

Chapter 12

The Detection of Deception in Cross-Cultural Contexts

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12.1 The Detection of Deception in Cross-Cultural Contexts

Judgments about credibility and deception often have significant implications. In forensic contexts, the evaluation of a person's veracity could affect the decision-making of investigators, prosecutors, and jurors. In everyday situations, credibility judgments may have personal repercussions—for instance, being able to assess the honesty of a salesperson might have important economic consequences for the customer. Across a range of social, legal, and professional settings, people are likely to make judgments about whether someone is telling them the truth or not. However, factors such as the creation of new technologies, globalization of economies, and changes in immigration patterns (Samovar et al. 2005) make it more likely for these judgments to occur in cross-cultural contexts. Thus, being able to accurately detect truths and lies in cross-cultural environments is likely to be particularly important for immigration, customs, and national security.

Despite the commonplace occurrence of cross-cultural interactions, deception research conducted to date has occurred almost entirely in mono-cultural contexts, where individuals are asked to judge the veracity of messages from people with whom they share the same cultural background. As suggested by Kim et al. (2008), “deception appears to be regarded as a phenomenon that occurs in a *cultural vacuum*” (p. 24). However, this assumption seems questionable on at least two grounds. First, cultural norms, display rules, and beliefs about deception might influence the cognitive and affective processes of deceivers, the behaviors

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that accompany deceptive messages (i.e., behavioral correlates of deception), and the cues that observers use when making judgments of credibility. Second, in a cross-cultural interaction, factors that affect intergroup perceptions, such as stereotypes and prejudice, may influence one person's judgments about the other. Without a clear appreciation of the impact these cultural factors might have on the process and outcomes of credibility judgments, there is a considerable gap in our knowledge about deception assessments in cross-cultural contexts.

Given that the limited interest culture has received in the deception literature, this chapter consists of two parts. The first section will review a number of cultural factors that can influence cross-cultural judgments of credibility. It will be argued that there are several cultural factors which can hinder cross-cultural lie detection. This section will also review current studies that demonstrate that differences in cultural norms and display rules (including facial expression of emotion) hamper the lie detection process by increasing the potential for errors and biases with significant consequences. The second section will then explore a number of intergroup factors that can, theoretically, influence the way people make cross-cultural judgments of credibility. It will be argued that from a theoretical standpoint stereotypes, ethnocentric beliefs and out-group biases can also hamper the lie detection process in cross-cultural environments. Future research directions will be outlined in the conclusion.

12.2 Defining Deception

Vrij (2008) defines deception as a “successful or unsuccessful deliberate attempt, without forewarning, to create in another a belief which the communicator considers to be untrue” (p. 15). This definition suggests that “intention to mislead” and “consciousness of the act” are the key elements for deception to occur. Accordingly, someone who truly believes the information they are giving is true is not considered to be deceiving because there was no intention or conscious attempt to deceive the other. Bok (1999) further argued that deception can be conveyed through “any form of communication, such as gesture, disguise, action or inaction, exaggeration, or silence” (p. 13). Thus, deception is a complex and subtle form of behavior that does not simply equate to saying something that it is not objectively true.

While deception has been defined as an intentional deceptive message which is conveyed through any form of communication, lying has been defined as an intentional deceptive message which is stated and conveyed verbally, in writing, or through any form of language such as sign language (e.g., Barnes 1994; Bok 1999; Vrij 2008). In this sense, a person may not be considered to be lying if he or she hides or omits information even though it would be considered deception. Although scholars have pointed out the distinctions between these concepts, lying is often considered part of the larger category of deception (e.g., Barnes 1994; Bok 1999). In this chapter, lying and deception will be used interchangeably, because

regardless of the type of communication used (i.e., whether language or any other form of communication), both terms imply the intention to convey a message that is not objectively true.

12.3 Theoretical Approaches to Behavioral Correlates of Deception

In addition to examining the nature and frequency of lying (e.g., DePaulo and Bell 1996; DePaulo and Kashy 1998; DePaulo et al. 1996), researchers have proposed a number of theoretical approaches that predict verbal and nonverbal behavioral differences between liars and truth-tellers, for instance, the multifactor model (Zuckerman et al. 1981), emotional and leakage cue approach (Ekman and Friesen 1969), and the interpersonal deception theory (Buller and Burgoon 1996). Overall, these approaches have suggested that although lying is not a distinct psychological process corresponding to a specific set of behavioral patterns (e.g., DePaulo et al. 2003; Vrij 2008), there are several psychological processes that are more likely to occur when lying than when telling the truth and that are likely to produce a number of behavioral responses in the body and face.

Firstly, liars are likely to experience emotions such as fear, anxiety, and guilt. These emotions can manifest behaviorally in the body as signs of arousal such as higher pitched voice, fidgeting, increased speech errors and hesitations, gaze aversion, and increased body movements (Ekman 2001; Ekman and Friesen 1969; Sporer and Schwandt 2007; Vrij et al. 2000; Zuckerman et al. 1981) and in the face as “microexpressions”—which are defined as “time-reduced remnants of interrupted or inhibited facial muscular movements” (Ekman and Friesen 1974, p. 289). Facial expressions are suggested to be far more difficult to control than the body or voice due to the involuntary nature of emotion expression (e.g., Ekman 2001; Hurley and Frank 2011). Therefore, attempts to conceal these emotions are more likely to “leak” in the face than the body. Ekman (2001) further argued that the presence of these behavioral responses is more evident if the liar is experiencing these emotions significantly, or the consequences of getting caught are serious enough. In other words, the guiltier the liar is feeling about their lie, the more he/she would display leakage signs of arousal and/or guilt (e.g., gaze aversion).

Secondly, lying is also a cognitively demanding task that requires greater cognitive effort than telling the truth (Buller and Burgoon 1996; Sporer and Schwandt 2006, 2007; Zuckerman et al. 1981). It is a cognitively demanding task because liars have to provide plausible answers, remember what was said, be consistent with what the observer knows or might find out (Vrij 2008), carefully monitor reactions and behaviors of the person being deceived, and suppress the truth (Spence et al. 2001; Vrij et al. 2008). Therefore, the more complex the lie is to fabricate, the more cognitive resources are needed, thus decreasing the availability of resources for other communication processes such as the control of body or facial movements (Ekman and Friesen 1974). This notion has been supported by extensive empirical evidence

which has demonstrated that engaging in a cognitively demanding task often leads to fewer illustrators and body movements, more speech errors and hesitations, more frequent and longer pauses when speaking, longer response latencies, greater pupil dilatation, and more gaze aversion (Buller and Burgoon 1996; DePaulo et al. 2003; Ekman 1997, 2001; Ekman and Friesen 1969, 1974; Goldman-Eisler 1968; Sporer and Schwandt 2007; Vrij et al. 2000; Zuckerman et al. 1981).

Thirdly, liars may also attempt to control their behavior (Vrij 2008; Zuckerman et al. 1981) as they might worry that some behaviors will give away their lies. Therefore, liars will try to control such cues and might engage in “impression management” in order to avoid getting caught (Memon et al. 2003, p. 13). However, this impression management is a complex and difficult task because there are numerous variables that a liar would have to take into account. For instance, the liar may need to suppress his or her nerves, mask evidence of cognitive load, and have knowledge about how an “honest” person behaves and the appropriate skills to effectively display such behavior (Memon et al. 2003). This suppression and control of behaviors will often result in behavior that looks planned, rehearsed, rigid, or too smooth (Vrij 2008). For example, if the liar believes that movement will give away the lie, he/she may try to make deliberate movements and avoid those which are not essential, resulting in behaviors that look unusual and rehearsed. Accordingly, liars would be more likely to display an overall decrease in body movements (e.g., hand and arm, leg and foot movements), less gaze aversion, fewer speech errors and hesitations, shorter response latency, and fewer pauses (Sporer and Schwandt 2006, 2007; Vrij 2008).

One important limitation of the predictions made by these theoretical approaches is that behavioral changes in the body and face that result from emotional and attempted control processes may not be exclusive to liars. It is possible that some truth-tellers experience the same emotions as liars—a phenomenon known as the *Othello error* (DePaulo et al. 2003; Memon et al. 2003; Vrij et al. 2010). For instance, consider the case of an innocent person in a police interrogation who feels nervous and afraid of not being believed by the police. Furthermore, truth-tellers may also attempt to control their behavior in the same way as liars because of their fear of making a dishonest impression (Fiedler and Walka 1993). Also, it may be plausible that not all liars experience negative emotions such as a liar feeling excitement for fooling someone (referred to as *duping delight* Ekman and Friesen 1969) or feeling guilt and anxiety for their deceptiveness. A person who does not experience these negative emotions may be less likely to leak cues in the body or face as there is no emotion that needs to be concealed or suppressed. Thus, it could be argued that while the occurrence of the behaviors predicted by these processes may indicate lying, their presence does not automatically suggest that the person is, in fact, being deceptive. Consequently, more recent research has focused in the cognitive load approach as a more fruitful avenue for finding reliable behavioral indicators of deception (Vrij et al. 2010).

Another limitation to this area of research that warrants further discussion, and which is the aim of this chapter, is the lack of cross-cultural focus. Current deception research has been limited in answering questions regarding the universality

of behavioral correlates of deception and the way these cues are used to make judgments of credibility in cross-cultural contexts. It has been well documented that culture not only influences the display verbal and nonverbal communication but also the way it is interpreted (Matsumoto 2006; Matsumoto and Hwang 2013; Watson 1970). Therefore, it is plausible that deceptive behavior is no exception, and thus, cultural norms and practices could also potentially mediate the display and interpretation of such communication. It is possible that the way deception is expressed, the cues that liars display, and the cues that observers use, evaluate, and interpret when making judgments of credibility are culture-specific. For instance, a lie that is perceived as unacceptable in one culture may induce higher degrees of emotion or guilt in the deceiver and may result in a specific pattern of behaviors, whereas the same type of lie may not be perceived in the same way by another culture and hence may result in different types of emotional experiences and accompanying behavioral signs.

Cultural factors such as differences in normative behaviors and display rules, beliefs toward deception, and stereotypes toward other groups may potentially affect deception and lie detection in cross-cultural contexts. Specifically, cultural factors may influence the way deception is perceived and regarded and thus shape the behavioral cues that accompany these messages. These factors could then hinder or facilitate the observer's ability to accurately detect whether a person from a foreign culture is lying to them or not. The following section will discuss how culture could influence deception and lie detection in cross-cultural environments.

12.4 Culture and Correlates of Deception

In a cross-cultural context, the behavioral predictions made by the different theoretical approaches described above can be examined from two different perspectives: the "universal cue perspective" and the "specific discrimination perspective." The "*universal cue perspective*" (Bond et al. 1990) assumes that liars across the world experience the same psychological processes of guilt, fear, cognitive load, and attempted control while lying and thus display similar behavioral cues of deception. That is, all liars across the world will display a number of verbal and behavioral cues in the body and face. On the other hand, the "*specific discrimination perspective*" (Bond et al. 1990) suggests that communication and behavioral patterns differ across cultures, and thus, behavioral correlates of deception are also culture-specific. That is, the behaviors associated with lying and truth-telling will vary according to the cultural origin of the deceiver.

To date, the deception literature has assumed the "*universal cue perspective*" (Bond et al. 1990)—which suggests that there is no theoretical reason to believe that a liar's behavior is different across cultures (Vrij 2008). However, the assumption that the experience of these cognitive and emotional processes is universally shared (e.g., Sabourin 2007; Vrij 2008) ignores the differences in the way deception is perceived and regarded across cultures. According to Kim et al. (2008), the premise that

liars experience emotions such as fear and guilt is only true if deception is believed to be an immoral act. Thus, if a culture's norms and practices consider lying acceptable under specific circumstances (e.g., when it is necessary to maintain relationships, to avoid conflict, or to show modesty), then there would be no reason for the liar to experience high levels of guilt or fear when communicating deceptively during such situations. Accordingly, if one does not experience high levels of guilt in response to communicating deceptively, one is not likely to exhibit behavioral cues of arousal or emotion as suggested by this approach.

Differences in the moral significance of deception and truth-telling have been found in many cultures (e.g., Lee et al. 1997; Yeung et al. 1999). For instance, Lee et al. (1997) studied Canadian and Chinese children's moral evaluations of lying and truth-telling in pro-social and anti-social situations. Children aged 7, 9, and 11 from Canada and mainland China were asked to read a series of vignettes that described a child that intentionally carried out a good and a bad deed. The vignettes also described when the child was questioned by a teacher about the deed and whether the child lied or told the truth. Overall, they found that Chinese children rated truth-telling less positively and lie-telling more positively in pro-social settings compared to their Canadian counterparts. Lee et al. (1997) concluded that the collectivistic nature of the Chinese culture promotes personal sacrifice for the social good and thus condones lying when it is use in conjunction with a good deed.

Similarly, Kim et al. (2008) found that in collectivistic cultures, the altering or rejection of truthful information is not typically considered deception but, instead, is seen as necessary in order to maintain harmonious relationships. Thus, when a person from a collectivistic culture alters the truth, he/she may not experience guilt or fear of lying because it is acceptable to do so according to cultural norms and practices. Likewise, if the communicator does not regard deception as an immoral practice that is to be avoided, it is less likely that he/she would try to engage in impression management techniques or attempted control processes (Memon et al. 2003).

If there are cultural differences in the way deception is regarded across cultures, it is also questionable to assume that there are no culture-specific cues to deception. To date, only few studies have been conducted in this area (e.g., Bond et al. 1990; Castillo and Mallard 2012; Vrij and Winkel 1991). One such study was conducted by Bond et al. (1990) who asked American and Jordanian students to either lie or tell the truth about a person they liked and a person they disliked. They then recorded the frequencies of eight verbal and nonverbal behaviors such as gaze aversion, self-manipulations, and movements. Bond et al. (1990) found that, regardless of veracity, American and Jordanian students differed in their behavior. Specifically, Jordanians displayed more eye contact, more movements, and more filled pauses per minute compared to Americans, regardless of whether they were lying or not. Interestingly, they also found that behaviors associated with deception were different across cultures. Jordanians were more likely to display filled pauses while lying than telling the truth, but Americans did not show this pattern. The results of this study not only support the idea that behavior is influenced by cultural norms and practices, but it also suggests that there may also be culture-specific indicators of deception.

Similarly, Vrij and Winkel (1991) investigated the behavioral patterns of white native Dutch and black Surinam citizens of the Netherlands during a simulated police interview. In the experiment, they approached Dutch and Surinam shoppers and asked them to participate in a study to determine how accurate police officers were at detecting deception in a short interrogation about the theft of a set of headphones. Half of the participants were given the headphones and were asked to hide them and convince the interrogating officer that they did not possess them. The other half of the participants were not given the headphones and were asked to tell the truth. The participants were then interviewed by a native Dutch police officer or Surinam police officer about the possession of the headphones. All interviews were videotaped, and participants' behaviors were scored. The results showed that regardless of whether they were lying or not, compared to native Dutch people, Surinamese people generally made more speech errors, spoke more slowly, spoke with higher pitched voice, smiled more, displayed more gaze aversion, and performed more self-manipulations, illustrators, and trunk movements.

A more recent study examined behavioral differences between Colombian and Australian liars and truth-tellers (Castillo 2011). In the study, participants were asked to either lie or tell the truth about a mock computer crime. Half of the participants were given details to break into a student's e-mail account and were asked to read a number of confidential e-mail messages. These participants were then asked to lie to the interviewer about what they did while they were using the computer. The other half of participants were not given the e-mail account details but were asked to search the Web for a few minutes. These participants were then asked to tell the truth to the interviewer about what happened while they used the computer. The interviews were videotaped, and the frequency of 14 verbal and nonverbal behaviors was recorded. It was found that there were significant behavioral differences between Australian and Colombian participants. Specifically, it was found that regardless of message veracity, Colombian participants smiled less and made fewer head nods and speech hesitations, and responses were generally shorter than their Australian counterparts. Moreover, Colombian participants were more likely to avert their gaze more, made more trunk movements and head shakes, and paused more frequently while speaking than Australians regardless of whether they were lying or telling the truth. The findings indicated that the cross-cultural differences in behavior were much greater than any differences associated with veracity.

The influence of culture can also be seen in the facial expressions of emotion. Recent research suggests that while there are basic commonalities in the way facial expressions of emotion are displayed and interpreted around the world, there are also important systematic differences across cultures (e.g., Elfenbein and Ambady 2002; Marsh et al. 2003; Matsumoto 1991). That is, there are specific, yet subtle, forms of facial expressions that may differ across cultures. These differences have been termed by Marsh et al. (2003) as "*nonverbal accents*." A recent study conducted by Jack et al. (2012) examined this issue and found that Chinese participants relied on eyes more to represent facial expressions compared to Western Caucasians. They argued that these cultural differences in the internal representations of emotions reflect cultural diversity in emotion signals. More importantly,

they argued that these cultural distinctions could potentially lead to missed cues or misinterpreted signals about emotions during cross-cultural communications. This finding is important for deception and lie detection as it is theoretically plausible to assume that such cultural variations on the way emotions are expressed could be misinterpreted by observers as signs of deception. For example, Matsumoto and Kudoh (1993) conducted a study to compare American and Japanese people's attributions of personality based on smiles. In the study, American and Japanese participants were asked to judge smiling and neutral faces depicted by both Caucasians and Japanese male and females. It was found that Japanese people have a display rule to use smiles for social appropriateness more frequently than Americans do and relatively less frequently to display true feelings of pleasure and joy. Consistent with these display rules, they found that Americans were more likely than Japanese people to associate more positive traits (such as honesty, sociability, and sincerity) with smiling faces. Therefore, it appears that Japanese people believe, perhaps more than Americans, that smiles are not a manifestation of true emotions; rather, they believe that there exists an association between smiling faces and distrust and dishonesty (Matsumoto and Kudoh 1993).

More recently, Safdar et al. (2009) provided further evidence of cultural display rules of emotions. They found that Japanese display rules permitted the expression of powerful emotions such as anger, contempt, and disgust, significantly less than the North American and Canadian display rules. They also found that Japanese display rules for the expression of anger, contempt, and disgust differed between in-groups and out-groups. That is, the expression of such emotions was dependent on whether the interactant was a member of their in-group (e.g., family member) or out-group (e.g., stranger/interviewer). It was also found that Japanese people expressed positive emotions (e.g., happiness, surprise) significantly less than Canadians but not compared to North Americans. Overall, the literature on the universality of basic emotions and culture specificity of display rules demonstrates that the fundamental expression of emotions may be shared by people from different cultures, but the usage, meanings, and interpretations given to these emotions may not be as easily translated across languages and cultures. However, to date, research on facial cues to deception (or microexpressions) has not examined the impact these cultural differences may have on deception and lie detection accuracy in cross-cultural environments. To my knowledge, there are no studies that have examined this issue.

While the results of these studies do not provide sufficient evidence to indicate that there are culture-specific cues to deception, the findings are consistent with the premise that culture has a significant influence in the display of verbal and nonverbal behaviors and facial expression of emotion which can also impact deceptive communication (e.g., Matsumoto and Hwang 2013; Matsumoto and Kudoh 1993; Watson 1970). If there were culture-specific cues of deception, then current lie detection methods would need to be revisited in order to account for such cross-cultural variability of deceptive behavior. More importantly, the real question that these findings raise is whether cultural distinctions in behavior have an impact on cross-cultural lie detection accuracy. Is it possible to accurately detect lies and truths in cross-cultural contexts?

12.5 Lie Detection Accuracy in Cross-Cultural Environments

Bond and Rao (2004) proposed that cross-cultural differences in behavior may affect cross-cultural lie detection in two ways: (1) It may hamper the lie detection process by introducing biases and errors or (2) it may facilitate lie detection by providing observers more cues indicative of deception.

Bond et al. (1990) study described above also examined lie detection accuracy in cross-cultural contexts. In the study, they asked American and Jordanian students to judge the veracity of American and Jordanian's statements about a person they liked and a person they disliked. The results indicated that, within cultures, Americans achieved a lie/truth detection accuracy rate of approximately 58.5 % when lies were conveyed by American students. Similarly, Jordanians had a lie/truth detection accuracy rate of around 57.4 % when lies were told by Jordanian students. Interestingly, when lie detection was examined across cultures, it was found that American observers achieved a lie/truth detection accuracy rate of 50.89 % and Jordanian observers 49.3 %, both no different from chance. These results suggest that participants were particularly poor at making accurate lie/truth classifications in cross-cultural contexts and slightly better in within culture contexts.

However, Bond and Atoum (2000) pointed out that the no-audio presentation of videos in Bond et al. (1990) study may have undermined observers' attempts at cross-cultural lie detection. In order to address this limitation, Bond and Atoum (2000) conducted a series of studies. They videotaped American, Jordanian, and Indian students and community members either lying or telling the truth. The videotapes were then judged for deception by other American, Jordanian, and Indian students and community members. Contrary to Bond et al. (1990) findings, participants' detection accuracy rate across cultures was around 51.66 % and within cultures 54.27 %, both significantly higher than expected by chance alone (i.e., 50 %), although not impressive. They concluded that people can accurately detect lies of people with whom they do not share the same cultural background; however, judgments of credibility were still consistently higher within than across cultures.

The results of these studies suggest that lie detection across cultures may be possible, but cultural differences in behavior may complicate this process. In mono-cultural contexts, lie detection accuracy has been consistently found to be particularly poor (i.e., around 50–60 %) (for a review, see Bond and DePaulo 2006); in cross-cultural contexts, however, the picture is not any better because accuracy rates have been found to be similar or even worse, as demonstrated by Bond and Atoum's (2000) study.

Given the significant consequences of making accurate judgments of credibility in cross-cultural settings, it is important to investigate the problems that are likely to occur in such situations. It has been argued that these cultural differences may hamper cross-cultural lie detection by introducing a number of errors and biases (Bond and Rao 2004). When people from different cultures come into extensive contact, there is a potential for miscommunication and misunderstandings which lie

in the nature of culture itself (Brislin 2001). For instance, what can be considered polite and effective in one culture may be considered rude and ineffective in another culture. Matsumoto et al. (2005) argued that cross-cultural communication is characterized by ambiguity and uncertainty because the ground rules by which the interaction occurs may not be similar between interactants. In other words, the meanings given to verbal and nonverbal codes are unknown and different for both the communicator and the receiver, which may produce opportunities for misunderstanding. Therefore, cultural differences in behavior may have the potential to introduce biases or errors when people are making attributions about a person's credibility from a foreign culture. Vrij et al. (2010) noted that these errors can easily occur because behaviors that are displayed by one culture may be interpreted as suspicious by the other culture.

12.6 Cultural Bias and Errors

Examining the potential for errors during cross-cultural judgments of credibility has received little attention. Vrij and Winkel (1992) conducted an experiment to examine whether differences in nonverbal behavioral patterns and skin color had an impact on perceptions of credibility. Data from their earlier study (Vrij and Winkel 1991) were used to establish behavioral norms for "white Dutch" and "black Surinamese" nonverbal behaviors. Surinamese and Dutch actors were then videotaped and were asked to display gestures and smiling behavior of typical white (Dutch) or typical black (Surinamese) while giving a statement. For example, the actors showed normative smiling behavior typical of black (Surinamese) people in one version and normative smiling behavior typical of white (Dutch) people in the other version. Dutch police officers were then shown these video clips and asked to indicate to what extent the people in the video made a suspicious impression, were nervous, and appeared unpleasant. It was found that skin color did not have a negative impact on impression formation but nonverbal behavioral differences did. Specifically, it was found that both Surinamese and Dutch actors were seen as more suspicious, nervous, and unpleasant when they showed nonverbal behavior that was consistent with Surinamese citizens than when they displayed normative Dutch nonverbal behavior.

Vrij and Winkel (1994) extended this line of research in a subsequent study in which they examined the influence of accent, skin color, speech style (i.e., direct or indirect), and spoken fluency on perceptions of credibility. They presented 175 Dutch police officers with a series of slides and an audiotape of a citizen being interrogated. They then asked the police officers to provide ratings of the perceived suspiciousness, nervousness, and unpleasantness of the citizen. Skin color and accent were manipulated by presenting slides depicting either a person of Dutch or Surinamese origin accompanied by audio recorded in a corresponding accent. The audiotapes were then manipulated to correspond to the typical speech style and spoken fluency of Dutch and Surinamese citizens, respectively.

They found that neither accent nor skin color produced an unfavorable assessment of the participants of Surinamese origin. However, consistent with their previous study (Vrij and Winkel 1992), it was found that when the communicators displayed the typical speech style and spoken fluency of Surinamese citizens, police officers were likely to rate them as more suspicious, nervous, and unpleasant than citizens displaying typical Dutch behavior. Thus, cultural differences in communication styles may have the potential to create biases when cross-cultural judgments of credibility are made.

There are two theories that can explain Vrij and Winkel's (1992, 1994) findings, the expectancy violation model (Bond et al. 1992), and the norm violation model (Levine et al. 2000). According to these models, violations of the observer's cultural norms and/or expectations would increase the likelihood that the observer will suspect the communicator of being dishonest if no other plausible explanation is available. Therefore, in a situation in which a communicator and an observer are from different cultures, the observer will apply social norms or beliefs concerning behavior that may differ from the communicator's own norms. This behavioral discrepancy may be interpreted as attempts to hide the truth by the communicator if the observer does not have an appropriate explanation for these behavioral differences. Thus, deception might be inferred from any behavior (or facial expression) that violates a social norm. For example, if the norm for a social interaction includes relatively high levels of eye contact, a person who avoids eye contact may be suspected of deception as a result of violating that norm. Considering Vrij and Winkel's (1992, 1994) findings, it is possible that because black Surinamese citizens have a distinct normative behavioral pattern compared to white Dutch citizens, the norm violations that occurred during these interactions may have aroused suspicion and thus resulted in more negative judgments compared to those communicators who did not violate these norms. However, it is difficult to determine whether these cultural differences did result in a heightened suspicion of the communicator as this was not investigated in their studies (Vrij and Winkel 1991, 1992, 1994).

More recently, Castillo, Tyson and Mallard (2014) conducted a study to investigate whether cultural differences in normative behavior would result in misinterpretations of a culture's baseline behavior and, consequently, in more dishonest judgments being made (i.e., deception bias). In order to do this, 71 Australian participants were asked to watch 24 video clips that depicted Australian and Colombian individuals either lying or telling the truth. Some of the Colombian video clips depicted individuals lying or telling the truth in their first language—Spanish—and some depicted Colombians lying or telling the truth in their second language—English. Participants were asked to watch the clips and then indicate whether they thought that the person in the clip was either lying or telling the truth (i.e., dichotomous answer). Interestingly, the results indicated that participants were likely to ascribe more truthful than deceptive judgments to the Australian clips than to the Colombian clips. Specifically, the average response bias for Australian clips indicated a *truth bias* (Mean $c = 0.32$), whereas the average response bias for Colombian clips (mean $c = 0.06$) indicated that participants took a neutral approach to judgment. The truth bias found for Australian clips

is consistent with the literature on the detection of deception in mono-cultural contexts (e.g., Bond and Atoum 2000; Bond and DePaulo 2006; Bond and Rao 2004; Levine et al. 1999, 2006). However, while it was found that observers did not rate Colombian clips as significantly more suspicious than Australian clips, the absence of a truth bias for the Colombian clips suggested that, at the very least, participants' tendency to make more truth judgments was attenuated for clips that depicted someone from another culture.

Although these findings do not provide sufficient evidence of the presence of bias during cross-cultural judgments of credibility, they do indicate that observers need to be cautious and aware of culturally mediated behavioral differences in order to avoid the potential for errors and bias. Vrij et al. (2010) proposed that lie detectors should interpret the verbal and nonverbal behaviors displayed by communicators of a different ethnic origin in light of cultural differences. However, research (e.g., Castillo 2011) in this area has indicated that observers often have limited knowledge about the behavioral differences that exist between cultures, and thus, pointing out differences between cultures or informing lie detectors of such differences might be sufficient to reduce such errors.

Theoretically, based on the expectancy and norm violation models (Bond et al. 1992; Levine et al. 2000), it is possible that providing observers with an explanation for norm and expectancy violations could attenuate observers' tendency to judge any violations as attempts to hide the truth. Familiarization or sensitization to cross-cultural issues of individuals who are performing cross-cultural judgments of credibility may be the key to prevent or attenuate the presence of such biases. While the research in this area has been limited, a preliminary investigation (Castillo and Mallard 2012) has suggested that providing lie detectors with specific normative information about the communicators' behavior did not improve accuracy but did counteract/alleviate cultural bias. Future research in the prevention of such biases could therefore benefit from examining whether familiarity with a cultures' communicational style and normative behavioral patterns moderates the extent to which these biases operate (i.e., result in a greater or lesser degree of bias). For instance, future studies could examine cultures with closer geographical proximity (e.g., two European cultures) and familiarity.

12.7 Second Language Use and Bias

Another aspect that is particularly relevant during cross-cultural interactions is second language use. Often these interactions are characterized by at least one individual requiring to communicate in their second language (L2). Therefore, investigating whether behavioral differences between liars and truth-tellers are dependent on the language spoken (i.e., first or second language) is essential for our understanding of cross-cultural lie detection.

Numerous research studies on second language use have demonstrated that speaking in a non-native language is more cognitively taxing than speaking in

a mother tongue (e.g., Fehringer and Fry 2007; Hongyan et al. 2010; Kroll and de Groot 2005). For instance, Fehringer and Fry (2007) provided evidence that second language use had a negative impact on speech production because of the cognitive demands it causes on working memory capacity. Therefore, speaking in a second language may result in a display of behaviors that suggest cognitive load and anxiety such as increase hesitations, repetitions, formulations, and filled pauses. Theoretically, it is plausible that despite the veracity of the message, communicating in a second language would result in differences in the baseline behavior of the second language speaker, and these differences would be in the direction that is indicative of increased cognitive capacity. Thus, a person who is communicating in a second language may display behaviors that are in accordance with deceptive cues but are the result of linguistic proficiency and not credibility.

This issue is particularly important for cross-cultural judgments of credibility. The literature has consistently demonstrated that lie detectors often associate lying with an increase of cognitive load and often look for cues that would indicate whether the person was thinking hard, feeling anxious, or nervous (e.g., Akehurst et al. 1996; Global Deception Research Team 2006; Granhag et al. 2004). Thus, if communicating in a second language is cognitively taxing and results in signs of cognitive load, a person communicating in their second language may be more likely to be judged as deceptive. In other words, the behavioral signs that arise from language demands may be interpreted by observers as attempts to hide the truth because these cues are stereotypically associated with deception. Therefore, if observers attribute deception based on the presence of behaviors that suggest cognitive load or arousal, then in a situation where the communicator is providing a message in their second language, the display of behavioral signs that are associated with language demands may be interpreted by observers as attempts to hide the truth. As a result, one would expect that behavioral differences that arise from second language use would increase the potential for errors in cross-cultural situations.

Only a few deception studies have examined this issue. One such study was conducted by Cheng and Broadhurst (2005). They asked 31 students from Hong Kong to either lie or tell the truth about their opinion of capital punishment. The students were interviewed in their mother tongue (i.e., Cantonese) or their second language (i.e., English), and the interviews were recorded. They then asked 27 students to watch the video clips and indicate whether the thought that the person was either lying or telling the truth. Consistent with the literature on second language use, they found that regardless of message veracity, speaking in a second language resulted in a different behavioral pattern compared to when speaking in a first language. Specifically, they found that participants speaking in their second language were more likely to display signs of nervousness and high cognitive demand (e.g., gaze aversion, increased body movements). More importantly, they found that observers were more successful in identifying liars speaking in their second language (English) than liars speaking in their native language (Cantonese). Interestingly, observers were more successful in identifying truth-tellers speaking in Cantonese than English, thus suggesting the presence of a language bias, such that people speaking in their first language were more likely to be judged as

credible than people speaking in their second language, irrespective of veracity. However, the validity of Cheng and Broadhurst's (2005) behavioral analysis was questionable as they reported a description of these differences without appropriate inferential statistics.

Similarly, Castillo (2011) found that participants' baseline behavior differed markedly when communicating in their second language compared to when communicating in their first language, regardless of the veracity of the message. Specifically, it was found that Colombian participants made more functional hand and arm movements and their response latency was considerably shorter when speaking in their first language (Spanish) than their second language (English). These behaviors were also consistent with literature on second language use which suggests an increase of cognitive load (Fehringer and Fry 2007). Similar to Cheng and Broadhurst's (2005) study, Castillo, Tyson and Mallard (2014) found that observers were more suspicious of individuals speaking in their second language (i.e., Colombian English speaking clips).

More recently, Da Silva and Leach (2013) asked observers to make credibility assessments of individuals lying and telling the truth in their second language. Consistent with previous studies, they found that observers were more likely to judge speakers of a second language as less credible than native speakers. Interestingly, they also found that observers were better able to discriminate lies and truths from native language speakers than second language speakers. Thus, observers were not only more suspicious but also less accurate at detecting deceit from second language speakers.

The results of these studies provide preliminary evidence that behavioral distinctions that arise from second language use could potentially hinder the lie detection process by producing bias and errors in judgment. Liars are likely to display a number of behaviors as a result of experiencing cognitive and affective processes: emotion, cognitive load, and attempted control. However, as the studies described above suggest, these same processes and behaviors may also be experienced by someone speaking in their second language; in particular, the emotional and cognitive load processes may be associated with speaking in a language in which one does not have native fluency.

12.8 Cognitive and Affective Factors in Cross-Cultural Lie Detection

The previous section highlighted that cultural and language differences in behavior may result in errors or bias during cross-cultural environments. The focus on such cultural differences in behaviors and norms suggests that previous research has also consistently neglected the influence of other cognitive and affective factors on intergroup perceptions, such as stereotypes, ethnocentrism, and prejudice (Stephan and Stephan 2002; Wiseman et al. 1989). There is considerable evidence in the cross-cultural communication literature that suggests that many misunderstandings

that arise during cross-cultural communications are rooted in the attitudes and beliefs people hold toward members of the out-group (Stening 1979). Wiseman et al. (1989) suggested that an individual's attitudes toward members of another culture not only influence how positive or negative their impressions of that culture are, but also determine the degree of mutual understanding that could be achieved during cross-cultural communication. However, the deception literature has largely disregarded the impact these factors may have during cross-cultural lie detection. Thus, it is argued that future research should explore the role of these issues in cross-cultural credibility judgments.

12.8.1 Stereotypes and Prejudice

Social psychologists have long been interested in stereotypes and prejudice because they are particularly important in understanding how people make sense of and react to each other (Stangor 2000). These two concepts have been widely viewed as interrelated (Devine 1989; Sherman et al. 2005). While stereotypes are commonly defined as the knowledge, beliefs, and expectations associated with social groups and their members, prejudice is defined as the positive or negative evaluations of social groups and their members (Sherman et al. 2005). Therefore, stereotypes are seen as the cognitive component and prejudice as the affective or evaluative component, of intergroup bias (Amodio and Devine 2006).

Stereotypes are particularly important in understanding intergroup relations because they help to create expectations of how a group and their members should behave and provide ways to explain and predict their behavior (Gudykunst 2004). Their influence can be pervasive, affecting the perceiver's attention to the information, their inferences, and interpretations of and judgments of behavior (Hamilton and Sherman 1996; Hamilton et al. 1990). Thus, stereotypes are particularly relevant during cross-cultural communication because they can affect the information that is noticed, remembered, stored, and recalled about individuals from a group (Stephan and Stephan 2002; Wiseman et al. 1989). However, it has been argued that stereotypes in and of themselves do not always lead to miscommunication or errors. According to Gudykunst (2004), inaccurate predictions of a person's behavior are particularly likely to occur when negative stereotypes of a group are rigidly held. For example, if a person has a strong belief that Americans are dishonest, seeing a man known to be American who takes a package from a car would likely lead that observer to assume that the American is stealing the package. Furthermore, people who hold rigid stereotypes of an out-group also tend to be negatively prejudiced toward that out-group. Consequently, rigidly held stereotypes and negative evaluations of an out-group are more likely to result in discriminatory behaviors (e.g., Hilton and von Hippel 1996; Jussim et al. 1987).

The role of stereotypes and prejudice would appear to be particularly important when cross-cultural judgments of credibility are made. It is plausible that

holding negative stereotypes and prejudiced attitudes toward members of a cultural group may increase the likelihood of interpreting a behavior as indicative of deception. These cognitive and affective factors may increase the potential of a dispositional attribution being made. However, the impact of these factors on cross-cultural judgments of credibility has not been investigated yet in the deception literature.

12.8.2 Ethnocentrism

Another central concept in understanding group attitudes and intergroup relations is ethnocentrism. Ethnocentrism is commonly defined as “the view of things in which one’s group is the center of everything, and all others are scaled with reference to it” (Sumner 1906 cited in Stephan and Stephan 2002, p. 130). Such views, according to Samovar et al. (2005), are the perceptual window in which cultures interpret and judge each other. Typically, ethnocentrism is exemplified by positive attitudes and behaviors toward the in-group and negative attitudes and behaviors toward out-groups (Hammond and Axelrod 2006; Neuliep and McCroskey 1997; Stephan and Stephan 2002; Wiseman et al. 1989). Ethnocentric groups see themselves and members of their in-groups as virtuous and superior and see their own standards of value as universal and true, whereas out-groups are seen as contemptible, immoral, inferior, suspicious, and weak (Neuliep and McCroskey 1997; Smith and Bond 1993).

Consistent with this, ethnocentrism has been commonly associated with negative stereotypes, negative affect, and prejudice toward the out-group (Dovidio et al. 2002; Perreault and Bourhis 1999). For instance, Gagnon and Bourhis (1996) found that individuals who identified strongly with their in-group were more likely to discriminate against an out-group than those who identified less strongly with their in-group. In cross-cultural interactions, ethnocentric views have also been thought to determine the extent to which a culture’s behavior is judged and understood. Some researchers argue that interactants high in ethnocentrism may base their expectations on their own cultural social norms and rules, resulting in misunderstandings of the other interactant’s intentions, values, and behavior (Lin and Rancer 2003; Neuliep and McCroskey 1997; Stephan and Stephan 2002). Similarly, Gudykunst (2004) noted that the more ethnocentric the people are, the more trouble they would have making accurate predictions of, and explanations for, a stranger’s behavior.

Theoretically, it appears plausible that ethnocentric beliefs may also influence cross-cultural judgments of credibility. The degree of ethnocentrism a person holds may determine the way they interpret and judge the behavior of an individual from a different culture. For instance, people high in ethnocentrism may perceive foreigners as more deceptive than their compatriots.

In sum, it has been well documented that cognitive and affective factors such as stereotypes, prejudice, and ethnocentrism play an important role when people

are trying to explain and predict a stranger's behavior and also have the potential to produce misunderstandings during cross-cultural interactions. Therefore, it is possible that these same factors play a part when people are trying to make judgments of credibility in cross-cultural contexts. However, research in this area is needed.

12.9 Conclusion

The literature reviewed above provides ample support for the idea that culture plays a role in the encoding and decoding of verbal and nonverbal behaviors including facial expressions of emotions, which are an important part of the communication process. However, it does not provide a clear explanation about the nature of such cultural influences in cross-cultural lie detection contexts. A number of studies have already provided an initial demonstration that such differences in display rules and normative behavior of behavior result in an increased suspicious of the speaker, yet it has not explained the extent of such influence or whether it can be prevented or not. Future research should examine the role of the cultural factors that were described in this chapter but more importantly on whether these biases and errors can be prevented or, at the very least, attenuated.

Existing literature has tended to regard deception as a “one-size-fits-all” phenomenon, where individuals from all over the world are thought to share a set of universally specific psychological processes that lead to similar behavioral cues to deception (e.g., Vrij 2008; Zuckerman et al. 1981). However, this chapter has challenged this view and argued that deception research needs to move away from this “*cultural vacuum*” perspective (Kim et al. 2008, p. 24) and start recognizing the cultural and cross-cultural factors that may impact deceptive communication and lie detection in cross-cultural contexts. It was argued that this view is problematic because it largely ignores the influence of culture in the communication process, particularly given that contemporary research has shown that culture has a significant impact on the way an individual communicates and that deceptive communication is not exempt from such influence (e.g., Gudykunst 2004; Sabourin 2007; Vrij and Winkel 1991, 1994).

The clear difficulties associated with accurately distinguishing truthful from deceptive messages in a cross-cultural context and the potential for biases that result from culturally and linguistically based behavioral differences have important implications for many social, legal, business, and national security settings. For instance, the tendency toward bias in cross-cultural judgments of deception could contribute to miscarriages of justice in which immigrants, asylum seekers, or foreign visitors are wrongly suspected of deception because their normative behavioral pattern may be misinterpreted as an attempt to hide the truth. Thus, the role of culture in deception and lie detection has been under-researched and are now long overdue.

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