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Abstract

Although much research into deceptive communication has been conducted in the last several years, little of it has focused on deception outside of a North American context. Similarly, most deceptive research has investigated face-to-face verbal communication and neglected computer-mediated communication modes. This paper describes a study in progress on deceptive computer-mediated communication, looked at across two national cultures, Spain and the U.S. The paper reviews the relevant literature and theory and presents hypotheses and the research design.

Keywords: deceptive communication, culture, computer-mediated communication.

1 INTRODUCTION

In an increasingly global marketplace, the utilization of computer-mediated communication (CMC) is more pervasive than ever between global organizations. Research indicates that CMC media, such as e-mail, is replacing the more traditional forms of media and becoming a primary mode of communication in the workplace (Tassabehji & Vakola, 2005). However, as cross-cultural CMC use increases, so does the arrival of newer, more disturbing cyber crime threats. For instance, a deceptive e-mail was recently sent to a consulting firm that works for the Department of Defense (Raghavan, 2008). Disguised as an e-mail from the Pentagon, the deceptive message actually originated in South Korea. Its intent was to trick a senior executive of the US-based consulting firm to divulge sensitive information relating to national security. While attacks like these are pervasive, this particular attack involved deception perpetrated by members of one cultural group on another, demonstrating a need for research on cross-cultural deception in a CMC context.

This type of research would be appealing to individuals involved in trade negotiations, intelligence gatherings, and international conflicts, as well as the ordinary individual who uses Skype to make cross-cultural calls. In the past there was less need for research on this topic due to the time and distances separating most people from each other, the expense, and the limited availability of individuals to electronically communicate with those from different cultures. However, the technology to allow communication partners to send messages and make domestic and overseas calls via the Internet free of charge is readily available. Therefore, these newer technologies create an environment which allows and supports more frequent cross-cultural interactions. In exchange, this creates more opportunity for cross-cultural deception using CMC, thus elevating the need to understand deceptive behavior and its detection across cultures. In the past, however, deception research has been primarily studied from a Western perspective, so very little is known regarding how other cultures view deceptive behavior and the ability of other cultures to detect deception. Therefore, the purpose of this study is to determine the differences in deceptive behavior and deception detection, for people of different cultures, communicating with CMC. This study seeks to answer the following research question: *Do espoused cultural values affect deceptive behavior and deception detection accuracy within and between people of varying cultures using CMC?*

This research paper is organized in the following manner. The theoretical bases that drive the study are described next. Based on cross-cultural, communication, and deception research, a research

model is then established incorporating the espoused cultural values of individualism/collectivism, power distance, uncertainty avoidance, masculinity/ femininity, and long/short-term orientation as antecedents of deceptive behavior and its detection. Hypotheses are presented next. This paper concludes with the proposed methodology for examining cross-cultural deception in a computer-mediated environment.

2 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

The literature review is organized in three parts: CMC, deception, and culture, followed by the intersections of CMC and culture, deception and culture, CMC and deception, and CMC, deception, and culture. We begin with a discussion of media richness theory, followed by a description of interpersonal deception theory and leakage theory. We then review Hofstede's (1980) theory of cultural differences, followed by an examination of the literature conducted in other cultures using CMC. The next section describes how cultural differences affect deceptive behavior and its detection. The literature review concludes with a review of the detectable deception cues across various media.

2.1 Computer-mediated communication

Theorists have categorized media by the level of richness they provide communication partners. MIS researchers have applied media richness theory (MRT) to their studies of communication technologies. MRT, as posited by Daft and Lengel (1986), assists in categorizing media by their capability of transmitting "rich" messages. Media richness is based on four criteria: the ability of media to provide immediate feedback, allow for variety in language, have a personal focus, and provide multiple cues. The higher the values of these four characteristics, the richer the media.

Despite the widespread use of MRT in research, it has been extensively criticized. Some have suggested that the theory is incomplete because it fails to take into account that people factor in the communication style of the recipient (Markus, 1994) as well as their own experiences (Carlson & Zmud, 1999) when choosing media. Dennis et al. (1998) acknowledge the lack of empirical support for media richness theory, suggesting that managers have often made different choices in media selection than media richness theory predicted. They further suggest that task-media fit is insufficient in explaining media choice, suggesting that it is also affected by factors beyond the richness of media, including the sender's access to media and ability to use media.

2.2 Deception

Buller and Burgoon's (1996) interpersonal deception theory (IDT) outlines the deception detection process by applying principles of interpersonal communication to the area of deception (see Figure 1). This framework was developed to explain deceptive interchanges and their success (Burgoon, Stoner, Bonito, & Dunbar, 2003). It specifies the relationship between a sender and a receiver prior to, during, and after a deceptive exchange (Burgoon, Buller, & Floyd, 2001). Therefore, it views deception as a dyadic, interactive process, in contrast to previous studies where either the sender or the receiver was the unit of analysis (Buller & Burgoon, 1996). IDT suggests that the interaction between the parties influences future behaviors. As such, the sender employs strategies in order to deceive, whereas the receiver also employs strategies to avoid being deceived. Thus, both participants seek to uncover tactics used by the other (Marett & George, 2004).

However, individuals are not very good deception detectors. Deception detection experiments have found that participants are rarely able to detect deception above 35% of the time (Levine, Park, & McCornack, 1999). This may be due, in part, to the truth bias, which proposes that individuals have an intrinsic belief that their communication partners are being honest. Attempts have been made to increase deception detection accuracy by identifying behaviors related to deceit. That is, deceptive individuals may reveal their dishonest intentions due to the guilt and difficulties associated with telling and creating lies and the extra effort exerted to make lies believable (Vrij, 2000). These diversions to the communication process can cause deceptive individuals to leak cues to their deceit.

In addition to building upon the IDT framework, deception research also relies on leakage theory. According to the theory, there are leakages and clues to deceit in the form of verbal and nonverbal cues that may expose a deceitful individual (Ekman, 1992). Cues to deception have been a widely researched area, but findings have not been consistent across studies. DePaulo et al. (2003) conducted a meta-analysis reviewing 158 cues to deception and reported the significant cues across studies. Their findings indicated that deceivers are less forthcoming, tell less compelling stories, are less positive, are more tense, and include fewer ordinary imperfections than are truth-tellers. In addition to these cues, we will later propose that espoused cultural values aid in the deception detection process.
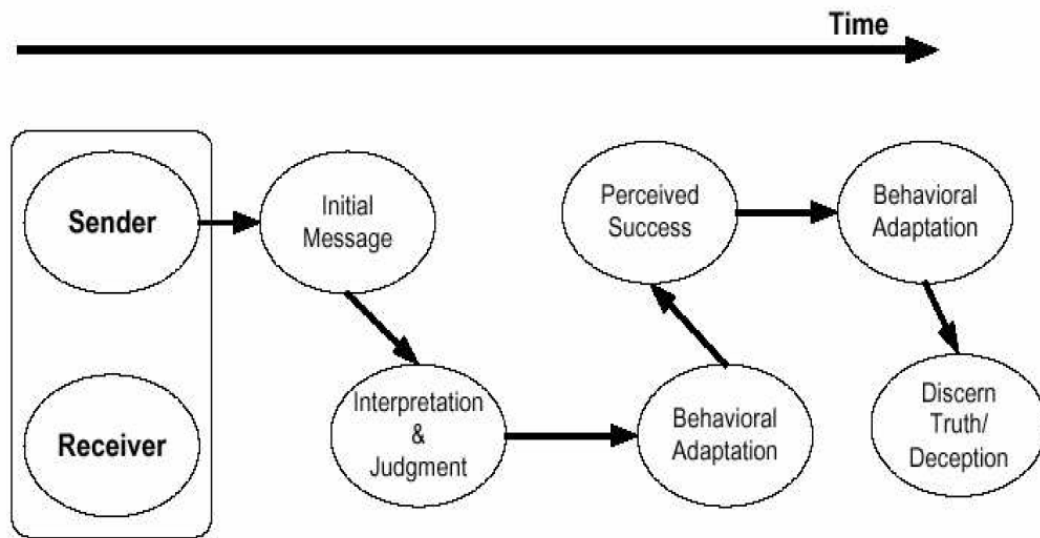

Figure 1. Interpersonal Deception Theory (Buller & Burgoon, 1996)

2.3   Culture

Globalization has led to people doing business and communicating outside their national or regional borders. Because information technology enables these communication exchanges between people in different countries, MIS researchers have argued that studying espoused national culture differences and their impact on these activities is important (Ives & Jarvenpaa, 1991). However, there are many challenges to conducting national culture research due to the many definitions and dimensions used to describe it (Straub, Loch, Evaristo, Karahanna, & Srite, 2002). Kroeber and Kluckhohn identified 164 different definitions of national culture (1952). However, most scholars have focused on defining national culture by the shared values of a society. An example of this can be seen in the work of Hofstede. His definition of national culture is the most dominantly cited (Srite & Karahanna, 2006): Culture is "the collective programming of the mind which distinguishes the members of one human group from another" (Hofstede, 1980, p. 260). In his theory of cultural differences, Hofstede (1980) divided culture into four dimensions: individualism/collectivism, power distance, uncertainty avoidance, and masculinity/femininity. A fifth dimension, long-term orientation, was added later.

2.4   CMC and Culture

Scarce research exists on CMC across cultures (Jarvenpaa & Leidner, 1999). Despite the lack of research in this area, the few studies that have been conducted reveal that individuals from different cultures vary in their manner of communicating, including the need to create identities and the method of disclosing information (Gudykunst, 1997). Amant (2002) examined the difficulties in creating identities in cyberspace. In CMC, some cues to establishing identity are filtered out, potentially creating difficult situations for individuals of certain cultures. For example, some cultures, such as

those from the Middle East and Eastern Europe, rely on complex social networks to determine whether to listen to or ignore a particular message (Hofstede, 1997). Thus, the lack of identity of the sender, in some cases, may lead to a message being disregarded by the receiver. This is especially true if the receiver is from a culture that values long-term relationships, strong family ties, and strong group ties (Amant, 2002). Thus, the reluctance to respond to ambiguous messages has been shown to be higher for collectivistic cultures than for individualistic cultures (Gudykunst et al., 1996).

2.5   Deception and Culture

Deception research has been primarily studied from a Western perspective, so very little is known regarding how other cultures view deceptive behavior and the ability of other cultures to detect deception. The few studies undertaken about deception in non-North American cultures indicate that beliefs about deception and non-verbal indicators of deception are culture-specific. Cross-cultural deception research has been conducted to distinguish differences in deception perceptions, deceptive behavior, and detection ability. Triandis et al. (2001) is among the most notable cross-cultural deception studies because they examined people in eight countries simultaneously. They reported that people in the collectivistic countries of Korea, Hong Kong, Greece, and Japan were more apt to be deceptive in business negotiations than people from the US, Australia, the Netherlands, and Germany, all of which scored high on individualism. There is also some evidence to suggest that individuals with more espoused masculine values have a tendency to be more deceptive than individuals with more espoused feminine values (Lewis & George, 2008). This may be due to the competitive nature that is often associated with masculinity, which could foster a "win using any tactic necessary" type attitude. Additionally, individuals with more espoused masculine values may feel the need to exhibit macho behavior, and deception could result from the stress of living up to this sort of image. Table 1 includes a subset of the variety of deception studies that have been conducted about various cultures.

Author	Culture	Results
Aavik, Abu-Hilal, & Ahmad, 2006	75 different countries	Pan-cultural stereotype is that liars avert gaze.
Al-Simadi, 2000a	Jordanians & Malaysians	Subjects were better able to detect deception with audio or an audiovisual presentation than with video alone. Individuals detected 52% of submitted lies within their cultures and 57% between cultures. Individuals are more accurate at depicting deception in the reveal condition than the conceal condition.
Al-Simadi, 2000b	Jordanians & Americans	Jordanians emphasize different cues to deceptive behavior than Americans. Jordanians found blinking, stuttering and change of face color as important indicators of deception, while Americans did not identify either of these cues.
Aune & Waters, 1994	American Samoa & American	Collectivistic Samoan culture was more likely to attempt deception for group or family concerns and authority-based concerns. Americans were more likely to deceive others regarding a private issue or to protect an individual's feelings.
Bond & Atoum, 2000	Americans, Jordanians, & Indians	Individuals are more accurate at depicting deception in the reveal condition than the conceal condition. Evidence of lie detection capability between cultures that share a language and cultures that do not. Individuals do not perceive those from other cultures as more deceptive than individuals from their own culture.
Bond, Omar, Mahmoud, & Bonser, 1990	Jordanians & Americans	Consistency of lie detection within cultures but not between Americans and Jordanians In both groups avoiding eye contact and pausing were found to be deceptive cues.

Cheng & Broadhurst, 2005	Hong Kong Chinese	Observers were better at identifying deception in their second language than their native language. More false-alarms were made under the truthful condition in the second language.
Feldman, 1979	Korean & American	Koreans were more skillful than Americans at controlling their nonverbal behavior and their deception.
Fu, Lee, Cameron, & Xu, 2001	Canadians & Chinese	Canadians considered lies concealing prosocial behavior to be lies. Chinese did not categorize lies concealing prosocial behavior as lies, and rated this deception favorably and truth-telling of prosocial behavior negatively.
Lee, Cameron, Xu, Fu, & Board, 1997 Lee, Xu, Fu, Cameron, & Chen, 2001	Chinese, Taiwanese, & Canadian	Chinese and Taiwanese children rated lying relating to good deeds more positively than Canadian children.
Li, Triandis, & Yu, 2006	Singaporean	Positive correlation between deception and collectivism in organizational business negotiations. Higher deception levels for family scenario than organizational scenario.
Nishiyama, 1995	Japanese & American	Some of everyday Japanese business behaviors would be considered deceptive in the US Collectivist countries experienced higher levels of guilt and shame over lying compared to individualistic countries.
Seiter and Bruschke, 2007	Chinese & American	Americans experienced more guilt over lying than Chinese participants.
Seiter, Bruschke, & Bai, 2002	Chinese & American	Chinese participants perceived deception to be more acceptable across all tested relationship types compared to Americans. Specific relationship types included parent relationships, teacher relationships, stranger relationships, friendship relationships, and spousal relationships.
Sims, 2002	Israeli & American	American employees were more likely than Israeli employees to deceive for personal gain. American employees were more likely to perceive the existence of organizational policies to support deception for personal gain than Israeli employees No differences were found between Israeli and American employee attitudes on deception for the organization's benefit.
Triandis et al., 2001	Korea, Hong Kong, Greece, Japan, US, Australia, the Netherlands, & Germany	Collectivistic countries were more apt to be deceptive in business negotiations than individualistic countries.

Table 1. Subset of Deception Study Results Between Cultures

2.6   CMC and Deception

CMC is another area of interest to deception researchers. However, unlike culture, CMC has been pursued by scholars from a number of angles to determine its relationship to deceptive behavior and detection ability. A recent study by Burgoon et al. (2003) suggested that under deceptive circumstances, as one moves from text to audio to audiovisual media, interactivity and involvement increase, leading to greater truth biases and deception detection inaccuracy. In addition to increasing the truth bias, an abundance of cues can be distracting to receivers, weakening their detection accuracy (Burgoon, Stoner, Bonito, & Dunbar, 2003). The reliable indicators to deception from the DePaulo et al. (2003) meta-analysis are presented in Table 2. The table also includes their ability to be detected across various types of media.

In summary, the intersections of CMC and culture, deception and culture, and CMC and deception have been reviewed, but reviewing the intersection of all three, CMC, deception, and culture, is scarcely possible due to the failure of previous research to examine this combination. However, one study has been conducted that examined differences in deceptive behavior among Americans and Koreans in computer-mediated and FTF environments. The results indicated that Koreans were more apt to exhibit deceptive behavior than their American counterparts and that deception was more frequent in FTF, rather than computer-mediated settings, for both cultures (Lewis & George, 2008)

Behavior	Video	Audio	Written
Less talking time	Detectable	Detectable	
Fewer details	Detectable	Detectable	Detectable
More pressed lips	Detectable		
Less plausibility	Detectable	Detectable	Detectable
Less logical structure	Detectable	Detectable	Detectable
More discrepancies and ambivalence	Detectable	Detectable	Detectable
Less verbal and vocal involvement	Detectable	Detectable	
Fewer illustrators	Detectable	Detectable	Detectable
Less verbal immediacy (all categories)	Detectable	Detectable	Detectable
Less verbal and vocal immediacy (impressions)	Detectable	Detectable	
More verbal and vocal uncertainty (impressions)	Detectable	Detectable	
More chin raises	Detectable		
More word and phrase repetitions	Detectable	Detectable	
Less cooperative	Detectable	Detectable	
More negative statements and complaints	Detectable	Detectable	
Less facial pleasantness	Detectable		
More nervous and tense (overall)	Detectable	Detectable	
More vocal tension	Detectable	Detectable	
Higher frequency, pitch	Detectable	Detectable	
More pupil dilation	Detectable		
More fidgeting	Detectable		
Fewer spontaneous corrections	Detectable	Detectable	
Less admitted lack of memory	Detectable	Detectable	Detectable
More related external associations	Detectable	Detectable	Detectable

Table 2. Detectability of deception indicators from DePaulo et al. (2003) across media

3   RESEARCH MODEL AND HYPOTHESES

This section presents the research models and hypotheses derived from the models. They are based on the theoretical frameworks of media richness, social presence, channel expansion theory, interpersonal deception theory, and the theory of cultural differences. The purpose of the models is to provide an integrated framework for analyzing cross-cultural deception in computer-mediated environments.

This study is experimental. Subjects from Spain and the US will be asked to find cues and determine the veracity of third parties they will be reading statements from, listening to, or watching. The research models, presented in Figure 2, integrate espoused cultural values into a model of deceptive communication to show their effect on veracity judgment (model 1) and deceptive behavior (model 2). They outline the cross-cultural communication event in a computer-mediated environment. Several hypotheses are derived from these models. Hypotheses 1, 2, 3, 4, 6a-6d, 7a, and 8 replicate prior findings; no prior empirical studies have tested Hypotheses 5a-5e, 6e, and 7b-7e.

Channel expansion theory posits four experiences or familiarities affecting individuals' development of richness perceptions: "experience with the channel, experience with the messaging topic, experience with the organizational context, and experience with communication co-participants" (Carlson & Zmud, 1999, p. 155). Carlson and Zmud (1999) suggested that gaining experience in each

of these areas would increase a communicator's perception of the richness of a medium, and therefore, enhance his or her ability to communicate effectively. In Model 1, media familiarity refers to the familiarity of the receiver with the CMC media. Consequently, it is expected that as receivers become more familiar with the media, more deceptive cues may be identified because their focus will be on the communication event, rather than unfamiliar media. Therefore,

Hypothesis 1: *Deceptive cue detection will be more accurate for individuals who are more familiar with the CMC media than individuals who are less familiar with the CMC media.*
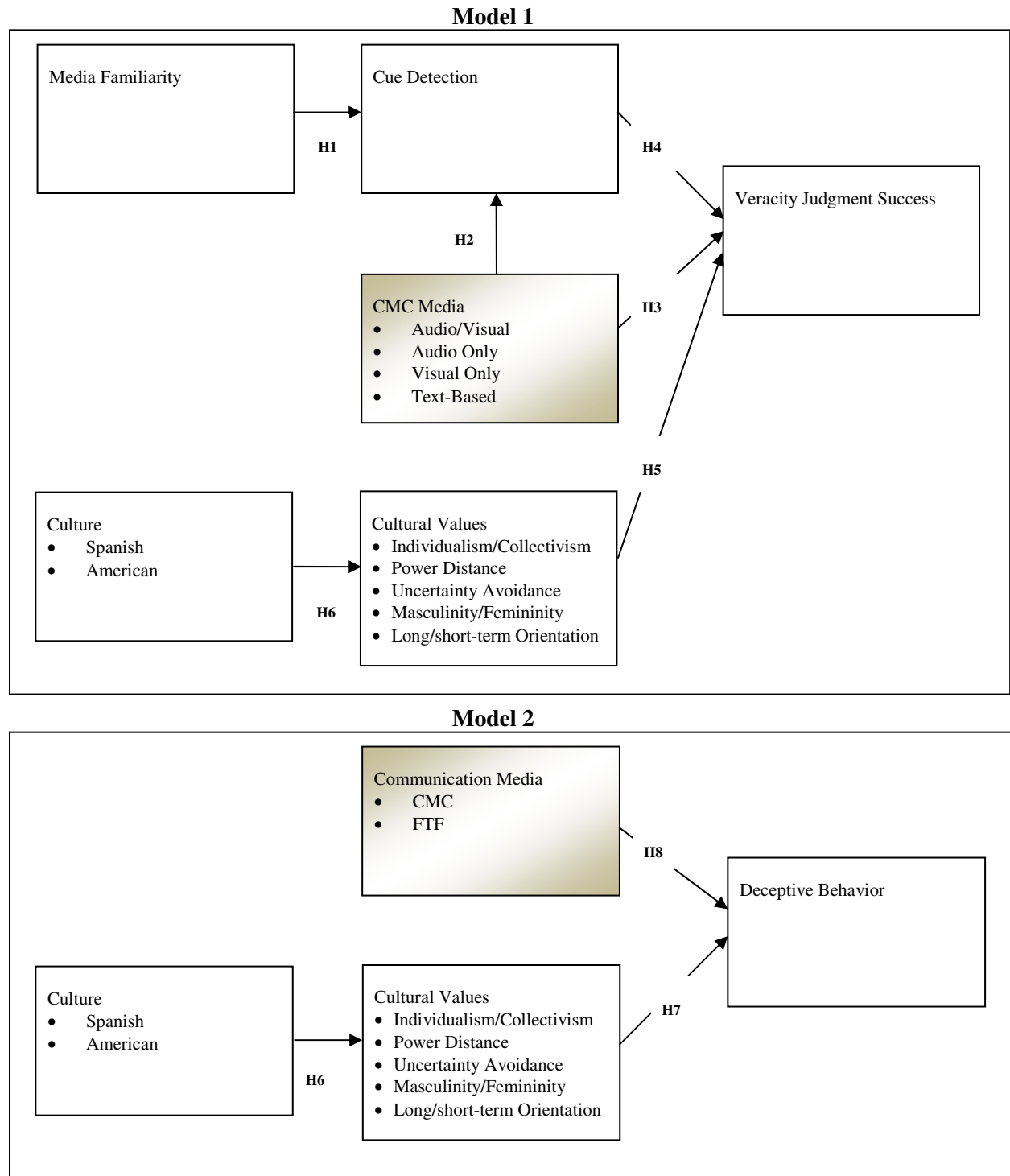
Model 1

Model 2

Figure 3. Model and Hypotheses for Cross-Cultural Deception in a Computer-Mediated Environment

Social presence theory helps to explain what happens after the process of selecting media. Developed by Short, Williams, and Christie (1976), social presence is represented by the level of intimacy or sense of togetherness communication media offer its users. Thus, the degree of social presence is affected by the amount of social cues allowed by communication media and the perceived distance between the communication partners, which in turn affects a communicator's behavior (Short, Williams, & Christie, 1976).

Because CMC conveys fewer social cues and is typically associated with a greater distance between the communication partners, it is considered to have less social presence than communication media which convey more social cues. As previously mentioned, an abundance of cues can be distracting to receivers, weakening their detection accuracy (Burgoon, Stoner, Bonito, & Dunbar, 2003). Therefore, it is posited that receivers using media with higher levels of social presence, such as videoconferencing, will be less apt to correctly spot deceptive cues and identify deception (i.e., veracity judgment). Thus,

Hypothesis 2: *Deceptive cue detection will be less accurate for CMC media with higher levels of social presence than for CMC media with lower levels of social presence.*

Hypothesis 3: *Veracity judgment success will be lower for CMC media with higher levels of social presence than for CMC media with lower levels of social presence.*

Deceivers may vary in their ability to conceal cues that may uncover their deception. Thus, to the extent that receivers are able to identify correct cues to deception revealed by the deceiver, their veracity judgment will be affected. This suggests that veracity judgment will be more accurate for individuals who identify more deceptive cues from the deceiver and less accurate for those who identify fewer deceptive cues from the deceiver. This leads to the following hypothesis:

Hypothesis 4: *Veracity judgment success will be greater for individuals who identify more correct cues to deception than for those who identify fewer correct cues to deception.*

In addition to the antecedents shown above, veracity judgment success levels may also be determined by the espoused cultural values of an individual. As previously mentioned, Hofstede (1980) divided culture into five dimensions: individualism/collectivism, power distance, uncertainty avoidance, masculinity/femininity, and long/short-term orientation. The first of Hofstede's dimensions is individualism/collectivism. This dimension refers to the degree to which individuals are affiliated with groups. Individualism and collectivism are on opposite ends of a spectrum. While individualism is characterized by loose group ties, collectivism is characterized by individuals being integrated into strong, cohesive groups (Hofstede, 1980). Power distance is Hofstede's second dimension of national culture. Power distance is defined as the extent to which less powerful individuals accept and expect an unequal distribution of power (Hofstede, 1980). Notably, an unequal power distance culture is authorized by its followers as much or more than its leaders, and superiors do not necessarily abuse power. Therefore, subordinates approve of power and inequality, leading to higher power distance values. Uncertainty avoidance refers to the extent to which individuals feel comfortable or uncomfortable in uncertain and ambiguous situations and is Hofstede's third cultural dimension (1980). Countries scoring the highest on uncertainty avoidance are characterized by resistance to change and risk, indicating the society's low level of tolerance for uncertainty. The last of the initial cultural dimensions is the masculinity/femininity dimension. The masculinity versus femininity dimension refers to the extent that a culture values and exhibits masculine or feminine characteristics. Masculine cultures are characterized as assertive and competitive, placing a strong emphasis on performance, while feminine cultures display more modest and caring values, emphasizing public welfare (Hofstede, 1980).

A later study (Hofstede & Bond, 1988) introduced a fifth dimension, long-term/short-term orientation. Long-term orientation refers to future-oriented values such as savings, persistence, and planning. In contrast, short-term orientation is associated with past and present values like personal stability, respect for tradition, and reciprocation of favors and gifts. Although the values that individuals possess across all five dimensions are likely to influence their deception detection ability, we know little from empirical studies as to which groups are likely to perform better. Therefore, in our

hypotheses, we have no expectations about how a group that scores high on one dimension will perform compared to a group that scores low on that dimension.

Hypothesis 5a: *Veracity judgment success will be different for judges with espoused collectivistic values than for judges with espoused individualistic values.*

Hypothesis 5b: *Veracity judgment success will be different for judges with higher espoused power distance values than for judges with lower espoused power distance values.*

Hypothesis 5c: *Veracity judgment success will be different for judges with higher espoused uncertainty avoidance values than for judges with lower espoused uncertainty avoidance values.*

Hypothesis 5d: *Veracity judgment success will be different for judges with espoused masculine values than for judges with espoused feminine values.*

Hypothesis 5e: *Veracity judgment success will be different for judges with espoused long-term orientation values than for judges with espoused short-term orientation values.*

The following hypotheses suggest that Spanish and American participants will vary in their levels of espoused cultural values. Since Hofstede (1980) surveyed participants from Spain and the US on their espoused cultural values (excluding long/short-term orientation), the hypotheses below reflect his findings. However, because of the number of years that have passed since his initial study, it is important not to assume that these societies have remained stagnant in their values. For example, in his assessment of 26 societies over 18 years, Inglehart (1990) found gradual shifts in the values of the populations of advanced industrial societies, which transformed their political, economic, and social lives. Thus, testing these values is imperative.

Hypothesis 6a: *Spanish participants will exhibit higher levels of espoused collectivistic values than American participants.*

Hypothesis 6b: *Spanish participants will exhibit higher levels of espoused power distance values than American participants.*

Hypothesis 6c: *Spanish participants will exhibit higher levels of espoused uncertainty avoidance values than American participants.*

Hypothesis 6d: *Spanish participants will exhibit higher levels of espoused feminine values than American participants.*

Hypothesis 6e: *Spanish participants will exhibit different levels of espoused long-term orientation values than American participants.*

Similar to Hypotheses 5a-5e, the values that individuals possess are likely to influence their deceptive behavior; however, excluding individuals with espoused collectivistic or masculine values, we know little from empirical studies as to who is likely to be more deceptive. Thus, individuals with espoused collectivistic or masculine values will be hypothesized as more deceptive than individuals with espoused individualistic or feminine values, whereas the remaining three dimensions will not hypothesize one group to be more deceptive than another.

Hypothesis 7a: *Deceptive behavior will be higher for judges with espoused collectivistic values than for judges with espoused individualistic values.*

Hypothesis 7b: *Deceptive behavior will be different for judges with higher espoused power distance values than for judges with lower espoused power distance values.*

Hypothesis 7c: *Deceptive behavior will be different for judges with higher espoused uncertainty avoidance values than for judges with lower espoused uncertainty avoidance values.*

Hypothesis 7d: *Deceptive behavior will be higher for judges with espoused masculine values than for judges with espoused feminine values.*

Hypothesis 7e: *Deceptive behavior will be different for judges with espoused long-term orientation values than for judges with espoused short-term orientation values.*

Research has indicated that deceivers prefer synchronous media to asynchronous media for transmitting deceptive messages (Carlson & George, 2004). FTF meetings are considered synchronous media because of their ability to provide feedback. Therefore, it is expected that deceivers would prefer FTF media because it provides deceivers the opportunity to be proactive in their deception through the ability to study responses from the receiver. Therefore:

Hypothesis 8: *Deceptive behavior will be more common for FTF communication than for CMC.*

4 METHODOLOGY

An experiment and a survey will be used to answer the research question. This study will be carried out using undergraduate business students from a university in Spain and from a university in the US, where the design involves three distinct phases. In the first phase of the study, an interview of one student by another about the former student's résumé will be conducted. The students being interviewed will have been previously asked to enhance their résumés; therefore, both honest and dishonest communication will take place during the questioning about the résumé. Those enhancing their résumés will be asked to clearly identify to the researcher which items are honest and which are not. The interviewees will be videotaped, with approximately 20 Spanish and 20 American interviews being conducted. Since such interviews were conducted as part of an earlier study using American participants, only the interviews in Spain need to be conducted for this study.

The second phase requires the recorded interviews to be edited for separate honest and dishonest exchanges. Two stimulus "tapes" will be created, containing 32 snippets of interview exchange per tape. Of the 32 snippets, 16 will feature honest exchanges, and the remaining 16 will feature dishonest exchanges. The 32 snippets will also vary according to the CMC media. Thus, eight will be both audio and video to simulate videoconferencing, eight will be modified to include audio only to simulate VoIP, eight will be modified to include video only, and the final set of eight will be text only to simulate e-mail. The text snippets will be transcribed versions of the interviews, where the English versions will be translated to Spanish for participants from Spain, and the Spanish versions will be translated to English for American participants. A third party proficient in English and Spanish will conduct the translations.

The third phase of the study design is needed to determine individual ability to detect deception in participants from Spain and the US. Third-party judges will view the stimulus tapes to test deception detection ability both within and between cultures. American judges will view either the Spanish stimulus tape or the English-language tape. Spanish judges will do likewise, except their instructions and questions will be written in the Spanish language. Approximately 50 judges from each country will view each stimulus tape, resulting in a total of 100 American judges and 100 Spanish judges. Each judge will have the opportunity to view the stimulus tape via a computer. Their instructions will be to document where the lying occurred and indicate what cues signaled when the interviewee was being dishonest. To summarize, one judge will sit in front of a computer and view 32 snippets in random order. After each snippet, the judge will be asked to indicate whether the individual on the snippet was being honest or dishonest on a 7-point Likert scale. If the judge chooses a value on the dishonest end of the scale, then he or she will have the opportunity to record the cues that were leaked by the interviewee. Then, the next snippet will play. This process will continue until all 32 snippets have been viewed. The snippets will be approximately 30 seconds in length, so the experiment should take no more than 45 minutes to complete. After watching the interviews, participants will be asked to complete a web-based survey using validated measures to assess their espoused cultural values, their media familiarity, and their perceptions of deceptive behavior in FTF and CMC. Participants from both samples will be offered a monetary incentive to increase the participation rate and the motivation to detect deception. We will control for gender and age because prior research indicates the existence of a relationship between each of these variables and deceptive behavior (Cornwell & Lundgren, 2001; Whitty, 2002). Bilingual ability is also a control variable because Americans who speak Spanish may have an advantage of enhanced detection ability for the Spanish snippets over those who do not speak Spanish. Likewise, individuals from Spain who speak English may have an

advantage of enhanced detection ability for the English snippets over those who do not speak English. Structured equationmodeling will be used to analyze the data.

In this study, many of the hypothesized relationships have never been investigated. Thus, there are many opportunities for major contributions through this research. First, this study develops a framework for understanding the relationship between CMC, deception, and culture, which provides the opportunity for much needed additional research to be conducted which would add to our understanding of deceptive practices in different cultures. Second, additional insights can be gained regarding deceptive behavior and deception detection ability both within and between cultures for various CMC media. Furthermore, by examining an individual's espoused cultural values, the extent to which Hofstede's findings hold true for the US and Spain can be assessed. It should be noted that a project more recent than Hofstede's was conducted over a ten year period by House et al. (2004) to investigate the cultures of 62 different societies. Their results indicated the existence of nine dimensions of espoused cultural values. In an effort to maintain parsimony with the survey, the four additional dimensions proposed by House et al. (2004) will not be used; however, they provide an opportunity for future cross-cultural research.

6   CONCLUSION

The aim of this paper was to provide a research framework for investigating deceptive behavior and its detection in individuals in the U.S. and Spain using CMC. Using a theoretical framework, two models were developed and hypotheses proposed that explained relationships between CMC media, espoused cultural values, cue detection, media familiarity, deceptive behavior, and veracity judgment success. The findings from this study will provide a better understanding of these complex relationships where very little is currently known.

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