

Still, what may be missing from the current theoretical work is a more cognitive approach to research that may address the discovery of the thoughts people have about deception and whether knowledge of these thoughts can give us a framework to with which to make predictions about deceptive communication. According to Greene (1984), cognition is concerned with the mental processing of information that “assumes a sequence of structures and processes linking inputs to the processing system with the outputs of that system” (p. 241). An understanding of these inputs and outputs allows us to describe and explain what leads people from such pre-interaction activities as consideration of motives, subjective norms, and attitudinal upbringing toward the production of deceptive messages. What makes this approach so applicable is that its main

purpose is to determine underlying causal mechanisms that are common across many phenomena (DePaulo et al., 1996a; Greene, 1984). A cognitive approach can tell us many things about how mere thoughts and cognitions lead to communicative behavior. The link between thoughts and behavior may include how people weigh their behavioral alternatives, attempt to predict the consequences, and assess their attitudes toward the deceptive act (Greene, 1984).

The cognitive approach advanced in this study proposes that people do not engage in deception merely for its own sake. Rather, communicators rely on deception in order to react to situations or to achieve various objectives (Bavelas et al., 1990). The reliance on one or more of the factors existent in one's construct of deception could facilitate the decisions individuals make when encoding deceptive messages. An accurate awareness and knowledge of these factors or predispositions may make a significant contribution to communication research because the uncovering of certain deceptive factors may move scholars toward a process model that may inform us of how a deceiver may lead a target away from what is perceived to be the truth (Deetz, 1990).

Additionally, these cognitions may be affected, mediated, or preceded by the level of intent a deceiver experiences. Another thing we may eventually learn from a cognitive approach is how the context or situation in which deceivers find themselves can influence the relationship among these constructs, which in turn, influences how one responds deceptively to that context or situation. But first, in order to move toward the development of such a predictive theory, the following research question is asked:

RQ1: Do the factors of *acceptance of deception, ethics, intentionality, motives, and upbringing* constitute relevant factors of deception?

Toward a Conceptual Framework for the Deception Factors

Deception is a communicative strategy much like other forms of communication in that it serves a purpose (O'Hair & Cody, 1994; Goffman, 1974). This means that when we use communication to serve our purposes, we often choose the words and tactics, more or less consciously, that most appropriately serve our purposes. This addresses an issue that is present in attitude-behavior relationship, which is, "the relationship between what people think and how they behave" (Prislin & Kovrlja, 1992, p. 1131). The portion of that relationship—what people think—is the focus for this study.

The development of the theory of planned behavior (TPB) represents an attempt to uncover the relationship between what people think and how they behave. The TPB is an extension of the theory of reasoned action (TRA—Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), "made necessary by the original model's limitations in dealing with behaviors over which people have incomplete volitional control" (Doll & Ajzen, 1992, p. 755). TPB and its earlier version, TRA, were intended to provide explanations and descriptions about the influences of information and motivational predispositions on behavior. Both models imply that individuals make behavioral decisions based on the consideration of information available to them (Conner & Armitage, 1998, p. 1430).

Before the Theory of Planned Behavior, the Theory of Reasoned Action was intended to predict behaviors from people's intentions to actually perform the

behaviors and from their control over performing them. Doll and Ajzen (1992) explain:

When the behavior, or situation, affords a person complete control over behavioral performance, intention alone should be sufficient to predict behavior, as specified in the theory of reasoned action. The addition of perceived behavioral control should become increasingly important as volitional control over the behavior declines. (p. 755)

The TPB in its extended form will be explicated, as well as how its components correspond with the deceptive constructs previously mentioned.

Ajzen and Madden (1986) claim:

According to the theory of planned behavior, among the beliefs that ultimately determine intention and action is a set that deals with the presence or absence of requisite resources and opportunities. The more resources and opportunities individuals think they possess, and the fewer obstacles or impediments they anticipate, the greater should be their perceived control over the behavior. (p. 457)

Just as with TPB, the deceptive factors examined in this study could represent the assessment of opportunities and obstacles facing a potential deceiver. If some opportunities (e.g., saving the target's face, believing that deception is right in a particular situation) lend themselves to positive outcomes, then deception might be the best option. On the other hand, if the opportunity to deceive successfully is impeded by too many obstacles (e.g., hurting someone's feelings, realizing that

deception goes against what one has learned, feeling that lying would be wrong), then the deceiver may decide to stick to the truth.

According to TPB, behavior stems directly from behavioral intention (Ajzen, 1985, 1988—see Figure 1), which in turn stems from three components, which are attitudes toward the behavior, subjective norms, and perceived behavioral control (Ajzen & Madden, 1986). The first component, attitude toward the behavior, refers to a person's positive or negative appraisal of the behavior in question (Ajzen, 1985, 1988; Doll & Ajzen, 1992). According to Conner and Armitage (1998), "The attitude component is a function of a person's salient behavioral beliefs, which represent perceived outcomes or attributes of the behavior (p. 1431). Conner and Armitage (1998) conceptualize an attitude as beliefs toward the behavior, which may include what people believe is right or wrong about deception, or the attitudes toward deception with which one was instilled by upbringing. Another way to look at attitude toward the behavior is to consider how it corresponds with one's ethical stance or how one was raised to view a particular deceptive situation (i.e., the factors of ethics and upbringing).

The second predictor of intention is subjective norm, which is the "perceived social pressure to perform or not to perform the behavior" (Doll & Ajzen, 1992, p. 755). Subjective norms represent significant others' preferences about the appropriateness of a behavior, and whether or not one should engage in it (Conner & Armitage, 1998) According to TPB, subjective norms are also a function of one's belief system, but those beliefs receive influence from people who are important to that individual and from reference groups (Doll & Ajzen,

1992). This is why subjective norms may be a factor distinctly separate from one's attitudinal beliefs toward a communicative behavior. In addition, subjective norms seem to speak to the acceptance of deception factor previously reviewed. Just as with the perceived acceptance of deception, subjective norms play a part in people's message choices regarding deceptive communication. What this means is that if people important to the deceiver are perceived to view deception a certain way, the deceiver may feel motivated to comply with that view.

The third antecedent of intention is perceived behavioral control (PBC), which is the perceived ease or difficulty with which one performs a behavior (Ajzen, 1985, 1988; Conner & Armitage, 1998; Doll & Ajzen, 1992). Perceived behavioral control reflects past experience as well as anticipated impediments and obstacles that influence one's perceived behavioral control. The stronger the perceived behavioral control, the more an individual's behavioral intention should lead to performance of the actual behavior (Doll & Ajzen, 1992). Ajzen's (1985) early presentations of the TPB suggest that "perceived behavioral control and intentions would interact in their predictions of behavior such that intentions would become stronger predictors of behavior as PBC increased" (Conner & Armitage, 1998, p. 1431).

The relevance of PBC in this study is that it may correspond with the motives people have for deceiving others or for avoiding deception. As stated earlier, many individuals may see themselves as thrust into a situation in which they feel "forced" to deceive others (Cody & O'Hair, 1994; O'Hair & Scholl, 1998; Scholl, 1999), and that deception in a particular situation may be inevitable,

or at least a better option than telling the truth. Also, because motives concern how one's communication affects and is affected by others, perceived behavioral control may be limited in a given situation due to the fact that others' actions and thoughts are beyond a deceiver's control. Thus, one may engage in deception in order to anticipate a reaction by the target over which the deceiver has no control. Such motives may convince a potential deceiver to believe that she or he has no choice but to deceive the target, which reflects little or no *behavioral control* over the situation.

The fourth component of TPB is behavioral intent (Ajzen, 1985, 1988), which acknowledges the notion of nonvolitional behaviors, thus extending the model from TRA to TPB. According to TRA, intentions represent an individual's motivation to exert effort toward an actual behavior. Intentions and behaviors are seen as strongly related, and attitudes toward a specific behavior have an impact on behavior via intentions (Conner & Armitage, 1998; Kurland, 1995). However, "In suggesting that behavior is solely under the control of intention, the TRA restricts itself to volitional behaviors. Behaviors requiring skills, resources, or opportunities not freely available are not considered to be within the domain of applicability of the TRA, or are likely to be poorly predicted by the TRA" (Conner & Armitage, 1998, p. 1430; Kurland, 1995). For this reason, Ajzen (1985, 1988) added perceived behavioral control, which expands the entire theory to include both volitional and nonvolitional behaviors. "This extension of the original theory has also been widely applied . . . and it is apparent that it often

represents a significant improvement over the predictive capabilities of the earlier model” (Raats et al., 1995, p. 484).

More importantly, the acknowledgement of volitional *and* nonvolitional control relates to the intentionality factor that has emerged in the Scholl and O’Hair (1998) study. As stated earlier, many of the focus group participants talked about unintentional attempts of deception in which they had engaged. TPB takes into account that the level of volitional control or intent affects communicative behaviors, and that not all behaviors are based on complete intentionality. This study contends that not all deceptive acts are motivated by complete intent felt by the communicators; rather, some of them may be the result of a lesser degree of intent to actually commit deception.

Studies continue to test the viability of TPB in several contexts. For example, Parker et al. (1995) tested the theory’s ability to predict driving violations, and they found that behavioral intention was predicted reasonably well by its three antecedent factors. Other researchers have tested TPB in terms of predicting unethical behavior, testing the effectiveness of specific types of persuasive campaigns (Giles & Cairns, 1995; Park, Levine, & Sharkey, 1999; Schifter & Ajzen, 1985), and even predicting deceptive communication (Beck & Ajzen, 1991). Basically what Ajzen (1985) and others (Giles & Cairns, 1995; Park et al., 1999) have shown in their investigations is that behavioral intention is preceded very strongly by what have been determined to be its antecedents—attitude toward the behavior, subjective norms, and perceived behavioral control.

This review of the theory of planned behavior focuses on issues that address the processes influencing one's choice to deceive, particularly the specific factors or antecedents to actual behavior. As studies testing TPB suggest, there may be distinct identifiable factors that serve as precursors to predictable behavior, such as subjective norms, attitudes and beliefs toward behaviors, motives, and level of intent. As with TPB, similar factors, such as subjective norms that affect our acceptance of deception, ethical codes and upbringing that influence our beliefs, motives people have that fit the situation, and intent behind a communicative behavior may influence when, how, why, and to whom people deceive. What deception scholarship may gain from such a perspective is the importance of certain influences that play a role in the shaping of our deceptive messages. Such a theoretical perspective may encourage scholars to ask: "What factors work to help us decide when to alter the truth?" Along with this question is the issue of how internally consistent or unidimensional these factors are? Applying the theory of planned behavior as a theoretical framework provides direction in answering this question. The contribution of TPB to the current study is that it presents a model that identifies certain components of behavioral cognitions. What TPB and the factors in the current study have in common is their attempt to identify distinct components or factors that represent a mental model, which in turn serves as an entire deception construct that illustrates the influences to deceptive behavior.

Some scholars (Seiter, 1997; Thagard, 1989) see the need for greater understanding of how individuals' think about and develop their own mental

models. For instance, Seiter (1997) conducted a study that explores the mental models people construct when they detect deception. More researchers need to follow Seiter's (1997) example by looking at other aspects of deception models. An attempt to access individuals' thoughts and constructs of deception may allow scholars to "explore, more dynamically and holistically individuals' rich and detailed "mental models" (Seiter, 1997, p. 218) regarding deception. Such models that accurately capture a conceptualization of deception may eventually inform us of how communicators decide when it is appropriate to deceive, what kinds of people can be duped, or how one morally feels about engaging in deception. More importantly, similar to the theory of planned behavior, this study identifies and seeks to confirm the factors that represent people's thoughts about deception. Overall, knowledge of how people behave may be linked to the attitudes they hold, which helps shape their behavior.

It should be noted that, while TPB is a causal model that has been tested repeatedly, the fact that it makes causal predictions is not the reason why it is being applied here. Rather, constructs within TPB and the factors tested here share many similarities. TPB addresses attitudes people have toward a behavior (i.e., ethics), perceptions of what important others think about that behavior (i.e., upbringing, acceptance of deception), how one's behaviors are affected by situational or contextual constraints (i.e., motives), and the level of intent behind a message (i.e., intention). Besides identifying the core factors underlying deceptive behavior, it is a concern of this study that each of these factors is internally consistent and unidimensional. Therefore, the second research question is posed:

RQ2: Do the factors of deceptive communication emerging from this study represent unidimensional and distinct constructs?

The knowledge of people's thoughts about deception and the common constructs that contribute to the decision-making behind deceptive communication can serve as very useful information in such contexts as workplace settings or employment interviews. For example, such knowledge may inform employers about the deceptive tendencies of potential employees, and may aid in hiring or promotion decisions. In these settings, employees of all types and levels engage in deceptive and dishonest practices in order to protect their job security, their reputation with coworkers and superordinates, and to hide theft or losses (Ash, 1971; Bernardin & Cooke, 1993; Cunningham et al., 1994). Employers recognize these occurrences and often feel the need to be on guard for and prevent these behaviors. Many employers seek knowledge of employees' deceptive and dishonest practices through survey instruments, such as the Reid Report (Reid, 1967), the Personnel Selection Inventory (PSI), and the London House Personnel Selection Inventory (Terris, 1979; Terris & Jones, 1982), which attempt to detect in employees tendencies towards theft and dishonest practices that lead to counterproductivity. Such knowledge of people's tendencies and practices may be useful in predicting their future behavior.

It is important that the tests we use to assess people's attitudes, thus helping us make decisions regarding their behavior, should capture what it is they attempt to capture. If the factors in this study indeed capture the thoughts people have about deception, it would make intuitive sense that we would use this

knowledge for more applied purposes. For example, scholars may wish to use this information to design studies that attempt predict individuals' deceptive tendencies based on the deception-related thoughts they may hold. For the current study, the factors proposed should represent thoughts that relate to deceptiveness or deceit.

Deceit as a construct has been captured by scholars (Christie & Geis, 1970; Hunter, Gerbing, & Boster, 1982; O'Hair & Cody, 1987) interested in Machiavellianism. The term Machiavellianism is derived from the writings of Machiavelli and deal with such issues as the nature of interpersonal tactics, views of human nature, and morality (Wrightsman, 1991). Christie and Geis (1970) did extensive work in capturing this construct by designing a scale that taps into a person's strategy for dealing with people, often to the degree of manipulation. The Mach IV (Christie & Geis, 1970) is a scale based on Machiavellianism that predicts dishonesty and duplicity within individuals. The Mach IV version of the Machiavellian scale contains 20 items that measure people's duplicity and insincere motives of themselves and other people (Cunningham et al., 1994). The Mach IV has been found to be a multi-dimensional construct that includes concepts such as deceit, cynicism, and morality (Hunter et al., 1982; O'Hair & Cody, 1987; Wrightsman, 1991). Items from the Mach IV that represent deceit include, "Honesty is the best policy in all cases" and "There is no excuse for lying to someone else". The Mach IV has been utilized to test the validity of some integrity and honesty tests (Cunningham et al. (1994). The construct of deceit is of particular importance in this study because of its direct treatment of deceptive

acts. Also, both O'Hair and Cody (1987) and Hunter et al. (1982) conducted a factor analysis of the scale and found identical items to load on the deceit factor. The items account for cynicism and morality did not load identically.

The Revised Philosophies of Human Nature Scale (Wrightsman, 1974) assess "philosophies of human nature, conceived of as the expectancies that people have about the ways in which other people generally behave" (Wrightsman, 1991, p. 385). This 20-item test assesses people's perceptions of such things as trustworthiness, altruism, independence, strength of will, complexity of human nature, and variability of human nature. Two particular concepts relevant to this study are trust and cynicism. Trust deals with the extent to which people are conventionally good, while cynicism refers to the perception that people do not act in good ways (Wrightsman, 1974, 1991). A factor analysis of the original 84 items revealed two factors, those representing trust and cynicism, which were found to be correlated to each other to a limited degree. The Revised Philosophies of Human Nature Scale is a 20-item version of the original scale and has been recommended by Wrightsman (1974, 1991) as a measure of the two central factors.

The rationale of this scale rests in the fact that the way people behave communicatively and interact with each other is influenced by their perceptions of others' predispositions, tendencies, and personality characteristics. This applies to how, when, and why people engage in deception. As argued earlier, subjective norms and perceptions of the acceptance of certain behaviors like deception may serve as an important type of factor mediating current deceptive communication

choices. For example, someone who highly values honesty and truth may have a general trust of others' veracity. On the other hand, a person who is cynical of the goodness of others may find it more practical to be dishonest when necessary or beneficial to the self.

Knowledge of deceptive factors or predispositions via such measurements and scales may prove to be very valuable information for individuals who may be affected or have a lot to lose from others' deceitful behaviors. If we have accurate knowledge of the underlying factors or mechanisms shaping deceptive behavior, we may be able to move forward with more studies and make viable predictions of deceptive behavior based on these identifiable constructs.

Therefore, in order to validate the existence of the deceptive factors as well as to test their construct validity, this study poses the following hypotheses:

H1: There is a significant correlation between the Deceit subscale of the Mach IV and each of the deceptive factors emerging from this study.

H2: There is a significant correlation between the Trust subscale of the Revised Philosophies scale and each of the deceptive factors emerging from this study.

H3: There is a significant correlation between the Cynicism subscale of the Revised Philosophies scale and each of the deceptive factors emerging from this study.

CHAPTER 3

Methods and Results—Phase I

The purpose of this study was to work toward a conceptualization of deception as it is represented by valid, unidimensional factors that influence people's deceptive communication. So far, this program of research has produced a set of data inductively obtained from focus group participants, after which these data have been reduced to yield four possible factors: upbringing, motives, acceptance of deception, and intentionality (see Scholl, 1999; Scholl & O'Hair, 1998 for detailed description of this series of studies).

Based on the literature previously reviewed and the nature of deception as a communication topic, it was decided to test these four factors and to add ethics as a fifth dimension in the current study.

This study was conducted in two phases. The purpose of the first phase was to develop and refine items for a scale that fell under these five factors through an exploratory factor analysis. From this phase emerged five clusters of items (fairly consistent with those of the first phase) that were incorporated into a revised scale for a second phase. In this second phase, each new factor was submitted to a confirmatory factor analysis for purposes of determining the internal consistency of each factor (Stevens, 1996).

This chapter outlines the methods implemented and results from Phase I. The first phase involved collecting data for purposes of answering RQ1. The second phase data were collected to answer RQ2 and H1, H2, and H3 (Phase II methods are outlined in Chapter 4).

Methods

Participants. A total of 342 individuals participated in Phase I, and each respondent in Phase I did not participate in Phase II. Participants consisted of speech communication students from the University of Central Oklahoma, communication majors and minors from the University of Wisconsin-LaCrosse, and individuals residing in the Oklahoma City, Oklahoma, area. A total of 215 females (62.9%) and 124 males (36.3%) participated in Phase I. (Three respondents did not indicate their sex.) Ages of participants ranged from 18 to 80, with the modal age being 20 (19.9%) (see Table 1 for remaining demographic characteristics of Phase I sample).

Procedures. Recruiting university students involved obtaining permission from the instructors and faculty from the universities mentioned above. Before these instructors distributed the questionnaires, the author asked them to tell students that this was a survey asking about their personal attitudes about deception (not about specific acts of deception in which they had engaged), that this survey was entirely voluntary, and that their names would not be connected with their responses. Instructors were also given debriefing sheets providing more detailed information about the purpose of the study and how to contact the author in the future; these sheets were to be given to students after they completed the survey.

When recruiting participants from the University of Central Oklahoma, the author asked adjunct and full-time faculty members of the Communications Department for their help in distributing the questionnaires. Five adjunct lecturers

who taught the introductory public speaking class agreed to help by taking approximately 50 questionnaires each. They had the option of asking their students to complete the questionnaires during a class period or to have students take the questionnaires home and bring them back during a subsequent class period. Due to varying time constraints of these adjuncts, the author gave them the choice of in-class or take-home participation.

The participants from the University of Wisconsin-LaCrosse were communication majors and minors, and were the students of a professor in the Communication Studies Department who was acquainted with the author. This professor took about 100 surveys and offered to distribute them to her students in her interpersonal communication class and her introduction to communication class. After all of the surveys given to her were completed, the professor mailed the surveys back to the author.

Convenience sampling was used to recruit participants from the Oklahoma City, Oklahoma, metropolitan area. These individuals included acquaintances of the author and individuals recruited by the author's acquaintances through snowball sampling. That is, individuals approached by the author were asked to distribute additional copies of the questionnaire to people they knew or with whom they worked. Questionnaires completed via snowball sampling were collected by the acquaintances and returned to the author. These individuals were targeted because of their relatively easy access to the author and because the author expected that they would diversify the overall sample. This assumption

was based on such characteristics as age, occupation, socio-economic status, educational background, and ethnic and/or cultural identity.

Instruments. The Phase I instrument consisted of an informed-consent form, a demographic questionnaire (see Appendix A), the scale containing items representing the five deception factors being tested (see Appendix B), and a debriefing sheet containing more detailed information about the purpose of the study (see Appendix C). The scale administered in Phase I was a 40-item Likert-type scale and included items representing the five factors being tested to answer Research Question 1. The scale started with a definition of deception—"the attempt to draw the listener away from what one believes is the truth"—and asked respondents to complete the Likert-type scale. This scale consisted of five themes emerging from the previous three phases of this research program—motives, upbringing, intentionality, acceptance of deception, and ethics. There were eight items per theme included in the questionnaire and their order was mixed to prevent the detection of certain themes or trends by respondents (Dillman, 1978). Based on guidelines offered by Dillman (1978), items with ordered answer choices (e.g., strongly agree—strongly disagree) were used. Respondents answered each item by choosing from 1 (strongly disagree) to 7 (strongly agree) to indicate the extent to which they agreed with each item. This format is ideal for determining such things as intensity of feelings, degree of involvement, and frequency of participation (Dillman, 1978). These guidelines are applicable to this scale, which is intended to assess people's attitudes or predispositions toward deceptive behaviors.

Several steps were taken when wording the statements. First, items were worded to reflect as much as possible the statements made in the original focus group meetings. Several other measures were taken to ensure the integrity and quality of this scale. Simple, direct, and familiar words were used when constructing the statements. Questions were worded to be as specific and clear as possible to the respondents. Also, double-barreled, loaded, and leading questions were avoided (Dillman, 1978).

Based on McCroskey's (1970) earlier developments of the Personal Report of Communication Apprehension (PRCA-24), the valence or attitudinal "direction" was alternated, meaning that half of the items in this scale were worded "positively" and the other half were worded "negatively". More specifically, the items reflect either a tendency toward (positive) or a tendency away from (negative) deception. Examples of positive items were, "Sometimes I have to use deception on the spur of the moment" and "Sometimes people use deception to benefit the person they are deceiving". These items convey ideas that reflect when deception is preferred or implemented. On the other hand, items such as, "My moral stance tells me that deception is never okay" and "Deception is not an acceptable form of communication" are "negative" in tone because they reflect a tendency to avoid deception, and thus, were reverse-coded for data analysis purposes.

Following the example of the Mach IV scale (Christie & Geis, 1970; O'Hair & Cody, 1987), for each group of items, references to "me" and "I" were altered with references to "people" in general. This was an attempt to help control

for social desirability, and it was reasonably assumed that respondents' reports of how other people communicate could accurately reflect how they communicate in roughly those same situations. Overall, each item in the scale was worded to reflect one of the five constructs, a positive or negative valence or direction, and a reference to either oneself or to other people.

Results

The deception scale was assessed for its reliability using Cronbach's alpha (Agresti & Finlay, 1997). The coefficient alpha of the deception scale was 0.82. To begin answering the first research question, "Do the factors of *acceptance of deception, ethics, intentionality, motives, and upbringing* constitute relevant factors of deception?" an exploratory factor analysis (EFA) was conducted. Factor analysis was deemed appropriate for this phase because this procedure is an important part of the measurement of psychological constructs, and in this case, is concerned with the structure of a set of variables that may influence deceptive communication. While this study has proposed a theoretical framework, this particular framework has not previously been applied to this factor structure, and therefore, makes this EFA more exploratory in nature (Stevens, 1996). The first research question was intended to establish whether or not this factor solution exists and to set the stage for the second research question, which tests how internally consistent and unidimensional these factors are (Stevens, 1996).

The 40-item deception scale was submitted to an EFA using Varimax rotation and principal components extraction (Stevens, 1996). Eigenvalues greater than 1.0 and a purity criterion of .60/.40 were used as primary criteria for

retaining components. A scree plot was constructed but did not serve as a primary criterion for interpretability of the data. It was also decided that the retained factors would contain items loading on no more than one factor.

The resulting analysis yielded 11 components accounting for 62.148 percent of the total variance. Based on the established criteria, the first five components were retained as factors; these accounted for 44.463 percent of the total variance. A total of five items loaded onto the first factor (eigenvalue = 7.748), referred to as “Deception is Wrong” (see Table 2 for factors and item loadings). This factor in came from the original “ethics” factor, but was relabeled due to the negative valence toward deception expressed by seven of the eight items. This factor loaded items from three of the original factors: “motives” (“Sometimes I have to use deception on the spur of the moment” and “I would rather not use deception even if it’s to benefit the person I am deceiving.”), “ethics” (“I have very strong feelings that deception cannot be ethically justified” and “My moral stance tells me that deception is never okay.”), and “acceptance of deception” (“I do not see deception as an acceptable form of communication.”). Before constructing the deception scale for Phase II it was decided to drop the first “motives” item because it did not fit with the ethical theme reflected by the other items. Further justification for dropping the item is in the fact that its factor loading (.607) was lower than that of the others items within that factor.

The second factor, “Acceptance of deception”, which had an eigenvalue of 3.323, had two “motives” items that loaded (“The situation sometimes makes it easy for people to deceive someone else” and “Sometimes people use deception if

it will benefit their relationship with other people.”) and one “acceptance of deception” item (“Deception is a common communication practice.”). This factor retained its original label because the loading items reflect the view of deception as a common and often-accepted form of communication. This is also in keeping with the theme of the “acceptance” item that loaded.

The third factor, “Upbringing”, loaded two original “upbringing” items (“My upbringing often motivates me to use deception” and “The way I was brought up often motivates me to use deception.”). This factor had an eigenvalue of 2.962.

The fourth factor, “Others’ Opinions”, loaded an “acceptance of deception” item (“Most people do not accept deception as an acceptable communication practice.”) and an “ethics” item (“Most people feel that deception is wrong.”) and had an eigenvalue of 2.151. This factor was labeled “others’ opinions” due to these statements’ references to others’ (rather than the self’s) opinions about deception, and it is noted that both items reflect others’ opinions as being negative. This factor was also the only new factor emerging from the original five.

The fifth factor, “Intentionality”, had an eigenvalue of 1.602. Two items loaded from the original “intentionality” factor (“There are times when I can be in the middle of saying something and suddenly realize that I was not telling the truth” and “Sometimes I realize that I have deceived someone else only after I had done it.”).

The emergence of these five factors represents the conclusion of Phase I. Before generating an answer to RQ1, it was decided to conduct an additional EFA once the data from the revised deception were collected. This was done to make certain that the subscales submitted to the confirmatory factor analysis (Phase II) contained items reflecting the factors they were representing.

CHAPTER 4

Methods and Results—Phase II

This chapter outlines the methods for and results of Phase II of this study.

Phase II was intended to test the internal consistency and to determine the dimensional structure of the newly emerging factors—deception is bad, prevalence, upbringing, others' opinions, and intentionality. What follows are the methods and results pertaining to Research Questions 1 and 2 and Hypotheses 1, 2, and 3.

Methods

Participants. The 321 participants from Phase II consisted of communication students from the University of Oklahoma, public speaking students from the University of Central Oklahoma, and residents of the Oklahoma City metro area. Students of the University of Oklahoma came from participants within the communication department and included students from the basic communication course, the public speaking course, and other courses required by communication majors and minors. University of Central Oklahoma students did not include those who participated in Phase I, and were recruited by a faculty member in the Communications Department. Metropolitan members in Phase II did not participate in Phase I, but came from the same population through the same convenience and snowball techniques.

Of the 321 respondents, 59.7 percent ($n = 186$) were female and 41.4 percent ($n = 133$) were male. Two individuals (.6%) did not indicate their sex. Ages of the respondents ranged from 18 to 59, with 19 being the modal age ($N =$

94, 29.3%). Three individuals (1.9%) did not indicate their age. Table 3 has the remaining demographic characteristics of the respondents.

Procedures. Procedures for recruiting University of Central Oklahoma students and members of the Oklahoma City community were the same as in Phase I. Students from the University of Oklahoma earned partial course credit for their participation. They were recruited with the help of several graduate teaching assistants and faculty in the department. Some graduate teaching assistants agreed to take a number of surveys and give them to their students to either fill out in class or to take home and complete (students taking home surveys would bring them back at a subsequent class meeting). Another method for recruiting participants was to e-mail instructors and ask them to announce to their students that they could sign up on the department's research bulletin board to participate in this project. These students signed up for a time to meet with the researcher to complete a survey. Students who signed up came to the author's office, were given the survey materials, and sat at a vacant desk or table in the office to complete the survey and were given debriefing information before leaving.

Instruments. The Phase II instrument consisted of the same informed-consent form as in Phase I, a Likert-type deception scale revised from Phase I (see Appendix D), the Mach IV scale (see Appendix E--Christie & Geis, 1970), and the Revised Philosophies of Human Nature Scale (Wrightsmann, 1974—see Appendix F).

Based on results of Phase I (see Data Analysis below), a scale reflecting the retained items, as well as newly added items, was developed and administered to a new sample of respondents. This revised scale had eight items per factor. The original items that loaded from Phase I were incorporated into the second scale, and new items were developed to provide an equal number of items for each retainable factor. These new items also were written to reflect the same valence toward deception whenever possible. Several aspects of those implemented by several researchers who have developed their own attitudinal self-report scales (< biblio >) have influenced this scale-revision procedure.

The subscale of “Deception is wrong” contained four of the five items loading from the first scale, while four were added: “I only use deception as a last resort,” “Deceiving someone is seldom justified,” “I cannot bring myself to deceive others even if it’s socially justified,” and “I try very hard not to use deception”. The additional items were worded to express a negative valence toward deception.

The “acceptance of deception” subscale contained all three items loading from the original scale and contained five new items: “People use deception for all sorts of reasons”, “I know people who use deception in many circumstances,” “Sometimes people feel that they have no choice but to use deception,” “People tell me that they have to use deception in difficult situations,” and “Deception is a part of most people’s everyday lives.” The new items were constructed to make references to other people’s willingness to engage in deception, as well as their views of deception as a common, everyday occurrence.

The “upbringing” subscale included the two items emerging from the first scale. Six more items were added: “My family has strong feelings about deception”, “I was brought up knowing right from wrong when it comes to deception”, “I had good role models for understanding the consequences of deception,” “It was continuously stressed when I was growing up that deception was unacceptable behavior”, “What I learned in school has influenced what I now believe is right or wrong about deception”, and “My family taught me a lot about whether deception is right or wrong.” In the wording of the new items, it was intended that upbringing might include a variety of influences, such as family, school, and peers.

The factor “others’ opinions” contained two items loading from the scale and included the following six new items: “Most people act morally when tempted with deception,” “Most people I know are honest most of the time,” “I am glad that most people avoid deceptive practices in their lives,” “Most of the people I know stress that “honesty is the best policy””, “Most people feel uncomfortable about engaging in deception”, and “People I come in contact with would hardly ever engage in deception.” Due to the notion of avoiding deception brought up by the original items that loaded, it was intended that the new items were in keeping with this theme.

The “intentionality” subscale contained the two items loading from the original scale. The following six items were added: “Sometimes I am surprised when I am told that I wasn’t exactly honest with someone”, “Sometimes I inadvertently deceive others”, “I have been in situations where I wasn’t as honest

as I had intended to be”, “In spite of my best intentions, I sometimes realized that I deceived someone”, “I have caught myself being untruthful without intended to be”, and “I have deceived someone else without being aware that I was doing so.” Because the original items expressed a lack of intentionality or mindfulness, it was decided to construct the remaining items in this fashion.

The items in the revised scale were mixed to decrease the chance that respondents could not detect any thematic patterns. Each item also contained a Likert-type scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).

The Mach IV scale (Christie & Geis, 1970) and the Revised Philosophies of Human Nature Scale (Wrightsman, 1974) were administered to test the construct validity of the revised deception scale (Kerlinger, 1986). Construct validity, according to Kerlinger (1986), usually seeks to know what properties explain the variance of tests, meaning that it is concerned with understanding the meaning of a construct. The items used in a scale to explore a particular construct are intended to represent the factors that account for differences in the construct, or in this case, deception.

The version of the Mach IV used in this study was a 20-item Likert-type scale, with scores ranging from +3 (Agree Strongly) to -3 (Disagree Strongly). After administering the scale, the items were then recoded so that +3 becomes 7, and -3 is coded as 1. There would be no 4 in this coding scheme (Wrightsman, 1991). It has been found that the Mach scale correlates very highly with the Trust subscale of the Philosophies of Human Nature Scale ($r = -.70$ to $-.80$ —Wrightsman, 1991). More specifically, through factor analyses, the Deceit

construct within this scale has been found to load the same four items consistently (--items 6, 7, 9 and 10; see Appendix) (Hunter et al., 1982; O'Hair & Cody, 1987).

The Revised Philosophies of Human Nature Scale is taken from the original Philosophies scale which contains six different components: trustworthiness, altruism, independence, strength of will, complexity of human nature, and variability of human nature. The shortened version, which has the constructs of trust and cynicism, has 20 items (10 of each construct). Each item has a Likert-type scale ranging from +3 (Agree Strongly) to -3 (Disagree Strongly) with no midpoint score (e.g., 0). As stated earlier, the constructs of trust and cynicism have been found to be negatively correlated (Walker & Mosher, 1970).

Results

The exploratory factor analysis conducted on the revised deception scale was conducted using Varimax rotation and principal components extraction. For retaining factors, the criteria used in Phase I were applied to Phase II. Table 4 contains the item and factor loadings for the revised deception scale. A total of four factors were retained, and these four factor constituted 40.379 percent of the total variance.

Research question 1. The first factor, "Intentionality", loaded six items, all of which were in the "Intentionality" factor at the end of Phase I. This factor had an eigenvalue of 6.736 and accounted for 16.840 percent of the total variance. The two items not loading from the revised deception scale were "Sometimes I am

surprised when I am told that I wasn't exactly honest with someone" and "I have been in situations where I wasn't as honest as I had intended to be."

The "Deception is Wrong" factor, which had an eigenvalue of 4.635 and 11.587 percent of the total variance accounted for, loaded six items, all of which remained consistent from Phase I. The two items not loading from the revised deception scale were, "I have very strong feelings that tell me that deception cannot be ethically justified" and "I use deception only as a last resort".

"Acceptance of Deception" was the third strongest factor with four items loading. This factor had an eigenvalue of 2.678 and accounted for 6.695 percent of the total variance. The items that did load were, "Deception is a common communication practice", "People use deception for all sorts of reasons", "I know people who use deception in many circumstances", and "Sometimes people feel that they have no choice but to use deception".

Finally, "Upbringing" loaded three items from the revised deception scale. This factor had an eigenvalue of 2.103 and accounted for 5.257 percent of the total variance. The loading items were, "I was brought up knowing right from wrong when it comes to deception", "I had good role models for understanding the consequences of deception", and "My family taught me a lot about whether deception is right or wrong".

In addressing the first research question, it has been determined that four of the original factors, "Intentionality" "Deception is wrong" (formerly "ethics"), "Acceptance of deception", and "Upbringing" represent viable constructs of deceptive communication. This response is based on the original items

constructed for the first EFA, as well as the new items constructed to correspond with the factors submitted to the second EFA.

Research question 2. A confirmatory factor analysis (CFA) was conducted to answer the second research question, “Do the factors of deceptive communication emerging from this study represent unidimensional constructs?” The CFA was conducted in two parts. First, a Pearson’s R was conducted for each subscale of items resulting from the second EFA ($N = 321$; tables 5-8 contain the correlation matrices for each of the subscales). The reliability coefficients (Cronbach’s alpha) for “intentionality”, “deception is wrong”, “acceptance of deception”, and “upbringing” were .886, .806, .637, and .777 respectively.

Next, the correlation coefficients were submitted to a confirmatory factor analysis. The determination of internal consistency of each subscale was based on its reliability (Cronbach’s alpha) and a calculation of the standard error for each correlation, which is the discrepancy of the predicted and obtained correlations ($o - p = \epsilon$). It was determined that items containing standard errors less than .20 would not be dropped, given an acceptable reliability coefficient.

The “Intentionality” subscale had a reliability coefficient (alpha) of .886 and an average correlation of .565. The standard errors corresponding to this subscale were relatively low (see Table 9), and for this reason no items were dropped. The chi square goodness of fit test, which tests the hypothesis that (a) the items are unidimensional and (b) the items are uniform in quality, yielded a value of 118.792 ($df = 14, p < .001$).

The “Deception is Wrong” subscale had a reliability coefficient of .807 and an average correlation of .410. The value of the chi-square is 30.791 ($df = 14$, $p < .05$). “Acceptance of deception” had a coefficient alpha of .664 and an average correlation of .312, and the chi-square value corresponding to this subscale was 6.250 ($df = 5$, $p > .05$). Finally, the coefficient alpha for the “Upbringing” subscale was .779 and its average correlation was .540. The chi-square value was 6.332 ($df = 2$, $p < .05$).

In order to determine the construct validity of the revised deception scale, this study posed Hypotheses 1-3, which predicted that the deception subscales had correlations with scales representing the construct of deceit from Mach IV and with constructs of trust and cynicism from the Revised Philosophies scale. The decision to use Pearson’s R to determine reliability is based on McCroskey’s (1970) decision to use this type of test when assessing the validity of the PRCA-24.

Hypothesis 1. The first hypothesis received partial support (see Table 13). The Mach IV Deceit subscale ($M = 7.162$, $SD = 1.845$) had a significant negative correlation with “Deception is wrong” ($r = -.445$, $p < .001$) and “Upbringing” ($r = -.196$, $p < .001$), but was not significantly correlated with “Intentionality” ($r = -.014$, $p > .05$) and “Acceptance of deception” ($r = .060$, $p > .05$).

Hypothesis 2. The second hypothesis also received partial support. Trust ($M = 2.770$, $SD = 9.395$) had significant negative correlations with “Intentionality” ($r = -.115$, $p < .05$) and “Acceptance of deception” ($r = -.221$, $p < .001$), as well as a significant positive correlation with “Deception is wrong” ($r =$

.166, $p < .05$). Trust was not significantly correlated with “Upbringing” ($r = .108$, $p > .05$).

Hypothesis 3. A Pearson’s R was also conducted to address the third hypothesis. The Cynicism subscale ($M = 6.100$, $SD = 8.372$) was significantly and positively correlated with “Intentionality” ($r = .284$, $p < .001$) and “Acceptance of deception” ($r = .228$, $p < .001$). Also, there was a significant negative correlation with “Deception is wrong” ($r = -.255$, $p < .001$). Cynicism did not significantly correlate with “Upbringing” ($r = -.080$, $p > .05$).

Pearson’s R was conducted to compare the four deception subscales with each other. “Intentionality” was significantly and negatively correlated with “Deception is wrong” ($r = -.131$, $p < .05$) and positively correlated with “Acceptance of deception” ($r = .324$, $p < .001$). “Intentionality” was not significantly correlated with “Upbringing” ($r = -.044$, $p > .05$). Also “Deception is wrong” had a significant negative correlation with “Acceptance of deception” ($r = -.146$, $p < .05$) and a significant positive correlation with “Upbringing” ($r = .410$, $p < .001$). Finally, “Acceptance of deception” was not significantly correlated with “Upbringing” ($r = .087$, $p > .05$).

Regarding the correlations among the Deceit, Trust, and Cynicism subscales, Cynicism was positively and significantly correlated with Deceit ($r = .123$, $p < .05$) and significantly negatively correlated with Trust ($r = -.340$, $p < .001$). Deceit did not significantly correlate with Trust ($r = -.020$, $p > .05$).

CHAPTER 5

Discussion

The purpose of this study was two-fold and consisted of two phases. The first phase set out to validate the existence of acceptance of deception, ethics, motives, intentionality, and upbringing as viable factors representing influences on deceptive communication. The second phase of this study tested the internal consistency of the factors emerging from Phase I of this project. This chapter will discuss the findings, limitations of this investigation, and implications for future research.

Research Question 1

The first research question, “Do the factors of acceptance of deception, ethics, intentionality, motives, and upbringing constitute relevant factors of deception?” was addressed through two principal components exploratory factor analyses. The first run yielded five factors (see Figure 2). Of these five factors, “acceptance of deception”, “upbringing” and “intentionality” emerged as basically the same factor. The factor representing “ethics” emerged with two of its original items, but loaded items from other factors, and was relabeled “deception is wrong”. Finally, “Motives”, the factor that had the only noticeable discrepancy before and after Phase I, had items loading onto two new factors, “deception is wrong” and “acceptance of deception”.

First, “Acceptance of Deception” emerged and loaded an original “acceptance of deception” item and two “motives” items, which, when placed in the context of “acceptance” appeared to be consistent with the notion of

acceptance. Items in the subscale representing acceptance include, “The situation sometimes makes it easy for people to deceive someone else” and “Deception is a common communication practice.” The words “sometimes makes it easy” and “common” suggest the commonplace nature of deception and its ubiquitous presence in everyday life. Furthermore, these statements indicate an acceptance or approval of deception as a common, almost normal part of everyday conversation (Backbier et al., 1997; O’Hair & Cody, 1994), something one may even be willing to “put up” with from time to time.

The prevalence or ubiquitous nature of deception works its way into people’s conceptualizations of deceptive acts, enabling individuals to consider how common or normal that act would be in a given situation (Buller & Burgoon, 1994, 1996a; Camden et al., 1984; DePaulo & Bell, 1998; Hample, 1980; Hopper & Bell, 1984; Knapp & Comadena, 1979; Knapp et al., 1974; O’Hair & Cody, 1994). A focus group participant (Scholl and O’Hair, 1998) testified to the prevalence or acceptance of deceptive messages, stating, “[Y]ou can tell like a lot of people do that all the time, exaggerate all the time.” In general, acceptance of deception may not only mean acknowledging that deception is out there, but perhaps coming to accept and even expect deception. For example, another focus group participant stated:

“I think that those times with those little white lies that you tell people . . . are so common. You know, if one of my friends [asks] me, “How do I look,” and [I say], “well yeah, you look fine” . . . that’s no big deal . . . everybody does it.”

The second loading factor, “intentionality”, included such items as, “There are times where I can be in the middle of saying something and suddenly realize that I was not telling the truth” and “Sometimes I realize that I have deceived someone else only after I had done it.” Upon reading these items, it seems that these statements reflect some lack of awareness or mindfulness on the part of the deceiver. In other words, these statements do not represent a 100-percent level of intent during an act of deception. Of course, these findings do not prove that people do engage in deception with some lack of awareness. Rather, the finding suggests that the level of intentionality behind a deceptive act may be something that individuals consider when making decisions about their deceptive messages. People’s conceptualizations of the deception process may include some consideration toward the level of unintentionality behind a message.

One sees support for this notion from Scholl and O’Hair’s (1998) focus group findings, in which participants talked about engaging in deception with some level of mindlessness. For example, one individual admitted, “[I]n some ways we all try to deceive someone, whether it be intentional or unintentional.” When explaining her past deceptive behaviors explained, “You start with little things that you didn’t realize . . . , [y]ou know . . . , [t]hat you were telling a lie.”

A lack of some intentionality may be indicative of a moderate or low level of strategy implemented in a deceptive message. Based on the work of Chisholm and Feehan (1977), the intent to deceive may imply consciously constructing a message based on such factors as valence toward the target or cognitive complexity. Perhaps the more intent exists within a deceptive message, the more

likely it is to be motivated by strategy and information management.

Another issue that warrants consideration is whether a lack of intentionality really implies deception at all, but rather a “mistake” in the way information was presented. When asked about deceiving others “unintentionally”, some of the Scholl and O’Hair (1998) focus group participants admitted that they claimed that the event did not involve deception at all. Rather, the “unintentional” deceptive message was really the truth later found to be false. Despite this possibility, intentionality is a strong factor that consistently emerges within the context of deception, as this exploratory factor analysis revealed.

The third factor remaining consistent before and after Phase I was “upbringing” and included such items as, “My upbringing often motivates me to use deception” and “The way I was brought up motivates me to use deception”. The items that loaded suggest two things. First, one’s upbringing has a great deal of influence on people’s deceptive behavior. This notion receives support from Scholl and O’Hair’s (1998) study, as well as from Buller and Burgoon (1996), Cole and Mitchell (1998) and Wood (1993), who claim that one’s upbringing can have a tremendous impact on how one views deception. One person from the focus group study talked about the influence upbringing has on a child. He knew someone whose “parents got a divorce recently. And it turned out [before the divorce] . . . her dad had been going and deceiving people at work . . . had been dating different people”. Although this piece of testimony does not reveal what kind of effect that instance would have, it seems arguable that people call to mind the examples of their parents and other important people, and how these

individuals' behaviors influence their own.

The second issue raised by the “upbringing” items that loaded is that people may remember is the extent to which their upbringing taught them to use deception. One focus group member explained how one learns from example: “[I]f your parents are deceivers you are more likely to be one.” Items that did not load talked about how upbringing motivates people to avoid deception. Unfortunately, these findings cannot tell us exactly why that is the case. Perhaps, as suggested by Buller and Burgoon (1994), the extent to which one has learned how to be a competent communicator is related to how often that person engages in deception. Competence, in this case, may imply that people may learn to use deception more often if they see others succeed with it, or if it is an easier solution than is truth telling.

What remains to be answered is exactly how individuals operationalize upbringing. While this study defines upbringing as an individual's set of habits, communicative behaviors, or typical reactions to situations as learned from parents, mentors, and other influential persons, the item scores and loadings do not indicate who these respondents consider to be important individuals in that upbringing process. Influential others within one's upbringing could be parents, teachers, elementary school peers, college friends, or other influential persons.

The next factor, “Deception is Wrong”, originated from the “ethics” factor, but received a new label. In general, “ethics” remains consistent as a factor, but it was relabeled here because the items that actually loaded reflect a negative attitude toward deception, rather than just an acknowledgement of

ethical issues. In essence, one could argue that this factor remains consistent before and after Phase I. The relabeling of this factor to “deception is wrong” is a more accurate depiction of the ethics items that eventually loaded.

The ethics-related items that suggest deception is “wrong” include, “I have very strong feelings that tell me that deception cannot be justified” and “My moral stance tells me that deception is never okay.” The items that loaded may speak to the ethics or justification behind deception, implying that deception is wrong or unjustifiable and should be avoided. The fact that these particular items loaded further suggests that people have a negative attitude toward deception in general.

The presence of a “deception is wrong” factor supports the fact that deceivers generally do not feel good about engaging in deception (Deetz, 1990; O'Hair & Cody, 1994; Sims, 1992; Smith, 1988), even though they see plausible reasons for doing so in specific situations. The Scholl and O'Hair (1998) focus group findings yielded many statements to this effect. For example, one person said, “[Y]ou can lie and tell [other people] that they look good and stuff but the same people you feel very bad telling like a real lie to.” Another person commented, “For the most part, . . . when people think of deception they think of it as being bad.”

Aside from the right or wrong of deception, “deception is wrong” included two items that were originally included under “motives”. One of the “deception is wrong” items states, “I would rather not use deception even if it's to benefit the person I am deceiving”. This statement not only implies that deception is

undesirable, but that the seemingly noble reason behind it is not enough to justify the act. Whether or not someone feels good about deceiving, he or she understands that people have motives for deceiving others (relational, self-preservation, other-preservation—Buller & Burgoon, 1994, 1996a; DePaulo & Bell, 1996; DePaulo & Kashy, 1998; Goffman, 1974; Hample, 1980; O’Hair & Cody, 1994). Based on this interpretation, it is understandable why the factor “deception is wrong” loaded some of the “motives” items.

Before discussing the fifth factor, it should be noted that the “motives” item is the only original factor that did not emerge on its own. The blending of “motives” items into other factors was partly due to the fact that many of them reflected personal moral or ethical viewpoints, which made them more fitting for “deception is wrong”. Another reason could be the discrepancy between self-references (e.g., “I would rather not use deception . . .”) and other-references (e.g., “The situation sometimes makes it easy for people . . .”). As a result, the self-references ended up in “deception is wrong” and the other-references loaded onto “others’ opinions”, which is discussed next.

“Others’ Opinions” is the fifth emerging factor, and it loaded an “ethics” item (“Most people feel that deception is wrong.”) and one of the original “acceptance” items (“Most people do not accept deception as an acceptable communication practice”). This fifth factor is considered here to be the only “new” factor emerging out of Phase I.

“Others’ opinions”, as does “deception is wrong” implies a negative valence toward deception, but unlike “deception is wrong”, “others’ opinions”

talks about perceptions of other people's negative opinions of deception, rather than one's own. The fact that this factor emerged on its own could indicate a bifurcation of attitudes within individuals' conceptualization toward deception. On the one hand, people could consider their own beliefs, values, motivations, and moral standards when deeming a deceptive act wrong. On the other hand, they may feel the need to take into account whether others would have the same opinion of that deceptive behavior. It may be interesting to find in future studies whether both these ethical issues must be present in the thoughts of deceivers, and how they relate to one another, for deception to take place.

It should be noted that an original "acceptance" item (item 4; "Most people do not accept deception as an acceptable communication practice.") Due to the negative attitude implied toward deception, and the fact that this statement refers to *others'* attitudes, it would make sense that this item is more suited for "others' opinions.

In order to adequately answer the first research question, it was decided to conduct an additional exploratory factor analysis to make certain that the subscales tested for internal consistency were distinct from each other. As a result of the second EFA, four of the five factors emerged: "Intentionality", "Deception is wrong", "Acceptance of deception", and "Upbringing". These factors are listed here in order of strength of factor loading. In answering RQ1, this study contends that, as a result of the rigorous data reduction methods used in the first phase, four factors represent viable constructs of deceptive communication (see Figure 3).

"Intentionality" was the first factor extracted and loaded six of the eight

items constructed for this factor. It is interesting to note that “Intentionality” loaded first in the second EFA, whereas it loaded fifth in the first EFA. Perhaps this is because the items constructed for the second EFA became much more unidimensional in the subsequent EFA. The chi-square value would provide support for this notion. It may be premature to say for certain that deception occurs with various levels of mindlessness, but the prevalence and loading of these statements may suggest that pure intent is not something necessarily required for deception to occur. Furthermore, when people think about deception in general, they could be taking into consideration that their deceptive acts may have had or will have some level of mindlessness behind them.

The second factor was “Deception is wrong,” which had six items loading. It may make sense that item 31, “I use deception only as a last resort” did not load since it does not explicitly express a tendency to avoid deception. Although it still reflects a negative attitude toward deception, it still talks about using deception. Item 1, “I have very strong feelings that tell me that deception cannot be ethically justified,” may not have loaded because it is a rather long sentence that is perhaps a little confusing to comprehend upon its first reading, even though it reflects a tendency to steer clear of deception.

“Acceptance of deception,” the third factor, had four items loading. For the most part, the loading items speak very generally about deception being commonplace and frequently used (e.g., “a common communication practice” and “in many circumstances”). The items that did not load talked about deception being committed “if it will benefit the [the] relationship” (item 7) or the situation

making it easy for people to engage in deception (item 2). Perhaps when individuals think about the acceptability of deception, they do not take into careful consideration specific circumstances or situations motivating the deception, but the simple fact that deception is common and accepted. The “acceptance of deception” factor submitted to the second EFA contained many motive-oriented items, which contain the words “situation” and “circumstance”. The implication of this could be that motives may be more of a heuristic factor or thought embedded in the minds of deceptive communicators, rather than a prominent cognition that is at the forefront of their minds.

Finally, “upbringing” remains a factor or thought that could be included in the thoughts of deceptive communication. What is most interesting about the results of the second EFA is that the items loading did not say whether or not people were taught to avoid deception or to be deceptive. Rather, the loading items merely talked about the importance of one’s upbringing, and that people learned what was right and wrong about deception. Granted, there were only three items reflecting this neutral notion; it could be argued that if more such items were included in the scale, they may have loaded as well. This is perhaps because people have various backgrounds and upbringings that have shaped their lives. Although individuals may have been told a variety of things about deception being right or wrong, in general, people acknowledge the importance and prevalence of one’s background (familial, especially) in the shaping of one’s deceptive behavior.

Only one item from “Others’ opinions”—“Most people I know are honest

most of the time” (item 19) had one item that loaded on a fifth factor, but this factor was not retained for the subsequent CFA. The factor “others’ opinions” from the first EFA contained items reflecting the perception of a negative attitude other people have toward deception, which is shown by such items as 4 (“Most people do not accept deception as an acceptable communication practice.”), 9 (“Most people feel that deception is wrong.”) and 34 (“Most people feel uncomfortable engaging in deception.”). Perhaps the only thing linking all these items together in the first EFA was that they reflected a negative attitude toward deception. Perhaps the reason that only one items loaded onto the fifth component (which was not retained as a factor) because this factor was not unidimensional enough. The factor as it emerged from the first EFA included items that spoke to both acceptability (e.g., item 19) and ethics issues (e.g., item 9) related to deception.

Research Question 2

What follows is a discussion of the results of Phase II, which was intended to answer the second research question, “Do the factors of deceptive communication emerging from this study represent unidimensional constructs?” The factors emerging from Phase II were “Intentionality”, “Deception is Wrong”, “Acceptance of Deception”, and “Upbringing”. This portion of the discussion focuses less on the loading of items to factors and concentrates more on addressing the internal consistency and dimensional structure of each factor.

The first factor emerging in the second EFA, the “intentionality”, contained six items that were included in the “intentionality” factor from Phase II.

This subscale had a relatively strong reliability with the inclusion of all six items (.886). These statements reflect one's own account of deceptive behavior and/or tendencies, as well as perceptions of mindfulness behind them. Additionally, this subscale includes statements recalling mindfulness from the past (e.g., item 35--"I have caught myself being untruthful without intending to be.") as well as descriptions of one's tendencies to act in the future (e.g., item 5—"There are times when I can be in the middle of saying something and suddenly realize that I was not telling the truth.").

Although "intentionality" loaded first in the second EFA, this factor is perhaps the most ambiguous in its meaning or relevance to the study of deception. Although "intentionality" emerged as a prevalent and unidimensional construct, this still does not tell us exactly what intentional or unintentional means. This construct could relate to consciousness or awareness, or be operationalized as level of strategy and planning. Also, if a deceptive act is seen as having less than 100 percent intent behind it, was the act deceptive at all, or was it just a mistake or a judgment in error? What we can take away from this analysis is that the level of intent behind a deceptive message is a type of thought that people may take into consideration, or it may have a mutual influence with other deception-related thoughts.

Next, the "Deception is wrong" subscale had six items that reflected individuals' negative attitudes about engaging in deception. Examples of items were, "I do not see deception as an acceptable form of communication (item 11)" and "Deceiving someone else is seldom justified (item 21)." These findings are

consistent with literature that asserts people see deception as an undesirable communicative choice. Furthermore, even when individuals decide to deceive, they tend not to feel very good about themselves for doing it (Hample, 1980). Another example of this sentiment can be found in the original focus group data in which one person said, “I feel like it is wrong when I do it at first, then a couple of days later I feel *really* bad” (Scholl & O’Hair, 1998).

One might view this subscale as one that represents personal ethics; the six remaining items refer to a moral stance that does not permit deception, or reflects a sense of discomfort with the idea of engaging in deception. Moreover, all these items refer to the self (e.g., “I”, “my”), reflecting a negative feeling about envisioning oneself deceiving others. These items have their origin in some of the focus group data that refer to this notion. For example, one individual said, “If you lie so much and deceive so much . . . your conscience actually gets to ya.” It could be argued that one type of thought encompassed in one’s deception construct is the extent to which one feels unjustified or uncomfortable with committing deception.

The “acceptance of deception” factor included such items as, “Deception is a common communication practice (item 12)”, and “People use deception for all sorts of reasons (item 17).” The “acceptance” factor reflects the perceived prevalence and acceptance of deception in other peoples’ everyday interactions, an idea that has been supported by the reviewed literature (Backbier et al., 1997; Buller & Burgoon, 1994, 1996a; O’Hair & Cody, 1994). These items are also quite similar to the statements emerging in Scholl and O’Hair’s (1998) focus

group interviews. Interviewees said such things as “People lie all the time” and that deception occurs “a whole lot”. According to another focus group participant:

I think we demand it. I can’t imagine someone going around not deceiving . . . telling people what [they really] thought . . . or saying, “you look like crap this morning.” That would be bad! I mean, you would be considered an outcast if you weren’t deceptive.

It could be argued, then, that when individuals think about committing deception, or the idea of deception itself, they take into account their perception that other people do it quite often, that people consider deception an often necessary way to communicate, and perhaps that people are often lying to them. Whether it is a perception of people’s motivations, or their mere acceptance of deception as a communication strategy, overall, “acceptance of deception” as a unidimensional construct seems to be conveyed here as the thought representing the extent to which people perceive deception to be a common and everyday occurrence.

It should be pointed out that the reliability coefficient for the “acceptance” subscale was .644, perhaps a little too low. The chi-square value was lower in comparison to the other subscale (.6.250), which suggests that the goodness of fit hypothesis is unsupported ($p > .05$). Perhaps there could have been more statements in the revised deception scale that reflected a more general acceptance of deception, rather than items that refer to specific motives (e.g., benefiting the relationship, avoiding difficult situations). It is possible that the “acceptance” subscale submitted to the second EFA was not very unidimensional.

The “upbringing” factor, which emerged in both Phase I and II, only had three items loading in the second EFA. These items were submitted to the CFA and yielded an alpha coefficient of .779. As stated earlier, these three items reflect an appreciation of the importance of one’s upbringing in shaping one’s deception-related attitudes, beliefs, and behaviors. The items not loading (and thus not included in the CFA) were not neutral with regard to what one is actually taught about deception. Items such as “My upbringing often motivates me to use deception (item 3)”, “The way I was brought up often motivates me to use deception (item 8)”, and “It was continually stressed when I was growing up that deception was an unacceptable behavior (item 28)”. These items reflect both positive and negative valences, and therefore, could have undermined the dimensional nature of the “upbringing” construct prior to the second EFA. Perhaps if there were more neutral “upbringing” statements, there would have been more items included in the subscale submitted to the CFA.

This prevalence of an “upbringing” factor is consistent with the literature that points to parents and close family members as important influences on one’s deceptiveness (Cole & Mitchell, 1998; Scholl & O’Hair, 1998; Wood, 1993). Scholl and O’Hair (1998) also found their respondents spoke of the importance of their childhood upbringing. Many focus group participants agreed that what their parents taught them about lying and deceiving remains salient in their minds to this day.

What should not be disregarded are the thoughts people may still have in mind about what they were specifically taught about deception. For example,

despite the overt message people may get about deception being unacceptable, there is evidence to the contrary. For example, one focus group member said:

[L]ittle kids are pretty truthful all the time and they learn to not be so naïve and not to be so truthful because they get hurt telling the truth. You know like if you say, “Mom, look at the fat lady” . . . your [mom’s] going to think, “oh, yeah, she’s fat” . . . [but you’re] going to get punished for it, so you learn not to tell the truth in all situations.

This statement may remind us that individuals not only appreciate the importance of their upbringing, but also that individuals remember specifically what they were taught. For instance, some children may get an overt, explicit message from their family or parents telling them to avoid deception and to be truthful to others. However, what the factor of “upbringing” does not take into account are the subtle messages that may be transmitted from parents to children, inadvertently telling them that there are some situations where it may be better to avoid the truth. This is an important issue that should be taken into account as the factor of “upbringing” is explored in future research.

In addressing the second research question, this study contends that the factors of “Intentionality”, “Deception is wrong”, and “Upbringing” represent unidimensional and internally consistent factors of deceptive communication. This response is based on the reliability coefficients and the chi-square values. For this reason, “Acceptance of deception” has not yet been found to be an internally consistent and unidimensional factor.

What this study's findings suggest thus far is that, first, "intentionality reflects the perception of one's level of mindfulness or intent behind their deceptive messages. Second, they view deception for themselves as unethical or unjustified (i.e., "deception is wrong"). Third, "upbringing" represents the level of importance of one's upbringing in shaping one's attitudes toward deception, as well as one's deceptive tendencies. Fourth, although not statistically supported here, there may be thoughts representing the extent to which individuals see deception as a ubiquitous and acceptable part of life.

It should be noted that these factors are not viewed here as reported behaviors or intent to behave deceptively. Rather, these factors are viewed as the cognitions that may adequately represent what people think about when they think about deception. In other words, what this entire program of research could be uncovering are the constructs through which individuals most likely progress as they consider formulating and executing a deceptive message. For example, for individuals to consider deceiving others, they may likely consider such things as: a) how uncomfortable they are with committing the act themselves, b) how acceptable or normal deception is in general, c) what they have been taught by their families about deception and how important that upbringing is to them, and d) the level of intent they feel behind the message.

Future directions for exploring these thoughts or factors are discussed below. In addition, the relationships among these factors warrant consideration and they are discussed next.

Hypotheses 1-3

Three hypotheses were posed to test the construct validity of the four factors emerging from the second EFA by comparing them to commonly tested items intended to predict deceit, as it is measured by the Mach IV (Christie & Geis, 1970). The construct validity of the four factors was also tested in terms of their relationship with the constructs of cynicism and trust, which are perceptions of other people's tendencies as measured by the Revised Philosophies of Human Nature Scale (Wrightsman, 1974).

Hypothesis 1. There were many significant correlations between the four deception factors and the Mach IV Deceit subscale. The Deceit subscale indicates the degree to which one exhibits deceptive tendencies. The higher the score, the more deceptive one tends to be (Christie & Geis, 1970; Wrightsman, 1991). The strongest correlation among this comparison was between Deceit and "deception is wrong". This was a significant negative correlation, meaning that the higher the measurement of Deceit, the less likely that respondents would agree that "deception is wrong". On the other hand, the more someone believes that "deception is wrong", the less likely they would be to deceive. This would make sense given that if people have a high tendency to be deceptive, the less remorse or regret that person would have with engaging in the act. In other words, a very deceptive person may be able to justify ethically a deceptive act in order to feel comfortable doing it.

The Deceit subscale had another significant negative correlation with "upbringing". What this correlation suggests is that the stronger someone's upbringing, the less deceitful that person may be. This correlation may hint at the

nature of the “upbringing” factor in that it may really reflect the extent to which one is taught that deception is wrong or undesirable. The more salient this particular notion is, the less likely one will display deceptive tendencies.

There were no significant correlations between Deceit and the factors of “acceptance of deception” and “intentionality”. It is interesting that, while nonsignificant, the correlation coefficient between Deceit and “acceptance” is positive. It is interesting that “acceptance” did not significantly correlate with Deceit, given that it may be the case that the more deceptive one is, the more likely one is to see deception as a prevalent and common communication practice. Perhaps “acceptance” and Deceit would share a significant relationship with each other if they were correlated with at least one of the other factors (as in a multiple regression) that would serve as a moderator.

Regarding the nonsignificant correlation with “intentionality”, the correlation coefficient, although nonsignificant, was negative. As is the case with “acceptance”, one or more moderating variables may need to be considered.

Hypothesis 2. The four deception factors were also compared with the Trust and Cynicism subscales of the Revised Philosophies scale to account for the perceptions people have about the tendencies of others. As defined earlier, trust is the degree to which people see others’ actions and behaviors and good and sincere (Wrightsman, 1974, 1991). Trust had a significant positive correlation with “deception is wrong”. Trust as a subscale has to do with a person’s perceptions of the goodness, sincerity, or honesty of others. Based on these findings, it would not be surprising that a high Trust score would relate to a high “deception is wrong”

score. It could be that someone who feels ethically uncomfortable with deceiving others may think (or at least hope) that others would share that viewpoint.

Trust correlated negatively and significantly with “acceptance of deception” and “intentionality”. Regarding “acceptance”, the findings suggest that the more trust individuals place in others’ veracity and good nature, the less likely they are to see deception as a common part of everyday life. What is also noteworthy is the negative correlation between trust and “intentionality”. High scores on intentionality would mean the greater likelihood individuals believe themselves to be capable of engaging in deception and not being totally aware of doing so. If one believes that people are engaging in deception, but often not realizing it, then it would make sense that a person may not feel confident in trusting others to tell the truth, perhaps more often than they would realize or admit.

Trust did not have a significant correlation with “upbringing”, although the correlation coefficient was positive. Perhaps with a larger sample size, this correlation would have been significant.

Hypothesis 3. Cynicism was the other Revised Philosophies subscale compared with the four deception factors. According to Wrightsman (1974, 1991), cynicism is the distrust of others’ actions or behaviors, or the extent to which one perceives others’ actions to be ill-intended or insincere. This comparison yielded one significant negative correlation and two significant positive correlations. First, cynicism was negatively correlated with “deception is wrong”. The higher the cynicism score, the lower the “deception is wrong” score,

suggesting that individuals who tend to be distrustful of other people's intentions may feel more comfortable with engaging in deception. This may make intuitive sense in that if one expects others to be deceptive, then that person may view deception permissible for oneself. Another possibility is that the more one distrusts others' motives, the more one may need to engage in self-protection, and deception may be a viable way to protect oneself. O'Hair and Cody (1994) support this notion, asserting that deception is sometimes viewed as a survival strategy.

A different type of interpretation of this correlation would be that communicators who are more comfortable with engaging in deception would more likely expect others to be just as comfortable, if not more. The reason here is that people may feel the need to protect their self-interests, and perhaps being honest or truthful in some situations makes one feel vulnerable to others' dishonorable intentions.

Cynicism positively correlated with "acceptance of deception" and "intentionality". First, with "acceptance", it would make sense that if one views deception as a prevalent and often-accepted phenomenon, then one would understand the need to be cynical of others who would view deception in a similar fashion.

The other positive correlation that is more difficult to interpret is the one between Cynicism and "intentionality". With "intentionality" the higher the score, the more individuals could account for deceptive attempts that were lacking intent or mindfulness. What this suggests is that if people believe in the possibility of

engaging in deception without realizing it, then they would expect other people to be capable of doing the same thing, probably more than they realize.

There was no significant correlation found between Cynicism and “upbringing”. This could simply mean that the salience or importance of one’s upbringing by itself may not be directly related to the cynicism toward others’ attitudes or actions. For “upbringing” and cynicism to be correlated, there may need to be an additional factor or variable linking the two.

Another group of correlations to consider is that among the four deception factors. “Deception is wrong” negatively correlated with “acceptance”, which suggests that the more people feel uncomfortable engaging in deception, the less likely they would accept deception as a prevalent and common activity. Also, “deception is wrong” was positively correlated with “upbringing” (This was the strongest correlation; $r = .410$), which is not surprising, given the nature of the items in the “upbringing” subscale.

“Intentionality” had a positive correlation with “acceptance of deception”, which may indicate that the acceptance of deception as a common activity is related to the tendency to deceive others sometimes without intending to. This may imply that a person who tends to engage in deception inadvertently or without 100 percent conscious thought may have a greater tolerance for deception in others. “Intentionality” also had a negative correlation with “deception is wrong”, meaning that the greater the likelihood that one would engage in deception inadvertently, the more comfortable one is with deception (lower score on “deception is wrong”).

Finally, “upbringing” did not significantly correlate with “acceptance of deception” or with “intentionality”. The nonsignificant finding with “acceptance” could be due to the neutral way the items were worded, meaning that “upbringing”, as stated earlier, only consists of items reflecting the *importance* of deception. These items do not say whether someone was taught to engage in or avoid deception; furthermore, these items do not reflect a like or dislike toward deception. On the other hand, the “acceptance” items undoubtedly were directional in nature, reflecting tendencies toward deception.

That “intentionality” and “upbringing” were not correlated could be due to the possibility that these two subscales do not measure deceptiveness in the same way. On the one hand, “intentionality” refers to one’s belief in engaging in a deceptive behavior without full intent. In contrast, “upbringing” does not refer directly to deceptive behavior, but to what one is taught by others about deception. Furthermore, “upbringing” may include memories of how others (rather than oneself) were deceptive or truthful. Perhaps the reason these two factors were not significantly correlated is because they were measuring thoughts of deception, but in two very different ways (memories of others’ deception-related beliefs vs. one’s own ability to behave deceptively). If the sample size were larger, however, and if there were another factor included in the correlation (i.e., multiple regression), perhaps these two factors could have been found to be significantly correlated.

In summary, Hypotheses 1-3 inquire about the construct validity of the four emerging factors in this study. There were significant correlations that

indicate many of the deception-related variables were indeed related (e.g., Trust with “deception is wrong”, Cynicism with “acceptance of deception”). Also, many variables that appear, at face value, to be opposite in terms of deception were negatively correlated (e.g., Deceit with “deception is wrong”, Trust with “acceptance of deception”). However, some deception-related items did not significantly correlate (e.g., Deception with “acceptance of deception”, Trust with “upbringing”). The inability of all variables to correlate with one another could indicate a lack of construct validity. However, due to a few of the limitations mentioned below, it would be premature to argue that these factors lack validity without including these factors in future studies by correcting for the limitations of the current study.

Limitations

Before addressing the theoretical and practical implications of these findings, as well as laying out the future for this program of research, several limitations of this study need to be addressed. First, a limitation of the study may be seen in the way the data were collected, which was through convenience and snowball sampling. Attempts were made to make the sample as heterogeneous as possible by accessing people within and without the university student population. However, convenience and snowball sampling techniques do lend themselves to biases. Such biases include a positive bias toward the researcher, and completing the survey in the presence of distractions of which the researcher is unaware. Also, as the demographics of the sample reveal, a large majority of the respondents were undergraduate, college-age students who likely made the overall

sample relatively young. However, given the exploratory nature of the study, the author was willing to accept less-than-random methods for collecting the data. The sampling methods used in this study allowed for relatively quick and easy data collection. The methods of data collection also seem less than severely detrimental given that this study was more interested in gathering information and validating that information, rather than carrying out experimental procedures, making predictions, or generalizing the findings to a larger population.

Another limitation was the lack of more systematic pre-testing of the scales used. Although the author made periodic checks of reliabilities as the data were accumulating during both phases, this does not substitute for pre-testing the scales before data are collected. Despite this limitation, wording of particular items as well as decisions to include or exclude certain items during a particular phase of this research program were largely a result of the outcome of the phase preceding it. In other words, each phase of this research program produced data that had been tested and validated for use in the subsequent phase. Furthermore, this program of research has its origins in emically derived data, which provides researchers with a rich set of information that otherwise could not be obtained through empirical approaches by themselves.

The sample size is another issue that needs consideration. Phase I had 339 respondents and Phase II had 321. Scholars such as Stevens (1996) would claim that a factor analysis requires 20 respondents per item in a scale, which would make both Phases limited in sample size. Granted, the replicability of the factors depends a great deal on the number of respondents, meaning the more the better.

However, Gorsuch (1983) claims that there is no agreement on the proper ratio between number of respondents to variables. Gorsuch (1983) goes on to recommend no less than 5 respondents per item, and this study did exceed that minimum. Due to the resulting high reliabilities of each subscale, it is this author's contention that this study did not suffer greatly from the effects of its sample size.

Another issue that needs attention is the low reliability (.450) of the Mach IV Deceit subscale. Although this reliability would be considered poor compared to the other subscale reliabilities, the Deceit subscale has been used and tested extensively in other studies (Hunter et al., 1982; O'Hair & Cody, 1987; Wrightsman, 1991). This subscale also has been used in a similar fashion by O'Hair and Cody (1987) and by Hunter et al. (1982), and both studies generated identical factor structures with regard to the Deceit subscale.

An additional limitation could be found in the use factor analysis itself. There are many things exploratory and confirmatory factor analyses are capable of, such as reducing data into usable, interpretable factors, summarizing interrelationships among variables to aid in conceptualization, and serving a heuristic function in building and/or contributing to communication theory. On the other hand, factor analysis is limited in that it cannot by itself make causal predictions based on how individuals respond to scale items. It should be noted, however, that this study in particular was not intended to make predictions or to arrive at generalizations about deceptive communication. This study had a primary goal of arriving at and validating viable factors that could be used in

future studies that are more variable-analytic and predictive in nature, or at least point out relationships that exist for reasons other than those that hypothesize causality.

Implications for Future Research

Having discussed the results and limitations of this study, we come to the implications of the findings, not only for the next stage of this research program, but also for their theoretical and practical applications. This study has revealed a great deal about people's deception-related thoughts and added to what we already understand about deceptive communication. The results of this study suggest that individuals may have particular types of thoughts with regard to deception. The decision to engage in deception may depend on how comfortable or justified a person is in deceiving (i.e., the extent to which "deception is wrong"), how "normal" or common the deception may be in comparison to other acts (i.e. how "acceptable" or prevalent is the act), and how much the act would conflict with what that person has been taught (i.e., "upbringing). Additionally, the level of intentionality behind that message may have an impact on how deceptive that message appears from the deceiver's perspective, as well as whether it is implemented in the first place.

Given what this study has revealed, the next logical step would be to test these factors in order to determine the nature of their relationship with one another. It may be insightful by itself to have the knowledge that these factors indeed exist, but it would be more informative to know how they relate to one another. Seeing the type, strength, and direction(s) of the interrelationships among

the factors can help us understand how this thought structure serves to influence one's willingness to engage in deception, or how a deceptive message would be implemented. For example, are there certain situations in which some factors become more prevalent or accessible than others are? Also, are there situations in which one factor (e.g., others' opinions) outweighs another factor (e.g., acceptance of deception) when a person is considering a deceptive message? Additionally, under what conditions must a person consider one's own ethical stance (that deception is "wrong") before proceeding to one's perception of others' opinions regarding that deceptive act, or vice versa?

Given these questions, it may be worthwhile in the next phase of this program to conduct a path analysis or to develop a path model. This approach could indicate not only which factors most strongly correlate with one another, but if there are any directional correlations that tell us of progressions from one factor to another. In other words, is there a factor or group of factors that have a causal or correlational link with another factor or group of factors? This perspective is similar to the approach taken by Hunter et al. (1982), who factor analyzed the constructs contained within the Mach IV scale. The authors submitted the results of their second-order factor analysis to a path model, and the resulting model showed that some constructs of the Machiavellian concept are antecedents of other constructs (see Hunter et al., 1982 for a detailed discussion of the development of the path model).

It is through the use of a path analysis or path model that provides for further application of the Theory of Planned Behavior. As seen in Figure 1,

attitudes toward the behavior, subjective norms, and perceived behavioral control have been found to be antecedents to behavioral intent, which precedes actual behavior (Ajzen, 1985, 1988). The TPB appears to incorporate many of the same types of factors similar to those in the current study. For example, subjective norms are to “acceptance” as attitudes toward the behavior is to “deception is wrong”, and so on. TPB also contains an intentionality component, termed behavioral intent in its model. It would be interesting to see if a path model conducted in the next phase of research would be similar to the model that has been proposed for TPB. So far, the emerging factors may imply some similarities between the current factor structure and the constructs contained within the Theory of Planned Behavior.

To explore this idea further, TPB portrays behaviors as being influenced by behavioral intent, which is preceded and influenced by attitudes toward the behavior, subjective norms, and perceived behavioral control. First, TPB and the current factor structure both contain elements of intentionality, or the level of mindfulness behind a communicative act. TPB posits that behaviors are not always preceded by volition, but often by nonvolitional influences (Ajzen, 1985, 1988; Doll & Ajzen, 1992). Perhaps deceivers vary in their mindfulness or mindlessness when constructing and executing deceptive messages.

Another connection between TPB and the current factors exists through the emergence of “acceptance of deception” as they pertain to subjective norms. TPB argues that subjective norms, or others’ perceptions of a given behavior, is an important antecedent to behavioral intent as well as to the actual behavior itself

(Ajzen, 1985, 1988). “Acceptance” could be related to subjective norms because of their link to what other people think about or do. The “acceptance” items may imply that if deception is a common activity, then others, in addition to the person considering deception, are perceived as engaging in the act as well. What this means is that, when a deceiver must decide when, why, and how to execute a deceptive message, he or she needs to assess the opinion others have toward a behavior, as well as how much the act is an accepted part of everyday communication.

Finally, TPB and the current factor structure have in common the notion of attitudes toward the behavior, which may be related to the factors of “deception is wrong” and “upbringing”. These themes refer to individuals’ negative feelings and attitudes about deception, or how uncomfortable they feel about engaging in the act. In addition, the opinions individuals hold about deception are largely shaped by what they have been taught during their upbringing, and these teachings are often laced with value-laden judgments about deception being right or wrong. For these reasons, TPB’s attitude toward the behavior may be related to the extent to which people think deception is bad, as well as what people are taught about the morality of deception by their families or parents.

It is not the intent for this portion of the discussion to be conclusive or to say that the emerging factors are identical to those contained within TPB; that is for future studies to determine. Rather, the application of TPB thus far provides a springboard from which future phases of this research program can progress. Once these studies are executed, it would then be more reasonable to draw more

solid conclusions about how one may interpret the results, as well as suggesting what implications these results have for the Theory of Planned Behavior.

Aside from the next phase of this research program, this study still leaves many questions to be asked. First, how common or generalizable are these thought patterns across individuals or situations? Are these five factors specific to a particular age group or culture, or can these five factors be found to cross most demographic and cultural boundaries? It is true that both phases of this study predominantly consisted of respondents who were Euro-American or white, and were between the ages of 18 and 25. A good test of a group of constructs that have theoretical potential would be to determine their applicability across various cultural and demographic groups.

Another group of questions relates to the strength or saliency of these factors. For example, does the strength of one or all of these factors correlate with actual deceptiveness? If so, which factors have a positive relationship with deceptiveness and which relate to deceptiveness inversely? We may be able to make some predictions based on the correlations that were conducted to check for construct validity (Hs 1-3), but the factor analyses in this study do not say much, if at all, about the likelihood of deception based on scores of the subscales; they merely speak to strength of a factor. Future studies would have to conduct inquiries involving manipulated and observed variables in order to answer these questions.

In terms of the deception literature, this study's findings have implications for altering how deception is defined, conceptualized, and operationalized with

regard to intention. Most of the literature that attempts to define deception assumes that for a deceptive message to be identified as such, it must contain intent, meaning that a deceiver must be totally mindful of doing the deceiving. While this study (or this research program, for that matter) has not provided solid proof to the contrary, it does yield results that suggest that deception may not always contain as much intent as the deception literature would claim. The factor of “intentionality” as it emerged in its final state contains items that suggest an element of unintentionality behind deceptive messages. Future phases of this research program will further pursue this issue. It is also the hope that other scholars will consider the level of intent more seriously.

While this study may serve as a springboard for answering some of the aforementioned questions, it also has many theoretical implications. First of all, this program of research is on its way to answering the call for more theoretical work in deception, as put forth by such scholars as McCornack (1997) and Buller and Burgoon (1994, 1996a). The need for more theory building in deception is derived from the need to provide the body of deceptive literature with more explanatory and predictive findings. This approach hopefully will move the area of deception above and beyond documenting behavioral correlates of deception toward predicting the conditions under which people will be deceptive, or predicting the types of adaptive behaviors deceivers and targets will engage in (as Interpersonal Deception Theory attempts to do). It is the hope of this research program to do just that. By identifying the thoughts or factors that serve as predispositions or influences of deceptive communication, this program could

make a contribution to the need for more predictive theories that explain what actually happens when people engage in deception. For example, whether or not someone engages in deception, or what kind of deceptive strategy a person engages in, may be influenced by certain factors or deception-related thoughts. Furthermore, the factors influencing deceptive behavior may themselves be influenced by the situation or a certain set of conditions (nature of the relationship, knowledge of the target, etc.). Thus, knowledge of the situation and its effect on the types of thoughts a deceiver has may help one predict whether or not one engages in deception, or what deceptive strategies a deceiver may use. What this example illustrates is that knowledge of how situational constraints affect our thoughts or predispositions (i.e., factors), which in turn, affect our deceptive behaviors, could prove to be very useful in helping us understand such things as when deception is most likely to take place, who is most likely to engage in it, and the conditions that make deception most probable.

This kind of theoretical understanding could have practical and applied implications. For instance, knowledge and foresight of people's thoughts about deception and the common factors or predispositions that influence their deceptive communication can serve as very useful information in such contexts as workplace settings or employment interviews. Such knowledge may inform employers about the deceptive tendencies of potential employees and may aid in hiring or promotion decisions. The need for and importance of honesty and integrity measures is very felt in these settings. Workers of all types and levels (e.g., subordinates and superiors) engage in deceptive and dishonest practices in

order to protect their job security, to preserve their reputation with coworkers and superordinates, and to hide theft or losses (Ash, 1971; Bernardin & Cooke, 1993; Cunningham et al., 1994). Employers recognize these occurrences and often feel the need to be on guard for, prevent, or even predict deceptive behaviors.

This study could expand on the knowledge gained from the use and study of other deception-related instruments. The subscales based on the factors in this study correlate strongly with the Mach IV Deceit subscale and with the Trust and Cynicism subscales of the Revised Philosophies scale. These subscales could also correlate with more specific scales, such as the Reid Report (Reid, 1967), the Personnel Selection Inventory (PSI), and the London House Personnel Selection Inventory (Terris, 1979; Terris & Jones, 1982), all of which are among the most commonly used to assess potential employees' tendencies toward dishonesty and theft. Commonly used deception and integrity scales, such as the Reid Report, contain items that relate to specific instances (e.g., "Suppose you found a bag of money that fell out of armored car lying in the street: Would you turn it in or keep it for yourself?"). The subscales developed in this study, on the other hand, refer more to general feelings and tendencies, which could be more applicable across various situations (self-managed teams, romantic relationships, parent-child interactions, etc.), not just the workplace setting.

Given the results of this study, as well as their theoretical and practical implications, the possibilities for future research are endless. Aside from the path analysis and path model that could be developed, this study takes scholarship in directions that lead to the link between attitudes and behavior, or more

specifically, between the factors that influence our deceptive tendencies and the deceptive messages we actually implement. Additionally, this line of research could take scholarship into the realm of study that seeks to understand the pre-interaction issues related to deception. Buller and Burgoon's (1996a) interpersonal deception theory does take into account such pre-interaction factors as expectations, prior knowledge, and communicative repertoire and skills. Such a pre-interaction approach to the study of deception could incorporate thought-related factors with the pre-interaction factors already studied. Furthermore, this approach could supplement our understanding of such phenomena as initial interactions, anticipated future interactions, and expectancy violations.

This research report discloses the results of what was the fourth phase of a program of research intended to explore the factors or thoughts influencing deceptive communication. The phases up to this point would still be considered rather exploratory in their design and implementation. They have also been fairly inductive and still have close ties to their emic, qualitative origins (e.g., focus group methods). What this program intends to do in the future is become more deductive as it progresses. In doing so, this program will take the information it has gleaned and start to approach it from a more empirical, variable-analytic perspective. By taking the factors that have now emerged, this program will be able to put these factors to more systematic tests and examine them under more specific conditions. The ultimate goal of this research program is to answer the call for more theoretical work in the area of deception.

Endnotes

¹ Please see Scholl and O'Hair (1998) for a more detailed description of the focus group interviews and the first factor analysis. Please see Scholl (1999) for a description of the second factor analysis.

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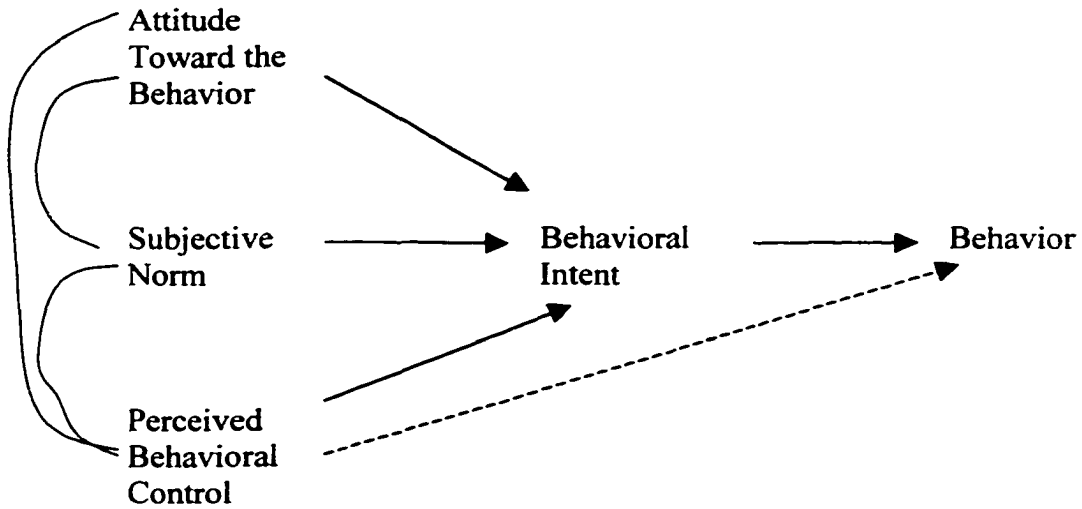
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FIGURES

Figure 1

Theory of Planned Behavior (Ajzen, 1985, 1988)

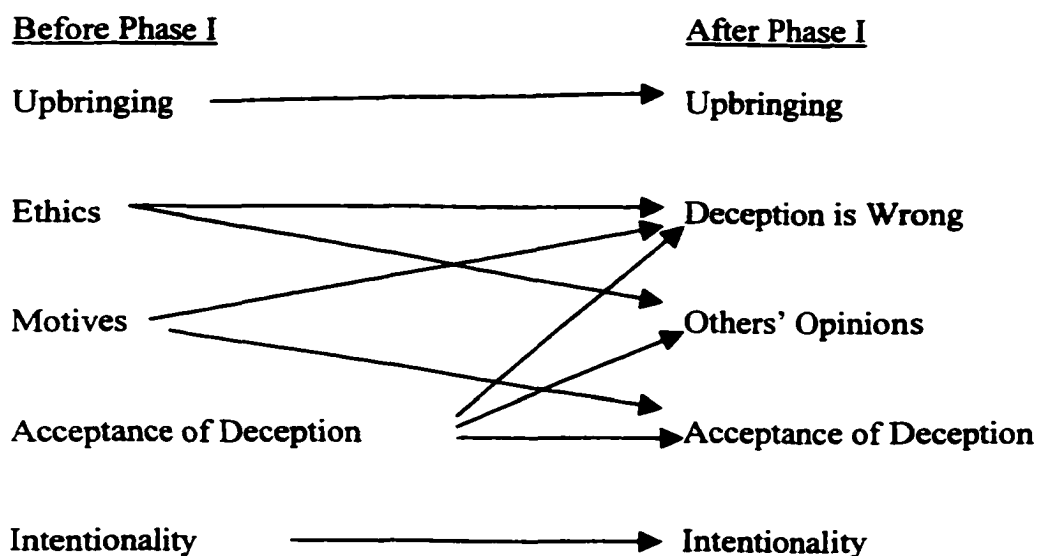


Theory of Planned Behavior (Ajzen, 1985)

The solid arrows represent a direct relationship. The broken arrow denotes an indirect relationship.

Figure 2

Factor Loadings in Phases I and II



This figure represents the emergence of factors during the progression from Phase I to Phase II. As the arrows demonstrate, Upbringing and Intentionality emerged as the same factor. Acceptance of Deception remained relatively consistent, and items that did fit this factor loaded onto other factors. Ethics was relabeled Deception is Wrong and items not fitting this factor loaded onto Others' Opinions (the only newly emerging factor). Motives was the only factor that did not emerge after Phase I.

Figure 3

Progression of Exploratory Factor Analysis in Phase I and Phase II

Phase I

Phase II

Upbringing —————> Upbringing

Deception is Wrong —————> Deception is Wrong

Acceptance of Deception —————> Acceptance of Deception

Intentionality —————> Intentionality

Others' Opinions

Items belonging to Others' Opinions (a factor that emerged at the end of Phase I) did not load onto any retained factors in Phase II.

APPENDICES

APPENDIX A

Personal Information

1. Female _____ Male _____

2. Age _____

3. Occupation (indicate if you are a student)

4. Hometown

5. Current religious affiliation (if any)

6. Religious background (if any)

7. Ethnic/cultural group with which you identify

APPENDIX B

Personal Issues Related to Deception

Directions: This study intends to get at the personal thoughts people have about deception. Deception can be defined as the act of drawing a listener away from what the deceiver believes is the truth.

When reading each statement, decide whether or not you agree or disagree with it, **given the events you just described.** For example, if you really disagree with an item, you may want to circle "1" or "2". If you really agree with the statement, you may want to circle "6" or "7". Please be as honest and as accurate as possible in your responses.

1. Sometimes I have to use deception on the spur of the moment. **M**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

2. I have become very tolerant of deception. **A**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

3. When I deceive someone I know that I am intending to do it. **I**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

4. My upbringing often motivates me to use deception. **U**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

5. My moral stance often allows me to justify deception. **E**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

6. Sometimes I will use deception for my own benefit. **M**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
7. Deception is an acceptable form of communication. **A**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
8. If I were to deceive someone I would have to be aware that I was doing it.
I
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
9. The way I was brought up often motivates me to use deception. **U**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
10. There are clear-cut cases when deception is okay. **E**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *11. No matter how a situation is going, I would not want to engage in deception with the other person. **M**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *12. Deception is not a significant part of my life. **A**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |

13. There are times where I can be in the middle of saying something and suddenly realize that I was not telling the truth. **I**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *14. What I learned while growing up often keeps me from lying to others. **U**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *15. I have very strong feelings that tell me that deception cannot be ethically justified. **E**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *16. I would rather not use deception even if it's to benefit the person I am deceiving. **M**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *17. I do not see deception as an acceptable form of communication. **A**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
18. Sometimes I realize that I have deceived someone else only *after* I had done it. **I**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *19. What I learned from my peers while growing up often keeps me from engaging in deception. **U**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |

***20. My moral stance tells me that deception is never okay. E**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

21. The situation sometimes makes it very easy for some people to deceive someone else. M

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

22. I think that many people feel that deception is sometimes a necessary evil. A

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

23. When people truly lie they are totally aware that they are doing it. I

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

24. What many people had learned in school often motivates them to lie to others. U

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

25. Many people recognize clear-cut cases when deception is justifiable. E

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

26. Sometimes people use deception if it will benefit their relationship with other people. M

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

27. Deception is a common communication practice. **A**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
28. When people deceive others it is done consciously, with full awareness of the act. **I**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
29. What many people have been taught in their households while growing up motivates them to lie to others. **U**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
30. People generally have very strong feelings that tell them that deception can be justified. **E**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *31. Most people would not use deception even if it's to benefit their relationship with the other person. **M**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *32. Most people do not accept deception as an acceptable communication practice. **A**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |

33. Some people can be in the middle of a lie and not realize it right away. **I**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *34. What many people have experienced in their household keeps them from engaging in deception. **U**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *35. Most people feel that deception is wrong. **E**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *36. Sometimes the situation makes it difficult for people to deceive the other person. **M**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *37. Most people would not view deception as a necessary evil. **A**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
38. It is possible for someone to be lying and only realize it after the fact. **I**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
- *39. What people used to learn in school keeps them from lying to others. **U**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |

***40. People in general have morals that tell them that deception is not okay. E**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

*** Indicates reverse coding.**

M = Motives

U = Upbringing

I = Intentionality

E = Ethics

A = Acceptance of Deception

APPENDIX C

Further Information about the Study: Relevant Issues Regarding Interpersonal Deception

Thank you for your participation. This study is the fourth phase of a research project designed to explore the factors that influence the choices people make regarding deceptive communication. So far, this research program has produced five factors—upbringing, situation/motives, acceptance of deception, ethics, and intentionality—that may influence when one deceives, who that person deceives, and how that deceptive message is formulated. The purpose of this phase was to test the prevalence of these five factors as possible influences—perhaps predictors—of deceptive communication. If you would like to know the results of this study or have additional questions, you can contact Juliann C. Scholl at:

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APPENDIX D

Personal Issues Related to Deception--Revised

Directions: This study intends to get at the personal thoughts people have about deception. Deception can be defined as the act of drawing a listener away from what the deceiver believes is the truth.

With this definition in mind, please respond to the following items. The responses range from 1 (Strongly disagree) to 7 (Strongly agree). When reading each statement, decide whether or not you agree or disagree with it. For example, if you really disagree with an item, you may want to circle "1" or "2". If you really agree with the statement, you may want to circle "6" or "7". Please be as honest and as accurate as possible in your responses.

1. I have very strong feelings that tell me that deception cannot be ethically justified. **D**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree
2. The situation sometimes makes it easy for people to deceive someone else. **P**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree
3. My upbringing often motivates me to use deception. **U**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree
4. Most people do not accept deception as an acceptable communication practice. **O**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

5. There are times when I can be in the middle of saying something and suddenly realize that I was not telling the truth. **I**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
6. I would rather not use deception even if it's to benefit the person I am deceiving. **D**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
7. Sometimes people use deception if it will benefit their relationship with other people. **P**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
8. The way I was brought up often motivates me to use deception. **U**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
9. Most people feel that deception is wrong. **O**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
10. Sometimes I realize that I have deceived someone else only *after* I had done it. **I**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
11. I do not see deception as an acceptable form of communication. **D**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |

12. Deception is a common communication practice. **P**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
13. My family has strong feelings about deception. **U**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
14. Most people act morally when tempted with deception. **O**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
15. Sometimes I am surprised when I am told that I wasn't exactly honest with someone. **I**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
16. My moral stance tells me that deception is never okay. **D**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
17. People use deception for all sorts of reasons. **P**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
18. I was brought up knowing right from wrong when it comes to deception. **U**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |

19. Most people I know are honest most of the time. **O**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
20. Sometimes I inadvertently deceive others. **I**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
21. Deceiving someone else is seldom justified. **D**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
22. I know people who use deception in many circumstances. **P**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
23. I had good role models for understanding the consequences of deception.
U
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
24. I am glad that most people avoid deceptive practices in their lives. **O**
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |
25. I have been in situations where I wasn't as honest as I had intended to be.
I
- | | | | | | | |
|----------|---|---|---|---|---|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly | | | | | | Strongly |
| Disagree | | | | | | Agree |

26. I cannot bring myself to deceive others even if it's socially justified. **D**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

27. Sometimes people feel that they have no choice but to use deception. **P**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

28. It was continuously stressed when I was growing up that deception was unacceptable behavior. **U**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

29. Most of the people I know stress that "honesty is the best policy." **O**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

30. In spite of my best intentions, I sometimes realized that I deceived someone. **I**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

31. I use deception only as a last resort. **D**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

32. People tell me that they have to use deception in difficult situations. **P**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

33. What I learned in school has influenced what I now believe is right or wrong about deception. **U**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

34. Most people feel uncomfortable about engaging in deception. **O**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

35. I have caught myself being untruthful without intended to be. **I**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

36. I try very hard not to use deception. **D**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

37. Deception is a part of most people's everyday lives. **P**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

38. My family taught me a lot about whether deception is right or wrong. **U**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

39. People I come in contact with would hardly ever engage in deception. **O**

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

40. I have deceived someone else without being aware that I was doing so. I

1	2	3	4	5	6	7
Strongly						Strongly
Disagree						Agree

D = Deception is Bad

P = Prevalence

U = Upbringing

O = Others' Opinions

I = Intentionality

APPENDIX E

Mach IV

Listed below are a number of statements. Each represents a commonly held opinion and there are no right or wrong answers. You will probably disagree with some items and agree with others. We are interested in the extent to which you agree or disagree with such matters of opinion.

Read each statement carefully. Then indicate the extent to which you agree or disagree by circling the number in front of each statement. First impressions are usually best in such matters. Read each statement, decide if you agree or disagree and the strength of your opinion, and then circle the appropriate number in front of the statement. *Give your opinion on every statement.*

If you find that the numbers to be used in answering do not adequately indicate your own opinion, use the one which is closest to the way you feel.

1. Never tell anyone the real reason you did something unless it is useful to do so.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

2. The best way to handle people is to tell them what they want to hear.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

- *3. One should take action only when sure it is morally right.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

- *4. Most people are basically good and kind.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

5. It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

- *6. Honesty is the best policy in all cases.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

- *7. There is no excuse for lying to someone else.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

8. Generally speaking, people won't work hard unless they're forced to do so.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

- *9. All in all, it is better to be humble and honest than to be important and dishonest.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

- *10. When you ask someone to do something for you, it is best give the real reason for wanted it rather than giving reasons which carry more weight.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

- *11. Most people who get ahead in the world lead clean, moral lives.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

12. **Anyone who completely trusts anyone else is asking for trouble.**

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

13. **The biggest difference between most criminals and other people is that the criminals are stupid enough to get caught.**

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

*14. **Most people are brave.**

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

15. **It is wise to flatter important people.**

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

*16. **It is possible to be good in all respects.**

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

*17. **Barnum was wrong when he said that there's a sucker born every minute.**

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

18. **It is hard to get ahead without cutting corners here and there.**

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

19. People suffering from incurable diseases should have the choice of being put painlessly to death.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

20. Most people forget more easily the death of their father than the loss of their property.

+3	+2	+1	-1	-2	-3
Agree				Disagree	
Strongly				Strongly	

<u>Original</u>	<u>Score Rescore</u>	<u>Reversed</u>
+3	7	1
+2	6	2
+1	5	3
-1	3	5
-2	2	6
-3	1	7

*Denotes reverse coding

APPENDIX F

Revised Philosophies of Human Nature Scale

This questionnaire is a series of attitude statements. Each represents a commonly held opinion, and there are no right or wrong answers. You will probably disagree with some items and agree with others. We are interested in the extent to which you agree or disagree with matters of opinion.

Read each statement carefully. Then indicate the extent to which you agree or disagree by circling a number for each statement. First impressions are usually best in such matters. Read each statement, decide if you agree or disagree and determine the strength of your opinion, and then circle the appropriate number on the answer sheet. Be sure to answer every statement. If you find the numbers to be used in answering do not adequately indicate your opinion, use the one closest to the way you feel.

1. If most people could get into a movie without paying and be sure that they would not be seen, they would do it. **C**

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

2. Most people have the courage of their convictions. **T**

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

3. The average person is conceited. **C**

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

4. Most people try to apply the Golden Rule, even in today's complex society. **T**

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

5. Most people would stop and help a person whose car was disabled. T

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

6. The typical student will cheat on a test when everybody else does, even though he/she has a set of ethical standards. C

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

7. Most people do not hesitate to go out of their way to help someone in trouble. T

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

8. Most people would tell a lie if they could gain by it. C

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

9. It's pathetic to see an unselfish person in today's world, because so many people take advantage of him/her. C

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

10. "Do unto others as you would have them do unto you" is a motto that most people follow. T

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

11. People claim that they have ethical standards regarding honesty and morality, but few people stick to them when the chips are down. C

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly					Strongly

12. Most people will speak out for what they believe in. **T**
- | | | | | | |
|----------|----|----|----|----------|-------|
| -3 | -2 | -1 | +1 | +2 | +3 |
| Disagree | | | | | Agree |
| Strongly | | | | Strongly | |
13. People pretend to care more about one another than they really do. **C**
- | | | | | | |
|----------|----|----|----|----------|-------|
| -3 | -2 | -1 | +1 | +2 | +3 |
| Disagree | | | | | Agree |
| Strongly | | | | Strongly | |
14. People usually tell the truth, even when they know they would be better off by lying. **T**
- | | | | | | |
|----------|----|----|----|----------|-------|
| -3 | -2 | -1 | +1 | +2 | +3 |
| Disagree | | | | | Agree |
| Strongly | | | | Strongly | |
15. Most people inwardly dislike putting themselves out to help other people. **C**
- | | | | | | |
|----------|----|----|----|----------|-------|
| -3 | -2 | -1 | +1 | +2 | +3 |
| Disagree | | | | | Agree |
| Strongly | | | | Strongly | |
16. Most people would cheat on their income tax if they had the chance. **C**
- | | | | | | |
|----------|----|----|----|----------|-------|
| -3 | -2 | -1 | +1 | +2 | +3 |
| Disagree | | | | | Agree |
| Strongly | | | | Strongly | |
17. Most people will stick to their opinions if they think they're right, even if others disagree. **T**
- | | | | | | |
|----------|----|----|----|----------|-------|
| -3 | -2 | -1 | +1 | +2 | +3 |
| Disagree | | | | | Agree |
| Strongly | | | | Strongly | |
18. Most people will act as "Good Samaritans" if given the opportunity. **T**
- | | | | | | |
|----------|----|----|----|----------|-------|
| -3 | -2 | -1 | +1 | +2 | +3 |
| Disagree | | | | | Agree |
| Strongly | | | | Strongly | |

19. Most people are not really honest for a desirable reason; they're afraid of getting caught. **C**

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

20. The typical person is sincerely concerned about the problems of others. **T**

-3	-2	-1	+1	+2	+3
Disagree					Agree
Strongly				Strongly	

C = Cynicism

T = Trust

TABLES

Table 1

Demographic Characteristics of Phase I Respondents

<u>Hometown (Place of origin)</u>	<u>Percent</u>	<u>N</u>
Southwest U.S.	63.2	216
Midwest U.S.	19.9	68
West coast U.S.	3.8	13
Southeast U.S.	2.1	7
Northeast U.S.	.9	3
Mountain Region of U.S.	5.4	18
Other countries	5.4	18
<u>Occupation</u>	<u>Percent</u>	<u>N</u>
College/university student	74.3	254
Metropolitan members	25.4	85
<u>Ethnic/cultural Group</u>	<u>Percent</u>	<u>N</u>
Euro-American, White, etc.	61.2	209
African American, etc.	2.3	15
American Indian, etc.	4.1	14
Mexican-American, etc.	2.9	10
Asian American	2.4	8
Middle East	1.8	6
Other	9.8	33
Left item blank	13.7	47
<u>Current Religious Affiliation</u>	<u>Percent</u>	<u>N</u>
Protestant	39.8	136
Non-denom. Christian	18.2	62
Roman Catholic	14.0	48
Other religions	6.6	22
No religious affiliation	9.9	34
Left item blank	12.6	43

Table 2

Phase I Factor Loadings

Item	F1	F2	F3	F4	F5
Sometimes I have to use deception on the spur of the moment.	.607	.343	.234	-.131	.087
I have very strong feelings that deception cannot be ethically justified.	.735	.082	.177	.120	.004
I would rather not use deception even if it's to benefit the person I am deceiving.	.646	-.034	.011	.087	.046
I do not see deception as an acceptable form of communication.	.781	-.011	.175	.180	.090
My moral stance tells me that deception is never okay.	.806	.056	.150	.143	-.063
The situation sometimes makes it easy for people to deceive someone else.	.041	.727	-.026	-.046	.026
Sometimes people use deception if it will benefit their relationship with other people.	-.085	.760	-.069	.054	-.013
Deception is a common communication practice.	.236	.647	-.038	.256	-.042
My upbringing often motivates me to use deception.	.301	-.086	.759	.033	-.090
The way I was brought up often motivates me to use deception.	.284	-.051	.780	.105	.008
Most people do not accept deception as an acceptable communication practice.	.237	.135	-.070	.721	-.017
Most people feel that deception is wrong.	.115	.001	.105	.762	.047
There are times when I can be in the middle of saying something and suddenly realize that I was not telling the truth.	.022	.014	.018	.045	.808
Sometimes I realize that I have deceived someone else only after I had done it.	-.049	.051	-.012	-.044	.838

Table 3

Demographic Characteristics of Phase II Respondents

<u>Occupation</u>	<u>Percent</u>	<u>N</u>
College/university student	89.4	287
Metropolitan member	9.0	30
<u>Hometown (Place of origin)</u>	<u>Percent</u>	<u>N</u>
Southwest U.S.	82.8	266
Northeast U.S.	2.7	9
U.S. Mountain Region	2.4	8
Midwest U.S.	2.1	7
West coast U.S.	1.8	6
Southeast U.S.	1.8	6
Outside the U.S.	4.9	16
Left item blank	.9	3
<u>Current Religious Affiliation</u>	<u>Percent</u>	<u>N</u>
Protestant	44.5	143
Non-dem. Christian	20.6	66
Roman Catholic	10.9	33
Other	5.7	19
No religious affiliation	11.2	36
<u>Ethnic/cultural Group</u>	<u>Percent</u>	<u>N</u>
Euro-American, White, etc.	67.6	217
African American, etc.	9.0	29
Hispanic, etc.	1.6	5
American Indian	1.6	5
Asian-American	1.6	5
Bi-racial, various	2.4	8
Asian, Pacific Islander	2.4	8
Other	3.0	11
No group affiliation	1.6	5
Left item blank	5.3	17

Table 4

Item-Factor Loadings for Phase II—Exploratory Factor Analysis

Item	F1	F2	F3	F4
There are times when I can be in the middle of saying something and suddenly realize that I was not telling the truth.	.766	-.096	-.034	-.130
Sometimes I realize that I have deceived someone else only after I had done it.	.812	-.037	-.044	-.030
Sometimes I inadvertently deceive others.	.725	-.099	.335	-.051
In spite of my best intentions, I sometimes realized that I deceived someone.	.712	-.110	.337	-.032
I have caught myself being untruthful without intending to be.	.859	-.042	.125	-.014
I have deceived someone else without being aware that I was doing it.	.779	-.034	-.033	-.064
I would rather not use deception even if it's to benefit the person I am deceiving.	-.025	.746	-.055	.040
I do not see deception as an acceptable form of communication.	-.007	.658	-.117	.142
My moral stance tells me that deception is never okay.	-.024	.708	-.004	.162
Deceiving someone else is seldom justified.	-.004	.603	-.030	-.061
I cannot bring myself to deceive others even if it's socially justified.	-.166	.638	-.222	.155
I try very hard not to use deception.	-.004	.657	-.011	.272
Deception is a common communication practice.	.075	-.035	.616	-.009
People use deception for all sorts of reasons.	-.017	.029	.630	-.001
I know people who use deception in many circumstances.	.250	-.003	.617	.134
Sometimes people feel that they have no choice but to use deception.	.130	-.139	.609	.003
I was brought up knowing right from wrong when it comes to deception.	.034	.206	.036	.714
I had good role models for understanding the consequences of deception.	.040	.095	.024	.786
My family taught me a lot about whether deception is right or wrong.	-.070	.225	.031	.758

Table 4 (continued)

Item-Factor Loadings for Phase II—Exploratory Factor Analysis

F1 = Intentionality

F2 = Deception is Wrong

F3 = Acceptance of Deception

F4 = Upbringing

Table 5

Factor Correlation Matrix for “Intentionality” Subscale (N = 321)

	5	10	20	30	35	40
5	X					
10	.604*	X				
20	.556*	.544*	X			
30	.500*	.505*	.643*	X		
35	.606*	.595*	.621*	.630*	X	
40	.441*	.588*	.494*	.472*	.676*	X

* Denotes correlation is significant at the .01 level.

Table 6

Factor Correlation Matrix for “Deception is Wrong” Subscale (N = 321)

	6	11	16	21	26	36
6	X					
11	.512*	X				
16	.429*	.433*	X			
21	.372*	.342*	.430*	X		
26	.425*	.398*	.413*	.389*	X	
36	.379*	.427*	.485*	.329*	.378	X

* Denotes correlation is significant at the .01 level.

Table 7

Factor Correlation Matrix for "Acceptance of Deception" Subscale (N = 321)

	12	17	22	27
12	X			
17	.290*	X		
22	.327*	.381*	X	
27	.245*	.312*	.312*	X

* Denotes correlation is significant at the .01 level.

Table 8

Factor Correlation Matrix for “Upbringing” Subscale (N = 321)

	18	23	38
18	X		
23	.485*	X	
38	.581*	.553*	X

* Denotes correlation is significant at the .01 level.

Table 9

Item-Factor Correlation Matrix for “Intentionality” Subscale—Confirmatory

Factor Analysis (N = 321)

	5	10	20	30	35	40
5	.71	.07	.02	.03	.01	.06
10	.60	.75	.01	.06	.05	.07
20	.56	.54	.76	.07	.03	.04
30	.50	.50	.64	.75	.02	.13
35	.61	.60	.62	.63	.86	.08
40	.44	.59	.49	.47	.68	.70

Bold-faced figures in diagonal are factor loadings.

Figures below the diagonal are correlation coefficients.

Figures above the diagonal are standard error terms.

Table 10

Item-Factor Correlation Matrix for “Deception is Wrong” Subscale—
Confirmatory Factor Analysis (N = 321)

	6	11	16	21	26	36
6	.67	.07	.04	.01	.02	.04
11	.51	.66	.03	.04	.09	.02
16	.43	.43	.70	.03	.02	.06
21	.37	.34	.43	.57	.04	.02
26	.43	.40	.41	.39	.62	.01
36	.38	.43	.49	.33	.38	.62

Bold-faced figures in diagonal are factor loadings.
Figures below the diagonal are correlation coefficients.
Figures above the diagonal are standard error terms.

Table 11

Item-Factor Correlation Matrix for “Acceptance of Deception” Subscale—
Confirmatory Factor Analysis (N = 321)

	12	17	22	27
12	.50	.01	.01	.01
17	.29	.60	.01	.01
22	.33	.38	.64	.01
27	.25	.31	.31	.50

Bold-faced figures in diagonal are factor loadings.
Figures below the diagonal are correlation coefficients.
Figures above the diagonal are standard error terms.

Table 12

Item-Factor Correlation Matrix for “Upbringing” Subscale—Confirmatory Factor Analysis (N = 321)

	18	23	38
18	.83	.19	.13
23	.49	.82	.15
38	.58	.55	.85

Bold-faced figures in diagonal are factor loadings.
 Figures below the diagonal are correlation coefficients.
 Figures above the diagonal are standard error terms.

Table 13

Correlation Matrix of Mach IV Subscales, Revised Philosophies of Human Nature Subscales, and CFA Subscales (N = 321)

	DEC	TRU	CYN	INT	WRO	ACC	UPB
DEC	XXX XXX						
TRU	-.020 .723	XXX XXX					
CYN	.123* .027	-.340 .000	XXX XXX				
INT	-.014 .804	-.115* .040	.284 .000	XXX XXX			
WRO	-.445 .000	.166 .003	-.255 .000	-.131* .019	XXX XXX		
ACC	.060 .283	-.221 .000	.228 .000	.324 .000	-.146 .009	XXX XXX	
UPB	-.196 .000	.108 .053	-.080 .153	-.044 .428	.410 .000	.087 .119	XXX XXX

*Indicates significance at the 0.05 level (2-tailed).

Italics indicate significance at the 0.01 level (2-tailed).

Table lists correlations among the Mach IV subscale Deceit (DEC), the Trust (TRU) and Cynicism (CYN) subscales of the Revised Philosophies scale, and the factors "Intentionality" (INT), "Deception is Wrong" (WRO), "Acceptance of Deception" (ACC), and "Upbringing" (UPB).

Table 14

Descriptive Statistics for Mach IV Deceit Subscale, Revised Philosophies Trust and Cynicism Subscales, and the Revised Deception Subscales (N = 321)

	Mean	Standard Deviation
DEC	7.162	1.845
TRU	2.770	9.395
CYN	6.100	9.372
INT	23.791	8.1760
WRO	29.592	6.814
ACC	20.788	3.830
UPB	17.090	3.350

DEC = Deceit subscale of Mach IV scale

TRU = Trust subscale of Revised Philosophies of Human Nature scale

CYN = Cynicism subscale of Revised Philosophies of Human Nature scale

INT = Intentionality

WRO = Deception is Wrong

ACC = Acceptance of Deception

UPB = Upbringing