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This article reports three studies of international deception. Americans, Jordanians, and Indians were videotaped while lying and telling the truth, and the resulting tapes were judged for deception by other Americans, Jordanians, and Indians. Results show that lies can be detected across cultures. They can be detected across cultures that share a language and cultures that do not, by illiterates as well as university students. Contrary to a hypothesis of ethnocentrism, perceivers show no general tendency to judge persons from other countries as deceptive; in fact, they often judge foreigners to be more truthful than compatriots. There is, however, some evidence for a language-based ethnocentrism when perceivers are judging the deceptiveness of a series of people from the same multilingual culture. Ancillary results reveal that people from diverse backgrounds reach consensus in deception judgments and that motivation can impair a liar's ability to achieve communication goals.

Deception has been defined as an "act that is intended to foster in another person a belief or understanding which the deceiver considers false" (Zuckerman, DePaulo, & Rosenthal, 1981). Judgments of deception have important consequences. Some may even start wars (Triandis, 1994).

Psychologists have studied judgments of deception from behavior. They have identified some nonverbal cues to deceit (Ekman, 1992) and discovered a number of patterns in naive observers' attempts to spot lies (Zuckerman et al., 1981). Unfortunately, most of the research on deception has been restricted to the United States. Although a little has been learned about deception in other countries (Aune & Waters, 1994; Cody, Lee, & Chao, 1989; Feldman, 1979), there has been only one experimental study of international deception to date.

Bond, Omar, Mahmoud, and Bonser (1990) investigated international deceptions between Jordanians and Americans. Jordanian and American students were videotaped while telling lies and truths; later, other Jordanian and American students watched the tapes and tried to spot deceit. Results showed statistically significant lie detection within each of the two cultures but no lie detection between cultures.

In implying that lies cannot be detected across cultures, the Bond et al. (1990) results would seem to have important implications. Theoretically, these results suggest that the ability to detect deception reflects culture-specific learning. At a practical level, they suggest that in international settings, liars are rarely caught.

It would be premature, however, to infer from a single study that cross-cultural lie detection is impossible. Even within a culture, lies are difficult to detect. In the American research literature, rates of monocultural lie detection rarely exceed 55%, when guessing would produce 50% detections (Kraut, 1980). Thus, one could hardly expect that lies would be easy to detect across cultures or that international lie detection abilities would be easy to observe. The Bond et al. (1990) study may have failed to uncover international lie detection for several reasons: They required people to judge deception solely from visible cues, restricted their research to students, and gave these people no motivation to lie. In principle, these factors might influence international deception judgments, as will now be explained.

Often, international lies are encountered in face-to-face meetings, where the liar can be seen and heard. However, in the only existing study of international deception (Bond et al., 1990), people were forced to

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judge deception from a video presentation with no sound. This unnatural perceptual mode may have undermined judges' attempts at lie detection. Consistent with this analysis, previous research shows that Americans are more accurate at detecting Americans' lies if they can hear the liars in addition to seeing them (Zuckerman et al., 1981).

International deceptions can involve individuals from diverse backgrounds. Participants in deception research are, by contrast, homogeneous. Almost invariably, they are students. Bond et al. (1990), for example, had university students in one country lie to university students in another country. Perhaps attempts at lie detection depend on the similarity of the liar to the target of deception. Perhaps research-based conclusions about deception judgments reflect university students' youth, wealth, and higher education (cf. Sears, 1986). In light of these possibilities, no general conclusions about international deception should be drawn from university students' attempts to detect university students' lies.

The stakes in an international deception can be high (Ekman, 1992). In most research on deception, the stakes are by contrast low. In the Bond et al. (1990) study of international deception, for example, participants were motivated solely by their desire to fulfill a psychology course requirement. Perhaps people regard experimental deception tasks as a form of acting, devoid of any consequences. Perhaps they feel none of the arousal that highly motivated liars experience and, hence, display none of the cues that would otherwise give them away. Consistent with this line of reasoning, Americans are most likely to "leak" nonverbal cues to deception when highly motivated to conceal their lies (DePaulo & Kirkendol, 1989).

The current article reports three studies of international deception. In Experiment 1, American and Jordanian university students attempt to detect international lies from an audiovisual presentation; in Experiment 2, illiterate Indian farm workers attempt to detect American and Jordanian university students' lies; and in Experiment 3, judges from three countries seek to detect Indians' motivated lies. These studies seek to determine whether lies can be detected across cultures.

Judgments of deception need not be accurate to have important effects. Indeed, Triandis (1994) maintains that the Persian Gulf War resulted when an Iraqi official mistakenly concluded that an American negotiator was lying. Thus, the present experiments will consider not only the accuracy of international lie detection but also international biases in judging deceit. Previous research shows that Americans show a bias toward perceiving other Americans as truthful (DePaulo, Stone, & Lassiter, 1985). In considering the sorts of biases that might color international deception judgments, we considered two possibilities. Perhaps people give the benefit of the doubt to communicators they do not understand. If so, people might be reluctant to judge foreigners as deceptive. Perhaps, on the other hand, people are suspicious of outsiders. If so, ethnocentric stereotypes (Smith & Bond, 1994) might encourage them to judge foreigners as dishonest. In three experiments, we will assess these possibilities by examining American, Jordanian, and Indian tendencies to attribute deception to foreigners and compatriots.

EXPERIMENT 1: VISIBLE AND AUDIBLE LIES

In principle, international subterfuge might be uncovered from a variety of cues. Eye contact, smiles, and head nodding can be seen; speech rate, volume, and tone of voice can be heard. Although researchers have detailed the impact of many such cues on Americans' judgments of Americans' veracity (cf. Zuckerman et al., 1981), in the international arena, some complications emerge. Negotiators who are ignorant of an adversary's language may attach special significance to nonverbal cues. Yet, these negotiators must be cognizant of cross-cultural differences, lest they interpret foreign mannerisms as evidence of deception (cf. Bond et al., 1992).

An initial study was conducted to analyze the impact on international lie detection of visible and audible cues. American and Jordanian university students attempted to detect one another's lies from one of three presentations: a video presentation of the liar's face and body, an audio presentation of the liar's speech, or an audiovisual presentation of both visible and audible cues. Americans have difficulty detecting other Americans' lies when they must base their judgments solely on what they can see. They are better at detecting lies if the liar also can be heard (DePaulo et al., 1985). Experiment 1 will determine whether similar effects obtain in American and Jordanian university students' attempts at international lie detection.

Ordinarily, liars attempt to conceal their deceptions, hoping to gain an advantage over an adversary (Bond, Kahler, & Paolicelli, 1985). In this respect, liars differ from other communicators, who seek to transmit information faithfully. In deference to the adversarial nature of deceptive interactions, most of the liars in the present research were instructed to conceal their deceit. To allow for a comparison with attempts at faithful information transmission, a few liars were given a different communication goal: to convey to others the fact that they were lying. Earlier research indicates that Americans have some ability to convey deception to other Americans (Zuckerman, DeFrank, Hall, Larrance, & Rosenthal, 1979). We wondered whether cross-cultural

attempts at conveying deception also might be efficacious.

METHOD

Research Participants

American and Jordanian university students participated in Experiment 1 by judging deception. The Americans were 89 female and 31 male psychology students at Texas Christian University. The Jordanians were 30 female and 30 male psychology students at Yarmouk University in Jordan.

Videotapes

The participants judged videotapes that had been made by Bond et al. (1990). These depicted Americans and Jordanians lying and telling the truth. On the videotapes were 20 male and 20 female American psychology students from Texas Christian University as well as 20 male and 20 female Jordanian psychology students from Yarmouk University. Throughout the experimental procedure, the Americans spoke in English; the Jordanians spoke in Arabic.

At the time the tape was made, a student sat facing a male research assistant from the student's culture and a videotape camera was located over the assistant's right shoulder. Students were then asked to describe a person they knew. They were asked to describe either (a) a person they liked, (b) a person they disliked, (c) a person they liked as if they really disliked that person, or (d) a person they disliked as if they really liked that person. Students were instructed either to tell the truth (if giving one of the first two descriptions above) or to lie (if giving one of the latter two descriptions).

After giving the initial description, the student was asked for a second person description. Over the course of the videotaping session, each student gave all four of the person descriptions described above, with the order of the descriptions counterbalanced across students. For a similar procedure, see DePaulo and Rosenthal (1979).

Students' communication goal was manipulated. On videotape, each student told the truth and lies. While telling the truth, all of the students were instructed to convince the research assistant that they were telling the truth. While lying, most of the students (32 Americans and 32 Jordanians) were instructed to conceal their lies and convince the research assistant that their descriptions were truthful. The other students (8 Americans and 8 Jordanians) were instructed to convey their lies and let the research assistant know that their descriptions were false. The latter were instructed not to say, in so many words, "I am lying" but were free to expose their deceit in any other way.

The videotapes created a 2 (conceal vs. convey lie) × 2 (tell lie vs. tell truth) factorial experiment. Although these videotapes had been made for an earlier cross-cultural study (Bond et al., 1990), none of the current judges had participated in the previous research.

In all, 320 person descriptions were solicited (four from each of 80 students: 40 Americans and 40 Jordanians). These were edited onto four videotapes. Each videotape depicted one description from each of the 80 students. Forty of the descriptions were lies and 40 were truths. Of the 40 lies on each videotape, 32 were lies that the students had tried to conceal and 8 were lies that the student had tried to convey. To reduce the length of participants' judgment task, the videotape depicted only the first 30 seconds of each person description.

Procedure

Visually isolated from one another in groups of five, research participants were presented with a tape of people describing acquaintances. As each description was presented, the participant tried to determine whether it was the truth or a lie. Immediately after the description, participants indicated their binary lie-or-truth judgment on a written form.

In response to one of the four videotapes described above, participants judged the veracity of 80 person descriptions. The tapes were presented in one of three modalities. One third of the participants judged deception from an audiovisual presentation of the tape, one third from an audio-only presentation, and one third from a video-only presentation. Each tape was judged in each modality by 10 Americans and 5 Jordanians. The segments on each tape were presented in one of two random orders.

RESULTS

Judges were asked about their language abilities. None of the 120 American judges claimed to know Arabic. Of the 60 Jordanian judges, 59 claimed to know English.

Lie Detection Within and Between Cultures

In the current study, each participant judged 40 lies and 40 truths. Half of the lies and half of the truths had been told by a member of the judge's culture; the other half had been told by a member of another culture. To test for lie detection, we noted the percentage of lie/truth judgments made by each of the 180 judges and compared the mean percentage correct to the 50% that would be expected by chance. We wondered whether it is possible to detect lies across cultures. It is. Overall, our participants' detection accuracy was 51.25% across cul-

tures, $t(174) = 2.06$, $p < .05$, and 54.27% within cultures, $t(174) = 7.03$, $p < .0001$.

An analysis of variance was conducted to identify factors that influence lie detection. This was a 3 (modality: audiovisual, audio only, or video only) × 2 (judge's culture: American vs. Jordanian) × 2 (judgment status: of target from same culture or other culture) × 2 (liar's goal: conceal or convey lie) mixed-model ANOVA on the percentage of correct lie/truth judgments. Results revealed that judgments were more accurate within cultures than across cultures, $F(1, 174) = 14.35$, $p < .001$, that lies that targets had tried to convey could be more readily discriminated from truths than those that targets had tried to conceal, $F(1, 174) = 24.43$, $p < .0001$, and that lie detection was less accurate when attempted from a video-only rather than an audiovisual or an audio-only presentation; for the main effect of modality, $F(2, 174) = 16.97$, $p < .001$. The ANOVA also showed that the liar's goal had its biggest effect on detection accuracy when lies were judged in the audiovisual rather than the audio or video mode, Modality × Goal interaction, $F(2, 174) = 6.76$, $p < .005$; that the liar's goal had a bigger effect on the accuracy of judges from the target's own culture rather than judges from the other culture, $F(1, 174) = 4.69$, $p < .05$; and that as targets, Americans were more successful than Jordanians at conveying deception. This final effect produced a two-way Judge's Culture × Judgment Status interaction, $F(1, 174) = 7.67$, $p < .01$, and a three-way Judge's Culture × Judgment Status × Target's Goal interaction, $F(1, 174) = 9.30$, $p < .01$. No other effects in the ANOVA were statistically significant. Relevant means and *t* tests appear in Table 1. Across cultures, truths could be discriminated from lies that a target had attempted to convey when judgments were made from an audiovisual presentation. Within cultures, truths could usually be discriminated from lies, except when judgments were made from video only.

Experiment 1 provides evidence for lie detection across a language as well as across cultures. American judges reported that they could not understand Arabic. However, from an audiovisual presentation, these judges could discriminate Jordanians' Arabic-language lies from truths (*M* correct = 53.30%), $t(39) = 2.97$, $p < .01$.[1] Indeed, Americans' judgments of Jordanians were significantly more accurate when made from the audiovisual than from the video-only presentation (*M* correct for the latter = 49.31%), for the difference, $F(1, 174) = 4.66$, $p < .05$. Access to Arabic speech facilitated lie detection by students who did not know Arabic.

Judgmental Biases

In principle, ethnocentrism might encourage people to stereotype foreigners as dishonest. Experiment 1 does not support this hypothesis. Americans gave foreigners the benefit of the doubt in judging more Jordanians than Americans to be truthful (*M*s = 59.55% vs. 52.07%, respectively), $F(1, 174) = 36.13$, $p < .0001$. Jordanians judged as truthful just as many Americans as Jordanians; for the difference, $F(1, 174) = .36$, *ns*. In general, foreigners received the benefit of the doubt only if they could be heard. Research participants judged as truthful 58.06% of foreigners and 53.24% of compatriots who had been depicted in the audiovisual presentation, 61.43% of foreigners and 49.14% of compatriots in the audio-only presentation, and 51.20% of foreigners and 52.29% of compatriots in the video-only presentation. In an ANOVA on percentage truth judgments, these patterns produced an interaction between judge's culture (American vs. Jordanian) and the status of the judgment (to own vs. other culture), $F(1, 174) = 8.93$, $p < .005$, as well as an interaction between presentation modality and the judgment's status, $F(2, 174) = 14.60$, $p < .001$.

TABLE 1: Percentage Lie/Truth Discrimination by Americans and Jordanians: Experiment 1

	Lie/Truth Discrimination of Own Culture		*Lie/Truth Discrimination of Other Culture*	
	American Judges	*Jordanian Judges*	*American Judges*	*Jordanian Judges*
Concealed lies				
Audiovisual	53.60*	51.02	51.85	51.25
Audio only	57.27*	52.76	52.43	50.16
Video only	48.92	51.51	49.58	47.19
Conveyed lies				
Audiovisual	71.56*	57.58*	58.79*	58.12*
Audio only	63.96*	56.54	46.83	58.75*
Video only	53.12	51.37	48.23	56.25

*Differs from 50% at $p < .05$.

DISCUSSION

Experiment 1 provides the first evidence to date of lie detection across cultures. Although it is not easy to detect lies across cultures, neither is cross-cultural lie detection impossible. International lie detection seems to require an audiovisual exposure to the liar, one that had not been available in earlier research. Experiment 1 suggests that Americans judge foreigners to be more truthful than fellow Americans. Hearing someone speak in an unfamiliar language may encourage judges to acknowledge their ignorance of the speaker's culture. Then judges give a speaker the benefit of the doubt. These Jordanians, knowing English, showed no such tendency in judging American speakers.

Unfortunately, Experiment 1 has limitations. All of the participants of the experiment were students of

higher education, and they were judging other students of higher education. Worldwide, university mores may encourage tolerance of cultural differences. If so, students may be uniquely inclined to give foreigners the benefit of the doubt. Worldwide, university students are similar in age, economic status, and educational background. Although Experiment 1 provides evidence of lie detection within an elite, geographically dispersed "culture" of higher education, it need not imply that individuals from radically different backgrounds could detect one another's lies.

EXPERIMENT 2: THE "CULTURE" OF HIGHER EDUCATION

We designed a second study to provide a more stringent test for international lie detection. In Experiment 2, videotapes of American and Jordanian university students were judged by Indians. Some of these Indian judges were university students, whereas others were illiterate farm workers. If international lie detection is confined to an elite culture of higher education, illiterate Indian farm workers should show no ability to detect American and Jordanian university students' lies. If only the highly educated give foreigners the benefit of the doubt, illiterates should be more willing than university students to judge foreigners as deceptive.

While investigating international lie detection, Experiment 2 also provides an assessment of the nonverbal abilities of illiterates. Illiterates comprise roughly a third of the world's adult population (Tresserras, Canela, Alvarez, Sentis, & Salleras, 1992) but are rarely studied by social psychologists (Jahoda, 1979). Illiterates are of theoretical interest because they can illuminate the impact of schooling on various competencies. In principle, one might expect illiterates to have exceptional judgmental abilities. Perhaps illiterates are uniquely equipped to interpret nonverbal behavior in possessing a holistic style of reasoning that education would undermine (Rogoff, 1980). Moreover, illiterates have a special investment in face-to-face behavior because they rely exclusive on nonwritten communications. Experiment 2 will test these possibilities.

METHOD

Research Participants

The participants were 120 residents of Maharashtra, a state in western India. Sixty of the participants (29 females, 31 males) were English-speaking psychology students at the University of Pune in India. The other 60 participants (15 females, 45 males) were farm workers from Bakori village, an isolated agricultural community 30 miles from Pune. The villagers spoke the Indian language Marathi. As farm laborers, these villagers earned 75 cents a day. Although the villagers had seen Indian television, few had ever met a non-Indian.

Procedure

Visually isolated in groups of five, the participants were presented with a videotape of Americans and Jordanians describing acquaintances. As each videotape segment was presented, participants indicated whether the person on the tape was lying or telling the truth. University students, who were seated in a classroom, indicated their binary lie-or-truth judgments in writing on a response form. Farm workers, who were seated on the floor of the village Hindu temple, indicated their judgments nonverbally by turning a thumb up if they thought that the person on the videotape was telling the truth or a thumb down if they thought that the person was lying.

In response to one of the four videotapes described in Experiment 1 above, each participant judged the veracity of 80 students (40 Americans and 40 Jordanians). As before, the tapes were presented in one of three modalities: audiovisual, audio only, or video only. The segments on each tape were presented in one of two random orders. Each videotape was judged in each modality by 5 Indian students and 5 Indian farm workers.

RESULTS

All 60 of the Indian students had completed bachelor's degrees and were enrolled in a master's program. Each of these students knew English. None of the 60 farm workers had any higher education, and 26 acknowledged that they were illiterate. Although the other 34 farm workers claimed to be literate, many had difficulty signing their names. Nine of the farm workers claimed to know English but none could understand the American English spoken by the first author of the current article. None of these 120 Indian judges claimed to know Arabic.

Lie Detection by Students and Illiterates

Experiment 1 indicates that it is possible for Americans and Jordanians to detect lies across cultures. As a second test for international lie detection, we had each of 120 Indians judge 40 lies and 40 truths told by non-Indians. Again, there was evidence of cross-cultural lie detection. The Indian participants averaged 51.08% correct lie/truth judgments, which is more than the 50% expected by chance, $t(114) = 2.27$, $p < .025$.

Perhaps lies can be detected internationally only by judges who are similar to the liars. Experiment 2 does not support this hypothesis. In fact, illiterate Indian farm workers were just as successful as Indian university students at detecting American and Jordanian university

students' lies. In a 3 (presentation modality) × 2 (liar's goal: conceal vs. convey lie) × 2 (judge's subculture: student vs. farm worker) ANOVA on percentage correct lie/truth judgments, the judges' subculture had no significant effects—for the main effect, $F(1, 114) = .01$.

In Experiment 1, lie detection depended on the modality in which lies were presented, with international lie detection evident only from an audiovisual presentation. Those results were replicated here. These Indians could detect lies across cultures only if they were judging an audiovisual presentation (M correct lie/truth judgments = 51.90%), $t(39) = 2.63$, $p < .025$. They could not detect non-Indian lies from either audio only or video only (Ms = 50.63% and 50.71% correct lie/truth judgments, respectively), $t(39) = .73$ and .83, both *ns*. In the analysis of variance, these differences produced a main effect of modality, $F(2, 114) = 3.53$, $p < .05$, but no interactions involving modality.

Experiment 1 suggested that people can convey their lies across cultures but that they need not fear cross-culture exposure of lies that they wish to conceal. Experiment 2 yields different results. Here, detection accuracy was just as strong for concealed lies as for conveyed lies; for the relevant main effect in the ANOVA on percentage correct judgments, $F(1, 114) = 1.84$, *ns*. Indeed, Indian judges could discriminate from truths lies that non-Indians intended to conceal (M correct lie/truth judgments = 51.35%), $t(114) = 2.49$, $p < .025$, but not lies that non-Indians intended to convey (M = 50.01%), $t(114) = .01$, *ns*.

Judgmental Biases of Students and Illiterates

In judging deception, American students give Jordanians the benefit of the doubt, as Experiment 1 shows. We had imagined that Indian university students would show this same judgmental bias and wondered whether illiterates might show an opposite bias—toward ethnocentric suspicion of outsiders. In fact, Indian university students showed some tendency to perceive Americans and Jordanians as truthful, but illiterates gave these foreigners a stronger benefit of the doubt. Although 53.21% of the non-Indians were judged as truthful by Indian university students, 62.72% were judged as truthful by Indian illiterates; for the difference, $F(1, 114) = 35.58$, $p < .0001$. These biases were unaffected by the target's culture and by the modality in which the foreigners were perceived; each F yields $p > .10$.

DISCUSSION

Individuals from starkly different backgrounds are able to detect one another's lies. International lie detection is not confined to an elite culture of higher education or to falsehoods that people wish to convey. The findings of Experiment 2 suggest that illiterates are neither more nor less successful at international lie detection than university students but that illiterates are more inclined to give foreigners the benefit of the doubt. Although we might be tempted to draw generalizations from these first two experiments, some limitations of the research remain to be addressed.

As a test of the impact of communication goals on international lie detection, the first two experiments have limitations. In these studies, judges encountered only one fourth as many conveyed as concealed lies, and targets had no special incentive. Human abilities to convey lies would be more fairly assessed in a balanced research design, and the research would be more relevant to high-stakes deceptions if participants were given more motivation to lie.

As a study of illiterates' deception judgments, Experiment 2 has limitations. This experiment suggests that illiterates are more willing than students to give foreigners the benefit of the doubt, but it does not indicate the scope of this bias. Relative to students, illiterates also might be more trusting of compatriots. Although Experiment 2 indicates that illiterates are no better than students at detecting foreigners' lies, it need not imply that the two sets of judges have equal judgmental abilities. If in their daily interactions with compatriots illiterates had acquired special skills, these need not have helped them judge foreigners.

Together, the first two experiments suggest that language differences have little impact on lie detection. Thus, Americans (who do not understand Arabic) can detect Arabic-language lies and Indian farm workers (who understand only Marathi) can detect lies told in Arabic and English. Yet, these experiments confound language with culture. A clearer study of language differences could be conducted within a multilingual country. There, one could compare a perceiver's judgments of two sorts of compatriots—those who are lying in a language that the perceiver understands and those who are lying in another language.

EXPERIMENT 3: LANGUAGE, SUBCULTURE, AND MOTIVATION

To complement the first two experiments, we designed a third study. Having investigated judgments of American and Jordanian liars, we videotaped Indians telling lies and truths. Some of the Indians on the videotape spoke in English; others spoke in the Indian language Marathi. Half of the Indians on the videotape attempted to conceal their deceptions and half attempted to convey that they were lying. Videotapes of these Indian lies and truths were then judged for veracity by American students, Jordanian students, Indian students who understood English, and Indian illiterates

who did not understand English. This final study sought to clarify the impact of communication goals, schooling, and language differences on international deception.

Although most of the lies told in everyday life may be relatively inconsequential (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996), psychologists are fascinated by deceptions that involve high stakes (Frank & Ekman, 1997). To accommodate psychological interest in motivated deceptions, we gave some of the participants of Experiment 3 financial incentives to lie. Motivation impairs Americans' ability to lie. DePaulo and Kirkendol (1989) report that Americans' lies can be more readily discriminated from truths if the Americans are highly motivated to conceal a lie than if they are relatively unmotivated. Experiment 3 will determine whether in attempts to conceal deception, Indians also suffer a motivational impairment effect. The experiment will extend earlier efforts by studying the effect of motivation on Indians' attempts to convey that they are lying.

METHOD

Research Participants

The participants were 120 American students from Texas Christian University (60 female, 60 male), 60 Jordanian students from Yarmouk University (30 female, 30 male), and 120 Indians (30 female and 30 male students from the University of Pune; 15 female and 45 male farm workers from Bakori village).

Videotapes

The participants judged videotapes of Indians lying and telling the truth. These Indian videotapes were modeled on the tapes of Americans and Jordanians described in Experiment 1 above (cf. DePaulo & Rosenthal, 1979). The videotapes depicted 32 female and 32 male residents of Pune, India, who had responded to a newspaper advertisement. While being videotaped, half of the Indians spoke in English and half spoke in the Indian language Marathi.

At the time that the tape was made, an Indian sat facing an Indian male research assistant and a videotape camera located over the assistant's right shoulder. Indians were then videotaped while describing (a) a person they liked, (b) a person they disliked, (c) a person they liked as if they really disliked that person, and (d) a person they disliked as if they really liked that person. The order of the descriptions was counterbalanced across participants. While telling the truth, all of the participants were instructed to convince the research assistant that they were telling the truth. While lying, 16 of the English-speaking Indians and 16 of the Marathi-speaking Indians were instructed to conceal their lies and convince the research assistant that their descriptions were truthful. The others were instructed to convey their lies and let the research assistant know that their descriptions were false without saying, in so many words, "I am lying."

The Indians' motivation to lie was experimentally manipulated. Half of the participants were given no incentive to achieve their communication goal; the other half received a financial incentive. The latter could make 20 Indian rupees (Rs. 20) for each of their four person descriptions. They made Rs. 20 each time that they convinced the research assistant that a truthful person description was, in fact, truthful. They also made Rs. 20 for each lie if they were successful in achieving their assigned goal—either to conceal or convey the lie. After observing each person description for which a financial incentive had been offered, the male research assistant (who was unaware of the order of the descriptions) guessed aloud whether the participant was lying or telling the truth. The Rs. 20 payment was then handed to the participant if the latter had succeeded in achieving their goal (of conveying the truth, conveying a lie, or concealing a lie). By giving four successful person descriptions, the participant could earn up to Rs. 80 in 30 minutes. At the time of the study, Rs. 80 was approximately 1 day's pay for an Indian university professor.

In all, 256 Indian person descriptions were solicited. These were edited onto four videotapes. Each videotape depicted 64 descriptions: one from each of the 64 participants—four descriptions in each of the cells of a 2 (tell lie vs. tell truth) $\times$ 2 (conceal lie vs. convey lie) $\times$ 2 (English vs. Marathi language) $\times$ 2 (incentive vs. no incentive) factorial design. Videotapes depicted the first 45 seconds of each person description.

Procedure

Visually isolated in groups of five, the participants were presented with a videotape of 64 Indians describing acquaintances. As each videotape segment was presented, participants indicated whether the person on the tape was lying or telling the truth. All of the university students indicated their binary lie-or-truth judgments in writing on response forms. The Indian farm workers turned a thumb up if they thought that the person on the tape was telling the truth and a thumb down if they thought that the person was lying.

In response to one of the four Indian videotapes, each participant judged the veracity of 64 Indians. The tapes were presented in one of three modalities: audiovisual, audio only, or video only. The segments on each tape were presented in one of two random orders. Each videotape was judged in each modality by 10 Americans, 5 Jordanians, and 10 Indians (5 university students and 5 farm workers).

RESULTS AND DISCUSSION

After judging videotapes of Indians speaking in Marathi and English, participants reported on their language abilities. All 120 Indian judges, but none of the American or Jordanian judges, reported that they knew Marathi. Knowledge of English was claimed by all of the American judges, all of the Jordanian judges, all 60 of the Indian university students, and 4 of the 60 Indian farm workers. Of the 60 farm workers, 26 stated that they were illiterate. Although the other 34 claimed to be literate in Marathi, many had difficulty signing their names.

Lie Detection Within and Between Cultures

Our first two experiments indicate that American and Jordanian lies can be detected across cultures. We wondered whether there might also be evidence for the cross-cultural detection of Indian lies. There was. Each judge in Experiment 3 was presented with a videotape of 32 Indians lying and 32 Indians telling the truth. An analysis revealed that non-Indians who judged these tapes averaged 51.38% correct lie/truth judgments, which is greater than the 50% that would be expected by chance, $t(179) = 2.81$, $p < .005$.

American and Jordanian lies could be detected more accurately by members of the liar's culture than by members of other cultures. This result did not generalize to Indian lies. In fact, in detecting Indians' lies, Indians were no more accurate than non-Indians; for the main effect of judge's culture (Indian vs. non-Indian) in an ANOVA on percentage correct lie/truth judgments, $F(1, 294) = .0002$, *ns*. Non-Indian judges averaged 51.38% correct detections of Indians; Indian judges averaged 51.39%.

The earlier experiments indicate that lie detection abilities depend on the modality in which lies are judged. In particular, American and Jordanian lies can be detected across cultures only if they are judged from an audiovisual presentation, whereas these lies can be detected within cultures from either an audiovisual or audio presentation. Here, modality has a main effect on judges' accuracy in detecting Indians' lies and truths, $F(2, 294) = 6.14$, $p < .005$, with statistically significant lie/truth discrimination evident from the audiovisual presentation (M correct = 53.14%), $t(99) = 5.11$, $p < .0001$, but not the audio-only or video-only presentations (Ms = 50.77% and 50.25% correct, each $p > .20$). This pattern was the same for Indian and non-Indian judges—for the Modality × Judge Culture interaction, $F(2, 294) = .40$, *ns*.

The earlier studies found evidence for lie detection across languages as well as cultures. To clarify the role of language, in the current study we had Indians lie in two different languages—English and Marathi. Language had no significant effects on the percentage of correct lie/truth judgments in a 2 (English vs. Marathi language) × 2 (conceal vs. convey lie) × 2 (incentive vs. no incentive) × 2 (Indian vs. non-Indian judge) × 3 (modality) ANOVA ($p > .05$ for the main effect of language and every interaction involving language). However, when making judgments from audio only, Indian farm workers were less successful than Indian university students in discriminating Indian English-language lies from Indian English-language truths (M = 47.17% vs. 52.16% correct judgments, respectively), $F(1, 114) = 4.48$, $p < .05$. This difference may reflect the farm workers' ignorance of English and help explain why Indians as a whole did no better than non-Indians at detecting Indian lies.

The Liar's Goal and Motivation

Americans' attempts at concealing deception are subject to a motivational impairment effect (DePaulo & Kirkendol, 1989). We wondered whether motivation would impair Indians' attempts to conceal deception and whether motivation also might have some effect on Indians' attempt to convey that they are lying. An ANOVA on percentage correct lie/truth judgments reveals that the impact of motivation depends on the judge's culture as well as the liar's goal: Goal × Judge's Culture × Incentive interaction, $F(1, 294) = 3.97$, $p < .05$. Means relevant to this interaction appear in Table 2. Follow-up analyses revealed two motivational impairment effects. In particular, Indian judges could discriminate from truths lies that Indians had received an incentive to conceal (M accuracy = 52.67%), $t(119) = 2.27$, $p < .05$, as well as lies that Indians had received no incentive to convey (52.70% accuracy), $t(119) = 2.42$, $p < .05$. They were not able to discriminate from truths lies that Indians had received no incentive to conceal or lies that Indians had received an incentive to convey (accuracy rates = 50.64% and 49.56%, respectively, *ns*). This produced a simple Liar's Goal × Incentive interaction on the percentage of lies and truths correctly judged by Indians, $F(1, 294) = 3.96$, $p < .05$. Thus, in judgments made by compatriots, motivation impaired Indians' ability to conceal and convey lies.

Non-Indians' judgments were unaffected by the Indians' motivation to lie. Non-Indian judges were, however, more accurate in discriminating from truths lies that Indians intended to convey than ones they intended to conceal (M accuracy rates = 52.34% vs. 50.43%, respectively), $F(1, 294) = 5.36$, $p < .05$.

Judgmental Biases

Our studies of American and Jordanian deceptions suggest that people give foreigners the benefit of the doubt. They also indicate that Indian illiterates are more

TABLE 2: Percentage Lie/Truth Discrimination of Indian Targets in Experiment 3: By Judge's Culture, Liar's Goal, and Incentive to Achieve Goal

	Indian Judges		*Non-Indian Judges*	
	Conceal	*Convey*	*Conceal*	*Convey*
No incentive	50.64	52.70	50.67	51.78
Incentive	52.67	49.56	50.19	52.90

likely than Indian university students to judge foreigners as truthful. To determine whether similar results would be evident in judgments of Indians' deceptiveness, we conducted a 2 (English vs. Marathi language) × 3 (judge sample: Indian illiterate vs. Indian student vs. non-Indian student) × 3 (modality) ANOVA on percentage truth judgments. The ANOVA revealed no general tendency for non-Indians to give Indians the benefit of the doubt. Instead, it revealed a Language × Judge Sample × Modality interaction, $F(4, 291) = 5.84$, $p < .001$, with an effect of language on illiterates' tendency to attribute truthfulness to Indians whom they could hear. The farm workers attributed less truthfulness to Indians whom they heard speaking English than to Indians whom they heard speaking the farm workers' language Marathi (judging as truthful 52.55% vs. 66.42% of such individuals, respectively), $F(1, 291) = 33.07$, $p < .0001$. No language-based discrimination was evident in Indian students' judgments of truthfulness. Non-Indians were more likely to judge as truthful Indians whom they heard speaking in English than Indians whom they heard speaking in Marathi (judging 54.19% vs. 50.83% of such individuals as telling the truth), $F(1, 219) = 5.84$, $p < .05$. Predictably, the language in which a person description was offered had no significant effect on judgments made from video only (all such effects yield $p > .20$).

These results may reflect a language-based ethnocentrism. Both Indian farm workers (who knew Marathi but not English) as well as non-Indians (who knew English but not Marathi) placed more trust in Indians who spoke a familiar language than those who spoke an unfamiliar language.

CUMULATIVE ANALYSES

Having conducted three similar experiments, we now report a few cumulative analyses. One analysis provides an omnibus answer to a question of special significance. From an audiovisual presentation, can people detect lies that foreigners have attempted to conceal? Cumulative results show that they can. Across our three experiments, 160 judges attempted audiovisual detection of cross-culturally concealed lies. In these cross-cultural judgments, they achieved a lie/truth discrimination accuracy rate of 51.66%, which is greater than the 50% that would be expected by chance, $t(159) = 2.76$, $p < .01$. Lies that a foreigner attempts to conceal cannot be uncovered from a video-only presentation (cross-cultural accuracy rate = 49.92%, *ns*) and may (or may not) be uncovered from an audio-only presentation (the latter accuracy rate = 51.19%, two-tailed $p = .054$).

Other cumulative analyses were designed to follow up on patterns established in earlier research. DePaulo and Rosenthal (1979) found that to Americans, some Americans appear honest even when they are lying and others appear dishonest even when they are telling the truth. Statistically, this "demeanor bias" reflects a positive correlation between the percentage of judges who infer deception from a given target's lie and the percentage of judges who infer deception from that same target's truth.

Similar biases were evident in the judgments studied here. Here, judgments of a given target's lies were consistent with judgments of that same target's truths whether the judgments were made from an audiovisual, audio-only, or video-only presentation and whether the people making the judgments were from the target's own culture or from other cultures. For the relationship between percentage deception judgments to a given target's lies and to that same target's truths, partial *r*s that control for the target person's culture were +.25, +.39, and +.37 for audiovisual, audio-only, and video-only judgments made by people from the target's own culture and +.54, +.29, and +.54 for audiovisual, audio-only, and video-only judgments made by people from other cultures (for each of these *r*s, $p < .001$). To foreigners as well as compatriots, some people look honest even when they are lying, whereas others appear dishonest even when they are telling the truth.

Bond et al. (1985) found that Americans reach substantial levels of consensus in judging Americans' deceptiveness. Analyses of the current data reveal that there is cross-cultural consensus in deception judgments as well. Across the three experiments reported here, participants judged lies and truths told by 144 target persons (40 Americans, 40 Jordanians, and 64 Indians). To assess agreement among judges from different cultures, we noted for a given target the percentage of American judges, the percentage of Jordanian judges, and the percentage of Indian judges who inferred that the target was lying and intercorrelated these percentages across the 144 target persons within each of the three modalities. For results, see Table 3. As shown in Table 3, there is statistically significant cross-cultural consensus in judgments of deceptiveness whether the judgments are made from an audiovisual, audio-only, or video-only presentation.

We also found evidence of judgmental consensus across languages. When judging deception from audio-

TABLE 3: Cross-Cultural Agreement in Deception Judgments

	Modality		
Agreement Between	*Audiovisual*	*Audio*	*Video*
Americans and Jordanians	+.50	+.26	+.30
Americans and Indians	+.51	+.24	+.46
Jordanians and Indians	+.39	+.38	+.49

NOTE: Entries are Pearson product-moment correlation coefficients. At $N = 144$, each r yields $p < .005$.

visual presentations of Jordanians speaking in Arabic, farm workers agree with American students ($r = .34$, $p < .05$), although none of these judges understand Arabic. When judging deception from audio-only presentations of Indians speaking in Marathi, Jordanians agree with Americans ($r = .39$, $p < .05$), although none of these judges understand Marathi. To natives of diverse cultures, some people look and sound dishonest.

GENERAL DISCUSSION

These experiments provide the first evidence to date of lie detection across cultures. Lies can be detected across cultures that share a language and across cultures that do not. They can be detected by university students and by illiterates, too.

Although Experiments 1 and 2 suggest that it is harder to detect a foreigner's than a compatriot's lie, it is noteworthy that the compatriot liars in the first two studies were the judges' classmates. As student peers, these judges and liars were more similar to one another than most compatriots (Sears, 1986) and, hence, might have been uniquely positioned to detect one another's lies. Experiment 3 was the only study in which participants judged lies told by nonpeer compatriots. Those lies were as well detected across cultures as within the culture.

The current results have theoretical implications. They imply that there are cross-cultural similarities in the way that liars act and that behavioral concomitants of deception can be identified across cultures. Perhaps liars throughout the world have common experiences. They may fear exposure or have difficulty fabricating deceptions (Zuckerman et al., 1981). Perhaps in all cultures, liars' experiences give rise to the same behaviors, or to behaviors that convey the same impression. These function as pan-cultural detection cues.

Visible cues are not sufficient for cross-cultural lie detection, and audible cues facilitate lie detection even when judges do not understand the liar's language. This explains why no cross-cultural lie detection was observed in an earlier study of deception judgments from video-only displays (Bond et al., 1990). In suggesting that cross-cultural lie detection is based on vocal rather than verbal cues, the current results are reminiscent of earlier demonstrations that Americans can detect Americans' lies from content-filtered speech (Zuckerman et al., 1979).

Although it is possible to detect lies across cultures, international lie detection is not easy. Similar to earlier monocultural research (Kraut, 1980), our studies of cross-cultural deception indicate that liars are often successful in their attempts to appear honest. This may imply that throughout evolutionary history, deception has been more important to the deceiver than to the target of deception (Bond et al., 1985) or that targets of deception rarely receive immediate feedback about their mistakes (DePaulo et al., 1985).

Facial displays of emotion can be readily recognized across cultures, as a large research literature suggests (Ekman, 1980). At first blush, people's strong cross-cultural ability to recognize emotions may seem at odds with their weaker cross-cultural ability to detect lies. However, there is an underlying consistency. In the earlier literature, the facial displays that were recognized across cultures were poses of emotions that were not being felt (Russell, 1994). To us, the earlier literature indicates that people are adept at feigning unfelt emotions. The present findings reveal that they also are adept at feigning attraction for acquaintances they dislike.

Distinct from the ability to detect deception are biases in international judgments. Often, people regard foreigners with suspicion and mistrust (Smith & Bond, 1994). Imagining that these ethnocentric stereotypes would impel people to judge foreigners as deceptive, we were surprised by the current results. People perceive foreigners as more truthful than compatriots, especially when the target can be heard. They perceive Indians who are speaking in an unfamiliar language as more deceptive than those who are speaking in a language that the perceiver knows.

In our view, these judgmental biases stem from a common source—the judge's attribution for a communication failure. Attempts at cross-language communication can be frustrating (Ryan & Giles, 1982). When people fail to understand a foreigner, they search for an explanation (Smith & Bond, 1994). Sometimes, listeners attribute communication failures to their own ignorance, giving speakers the benefit of the doubt. Sometimes, they attribute the failure to the speaker, thereby externalizing blame. From our first two experiments, we infer that listeners attribute communication failure to their own ignorance when confronting a culture in which no one is speaking the listener's language. This tendency toward self-blame is strongest among the poorly educated. From Experiment 3, we infer that listeners externalize blame for communication failures when they confront a culture in which some people are

speaking a familiar language and others an unfamiliar language. Then the latter can be seen as choosing to miscommunicate.

Future research will be needed to test our interpretations, to survey lies from other cultures, and to understand cross-cultural deceptive interactions (Buller & Burgoon, 1996). In the meantime, some conclusions can be drawn. It is possible to detect lies across cultures. Language and cultural differences introduce biases into deception judgments. These biases can have international consequences.

NOTE

1. Throughout this article, one-sample *t* tests are used to assess the difference between lie/truth discrimination rates and 50%, the rate that would be expected by chance. Each *t* test reported in the article includes in its error term data from only those research participants whose lie/truth discrimination is being assessed. For each such test, a corresponding test was conducted in which the denominator of the *t* statistic was based on the pooled within-group error term from an appropriate analysis of variance. Each time a discrimination rate differs significantly from 50% at $p < .05$ by the individual-error *t* test reported in the article, it also differs significantly from 50% at $p < .05$ by the corresponding pooled-error *t* test.

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