

Research Article

You Want to Know the Truth? Then Don't Mimic!

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ABSTRACT—*Mimicry facilitates the ability to understand what other people are feeling. The present research investigated whether this is also true when the expressions that are being mimicked do not reflect the other person's true emotions. In interactions, targets either lied or told the truth, while observers mimicked or did not mimic the targets' facial and behavioral movements. Detection of deception was measured directly by observers' judgments of the extent to which they thought the targets were telling the truth and indirectly by observers' assessment of targets' emotions. The results demonstrated that nonmimickers were more accurate than mimickers in their estimations of targets' truthfulness and of targets' experienced emotions. The results contradict the view that mimicry facilitates the understanding of people's felt emotions. In the case of deceptive messages, mimicry hinders this emotional understanding.*

People are bad lie detectors. They often want to know what others truly feel or think, whether in a game of poker (is the player bluffing?), a police setting (did the suspect do it?), or daily interactions (is this excuse fabricated?). In the search for possible ways to improve the ability to distinguish lies from truths, previous studies often emphasized the idea that to increase accuracy, one should look for the right deception cues (e.g., reduced number of arm and leg movements, high-pitched voice; Vrij, 2000). Acquiring these detection skills, however, is not an easy task and requires extensive training (e.g., Hill & Craig, 2004). In this article, we consider a possible alternative way to enhance accuracy: mimicry, the automatic tendency to imitate the behaviors of other people.

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MIMICRY

Research has convincingly demonstrated the existence of mimicry; people nonconsciously mimic other people's behaviors, postures, gestures, mannerisms, words, accents, speech rates, and facial expressions (Bernieri, 1988; Chartrand & Bargh, 1999; Dimberg, 1990; Webb, 1972). Mimicry is beneficial for communication in social interaction: For instance, it enhances people's liking for each other and smooths interaction, which results in people becoming more close to one another (Chartrand & Bargh, 1999).

In addition, mimicry has been shown to facilitate emotional understanding. About a century ago, Lipps (1907) hypothesized that mimicking another person's movements in postures and vocal and facial expressions creates inner cues, which lead (via afferent feedback from the muscle movements to the brain) to experiencing what the other person is feeling. This process of emotional contagion is viewed as a two-step process (Adelman & Zajonc, 1989; Izard, 1971; Tomkins, 1963). First, one mimics the other person's behaviors and expressions. Second, as a result of subsequent afferent feedback from the activated muscles to the brain, one feels corresponding emotions (e.g., Hatfield, Cacioppo, & Rapson, 1992). Recently, studies have provided experimental evidence for the effect of mimicry on emotional contagion (e.g., Stel, van Baaren, & Vonk, 2008). In addition, mimicry has been shown to facilitate the experience of understanding other people (Stel, Vonk, van Baaren, & Smeets, 2008). Thus, mimicry helps people feel what others are feeling and helps people understand one another.

DECEPTION

Without exception, however, the benefits of mimicry for understanding of other people's emotions have been demonstrated in studies in which true emotional expressions were mimicked (i.e., the mimicked emotional expressions corresponded to the emotions that were truly experienced by the other person). It is conceivable that mimicry does not convey the same benefits when the other person intends to deceive.

When telling lies, people experience heightened fear and guilt, whether the lies concern emotions or not (Ekman, 1993). Liars may wish to mask this emotional response by inhibiting the expression of felt fear and guilt and possibly by simulating false facial expressions. What happens if one mimics the facial expressions of a liar? Will mimicry facilitate the recognition of deception? Or will it hinder the ability to accurately assess the liar's true felt emotions?

On the one hand, there is reason to believe that mimicking false emotional expressions can improve assessment of the expressor's true emotions. False emotional expressions differ from true expressions in the muscles that are activated, as well as in the intensity, duration, laterality, and timing of this activation (Ekman & Friesen, 1982; Ekman, Friesen, & O'Sullivan, 1988; Ekman, Hager, & Friesen, 1981; Hill & Craig, 2002). For instance, in a true smile, the zygomaticus major and orbicularis oculi are activated. In a masking smile, the zygomaticus major and other muscles that show leakage of the truly experienced emotions are activated (Ekman et al., 1988). Mimicking those cues of deception might make one better able to detect this deception. Just as a smile activates corresponding feelings of happiness, an asymmetric smile might activate concepts related to lying.

On the other hand, there is reason to believe that mimicry might reduce detection of deceit. Though observers respond differently to pictures of genuine and posed smiles (e.g., Miles & Johnston, 2007), it is possible that cues of deceit in facial expressions are too subtle to be perceived (Ekman & Friesen, 1982), and thus will not be mimicked (either spontaneously or even under instructions to mimic them). Therefore, a masking smile may not be mimicked differently than a true smile, which would make it harder for mimickers than for nonmimickers to distinguish true from false expressions. Thus, when mimicking false expressions (i.e., expressions that do not correspond with truly felt emotions), one may not catch the true emotions. Instead, one may even experience the emotions that the other person wants to fake. If one's own experienced emotions are then used as information to infer the other person's emotions, mimicking may not be the best strategy for detecting deception. Instead, the best way to discover another person's true feelings might be to not mimic that person's facial expressions.

THE PRESENT STUDY

To investigate the effects of mimicry on detection of deception, we conducted an interaction study in which observers were asked to mimic or not mimic targets. In a control condition, observers did not receive any instruction concerning mimicry. We expected that results for observers in the control condition would be similar to those for observers in the mimicry condition because research has shown that mimicry occurs largely automatically and nonconsciously (Chartrand & Bargh, 1999; Dimberg, 1990; Meltzoff & Moore, 1983; Rizzolatti, Fadiga,

Fogassi, & Gallese, 2002). However, it was possible that observers in the control condition would show less spontaneous mimicry of liars than of truth tellers, because previous research has shown that the automatic tendency to mimic is reduced when the target is disliked, negatively stereotyped, or stigmatized (e.g., Johnston, 2002; Stel, van Baaren, Blascovich, et al., 2008).

Targets either lied or told the truth about having or not having done a good deed (making a donation to charity). We expected that the liars would experience the lie-related emotions of fear and guilt (Ekman, 1993) and that the effect of mimicry on detection of deceit would not differ between the different kinds of lies (i.e., those creating a more positive vs. a less positive impression). We assessed observers' ability to distinguish liars from truth tellers both directly, by asking the observers whether the targets were telling the truth, and indirectly, by asking the observers to assess the targets' felt emotions.

METHOD

Participants and Design

Participants were 92 (65 women and 27 men) students at Leiden University (mean age = 21.16 years, range: 17–31). They participated for payment (€3) or participation credits. The unit of observation in this study was a couple. There were 46 couples: 27 female couples, 8 male couples, and 11 couples of mixed sex. Each couple was randomly assigned to one condition of a 3 (mimicry: yes vs. no vs. control) \times 2 (deception: yes vs. no) between-subjects design.

Procedure

Participants signed an informed-consent form stating that their responses and reaction times could be recorded, as could audio or video from the experimental session. Participants were told that they were going to interact with another participant and were randomly assigned to the role of target or observer.

Before the interaction, targets were asked whether they would like to donate money to Amnesty International. They could drop their money in a donation box if they wanted to donate, and each target's behavior was recorded. Then, targets received instructions to either lie or tell the truth about whether or not they made a donation (see Materials). In the meantime, observers received mimicry instructions, depending on the condition to which they were assigned (see Materials). Subsequently, the members of each couple were brought to a room for a 3-min interaction, in which the target either told the truth or lied about whether he or she donated money to Amnesty International and why he or she made that decision. The observer could ask questions regarding the target's motivation to donate or not and carried out his or her mimicry instructions (if any). The observer and the target were individually videotaped during the interaction, so that we could check whether the mimicry instructions (if any) were carried out. After the interaction, the target and observer went to different

rooms and filled out questionnaires (see Materials). Finally, they were thanked and debriefed.

Materials

Deception Instructions

Targets were instructed to either lie or tell the truth about whether they did or did not donate money. In both the lie and the truth conditions, they were instructed to think of arguments to back up their decision. To raise the stakes, we informed targets that they would be judged by a fellow participant. They were told it was their job to convince this person that they were telling the truth (both when they were lying and when they were actually telling the truth). To make their task relevant, we told targets that an extra bonus of €1 would be withheld if they did not succeed in convincing their fellow participant.

Mimicry Instructions

One third of the observers were instructed to mimic the movements of their interaction partner, one third were instructed not to mimic their partner's movements, and the other third received no mimicry instructions (control condition). The instructions for the mimicry and no-mimicry groups were very specific and were matched for content. Participants in both of these groups were told to pay attention to specific movements of their partner's eyes, eyebrows, mouth, lips, head, and gestures, but the mimicry group was instructed to mimic these movements, and the no-mimicry group was instructed not to mimic them.

Questionnaires

After the interaction, observers were asked to use a 7-point scale to indicate whether they thought their partners were telling the truth. Then, they estimated the extent to which they thought their partners had experienced the emotions of fear and guilt. We also asked observers to estimate the targets' felt happiness in order to show that any effects were specific to the lie-related emotions of fear and guilt. When no feedback about success or failure of deceit is given, as in the present study, happiness is unrelated to the acts of lying and telling the truth (Vrij, 2000). To assess observers' estimation of targets' fear, guilt, and happiness, we asked observers to use 7-point scales to rate how *frightened*, *fearful*, *anxious*, *nervous*, *penitential*, *regretful*, *guilty*, *repentant*, *enthusiastic*, *pleased*, *cheerful*, and *happy* they thought the targets were. The questionnaire for targets asked them to indicate the extent to which they experienced each of these 12 emotions during the interaction.

RESULTS

Twenty of the 46 targets donated money to the charity. Random assignment to the lie and truth conditions led to a good distribution of liars and deceivers among targets who did and did not donate money: Of the 20 who donated, 11 lied and 9 told the

truth, and of the 26 targets who did not donate, 13 lied and 13 told the truth. Whether or not targets donated money and the sex composition of the couples did not produce any significant effects. Therefore, these factors were not included in the analyses reported.

Check on the Mimicry Manipulation

Three couples were omitted from our analyses of mimicry because of problems with the camera systems. To check whether observers carried out their instructions, a trained coder rated the facial and behavioral movements of all observers and compared these with the coded movements of the targets. Facial movements included movements of eyes, eyebrows, lips, mouth, and head. Behavioral movements included scratching the face and any other hand gestures. The observers and targets were coded independently. As in previous studies, the movements of the observers were compared with the targets' recent movements (Stel, van Baaren, & Vonk, 2008; Stel, van den Heuvel, & Smeets, 2008). Specifically, an observer's movement was scored as mimicry if it matched a movement of the target and occurred within 10 s after that movement.

A 3 (mimicry instruction: yes vs. no vs. control) \times 2 (deception condition: lie vs. truth) univariate analysis of variance (ANOVA) was conducted on the percentage of mimicry (i.e., the number of mimicked movements divided by the total number of facial and bodily movements displayed by the target). This analysis yielded only a main effect of mimicry instruction, $F(2, 37) = 20.20$, $p_{\text{rep}} > .99$, $\eta^2 = .52$; observers in the mimicry condition mimicked the target ($M = 49.63\%$, $SD = 16.48$) more than observers in the no-mimicry condition ($M = 14.44\%$, $SD = 11.63$), $p_{\text{rep}} > .99$, and more than observers in the control condition ($M = 27.78\%$, $SD = 13.54$), $p_{\text{rep}} > .99$. Observers in the control condition mimicked to a greater extent than observers in the no-mimicry condition, $p_{\text{rep}} = .95$.

Direct Measure of Deception Detection

A 3 (mimicry instruction: yes vs. no vs. control) \times 2 (deception condition: lie vs. truth) ANOVA on observers' direct deception judgments showed an interactive effect of mimicry instruction and deception condition, $F(2, 40) = 4.73$, $p_{\text{rep}} = .95$, $\eta^2 = .19$. The interaction was driven by the no-mimicry condition; observers in this condition rated the target as more truthful when the target was indeed telling the truth ($M = 3.67$, $SD = 1.94$) than when the target was lying ($M = 1.86$, $SD = 0.90$), $F(1, 40) = 6.17$, $p_{\text{rep}} = .93$. The mimicry and control conditions did not show significant differences between the lie and truth conditions, $F(1, 40) = 1.99$, $p_{\text{rep}} = .75$, and $F(1, 40) = 1.06$, $p_{\text{rep}} = .64$, respectively. Thus, observers were more accurate in distinguishing between liars and truth tellers when they were instructed to not mimic the target than when they were instructed to mimic the target or were given no instructions (see Table 1 for means and results of contrast tests). The main effects of

TABLE 1
Observers' Ratings of Targets' Truthfulness

	Deception condition			
	Lie		Truth	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Mimicry instruction				
Mimicry	3.38 _a	1.41	2.20 _{ab}	0.45
No mimicry	1.86 _a	0.90	3.67 _b	1.94
Control	3.33 _a	1.41	2.63 _{ab}	1.51

Note. The rating scale ranged from 1 (*totally not truthful*) to 7 (*totally truthful*). Within each column and row, means that do not share a subscript differ significantly ($p_{\text{rep}} > .88$).

mimicry instruction and deception condition were nonsignificant, $F_s < 1$.

Emotions

A factor analysis of the emotion items yielded three distinct factors. The first factor, which we term fear, consisted of the items *frightened*, *fearful*, *anxious*, and *nervous* ($\alpha_{\text{target}} = .81$, $\alpha_{\text{observer}} = .85$). The second factor consisted of the guilt items: *penitential*, *regretful*, *guilty*, and *repentant* ($\alpha_{\text{target}} = .88$, $\alpha_{\text{observer}} = .82$). The final factor, happiness, consisted of the items *enthusiastic*, *pleased*, *cheerful*, and *happy* ($\alpha_{\text{target}} = .79$, $\alpha_{\text{observer}} = .81$).

Targets' Felt Emotions

Targets' emotion ratings were analyzed in a 3 (mimicry instruction: yes vs. no vs. control) \times 2 (deception condition: lie vs. truth) \times 3 (emotion: fear vs. guilt vs. happiness) repeated measures ANOVA, with emotion as a within-participants factor. A main effect of emotion, $F(2, 39) = 21.07$, $p_{\text{rep}} > .99$, $\eta^2 = .51$, indicated that targets experienced more happiness ($M = 3.78$, $SD = 1.03$) than fear ($M = 3.15$, $SD = 1.29$), $t(45) = 2.10$, $p_{\text{rep}} = .89$, and more happiness than guilt ($M = 2.30$, $SD = 1.43$), $t(45) = 4.63$, $p_{\text{rep}} > .99$. They also experienced less guilt than fear, $t(45) = 4.48$, $p_{\text{rep}} > .99$. A main effect of deception condition, $F(1, 40) = 16.47$, $p_{\text{rep}} > .99$, $\eta^2 = .29$, indicated that, in general, targets felt more emotions when lying ($M = 3.39$, $SD = 0.63$) than when telling the truth ($M = 2.73$, $SD = 0.47$).

These main effects were qualified by an Emotion \times Deception Condition interaction, $F(2, 39) = 9.73$, $p_{\text{rep}} > .99$, $\eta^2 = .33$. To interpret this interaction effect, we analyzed the emotions separately. Targets felt more fear when lying ($M = 3.52$, $SD = 1.37$) than when telling the truth ($M = 2.75$, $SD = 1.09$), $F(1, 44) = 4.42$, $p_{\text{rep}} = .89$. They also felt more guilt when lying ($M = 3.08$, $SD = 1.51$) than when telling the truth ($M = 1.44$, $SD = 0.61$), $F(1, 44) = 22.43$, $p_{\text{rep}} > .99$. In contrast, happiness was not affected by deception condition, $F(1, 44) = 1.90$, $p_{\text{rep}} = .74$. (See Table 2 for means and results of contrast tests.)

TABLE 2
Targets' Ratings of Their Felt Emotions

Emotion	Deception condition			
	Lie		Truth	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Fear	3.52 _a	1.37	2.75 _b	1.09
Guilt	3.08 _a	1.51	1.44 _c	0.61
Happiness	3.58 _a	1.14	4.00 _a	0.88

Note. Ratings were made on a scale from 1 (*totally not experienced*) to 7 (*totally experienced*). Within each column and row, means that do not share a subscript differ significantly ($p_{\text{rep}} > .88$).

Observers' Attribution of Emotions to Targets

We analyzed observers' ratings of targets' emotions in a 3 (mimicry instruction: yes vs. no vs. control) \times 2 (deception condition: lie vs. truth) \times 3 (emotion: fear vs. guilt vs. happiness) repeated measures ANOVA, with emotion as a within-subjects factor. A main effect of emotion, $F(2, 39) = 20.85$, $p_{\text{rep}} > .99$, $\eta^2 = .52$, indicated that, in general, observers attributed less guilt ($M = 2.54$, $SD = 1.15$) than fear ($M = 3.86$, $SD = 1.29$), $t(45) = 6.37$, $p_{\text{rep}} > .99$, and attributed less guilt than happiness ($M = 3.53$, $SD = 1.03$), $t(45) = 4.38$, $p_{\text{rep}} > .99$. There was no difference between estimates of fear and estimates of happiness, $t(45) = 1.25$, $p_{\text{rep}} = .71$.

An interaction between mimicry instruction and deception condition, $F(2, 40) = 4.13$, $p_{\text{rep}} = .93$, $\eta^2 = .17$, was qualified by a Mimicry Instruction \times Deception Condition \times Emotion interaction, $F(4, 78) = 3.18$, $p_{\text{rep}} = .93$, $\eta^2 = .14$. To interpret this three-way interaction, we analyzed effects for fear, guilt, and happiness separately. These analyses indicated that mimicry instruction and deception condition influenced the assessment of fear and guilt, $F(2, 40) = 5.52$, $p_{\text{rep}} = .95$, and $F(2, 40) = 3.90$, $p_{\text{rep}} = .91$, respectively, but did not influence the assessment of happiness, $F(2, 40) = 1.13$, $p_{\text{rep}} = .62$. For both fear and guilt, the effects were driven by the no-mimicry condition, $F(1, 40) = 6.30$, $p_{\text{rep}} = .93$, and $F(1, 40) = 6.33$, $p_{\text{rep}} = .93$, respectively. Observers in that condition assessed the target as experiencing more fear when the target was indeed lying ($M = 5.00$, $SD = 0.35$) than when the target was telling the truth ($M = 3.42$, $SD = 1.66$). They also assessed the target as experiencing more guilt when the target was lying ($M = 3.21$, $SD = 1.21$) than when the target was telling the truth ($M = 1.83$, $SD = 0.86$). In the mimicry and control conditions, estimates of the targets' fear did not differ significantly between the lie and truth conditions, $F(1, 40) = 2.36$, $p_{\text{rep}} = .79$, and $F(1, 40) = 2.08$, $p_{\text{rep}} = .76$, and estimates of the targets' guilt did not differ significantly between the lie and truth conditions, $F < 1$, and $F(1, 40) = 1.48$, $p_{\text{rep}} = .70$. Thus, observers assessed the emotions of the targets more accurately when they did not mimic the targets than when they mimicked the targets or received no mimicry instruction. (See Table 3 for means and results of contrast tests.)

TABLE 3
Observers' Ratings of the Targets' Emotions

Mimicry and deception condition	Attributed emotion					
	Fear		Guilt		Happiness	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Mimicry						
Lie	3.31 _a	0.93	2.38 _{ab}	1.11	3.94 _a	0.59
Truth	4.30 _a	0.67	2.70 _{ab}	1.29	3.95 _a	0.89
No mimicry						
Lie	5.00 _b	0.35	3.21 _a	1.21	2.71 _a	0.87
Truth	3.42 _a	1.66	1.83 _b	0.86	3.08 _a	1.05
Control						
Lie	3.36 _a	1.38	2.36 _{ab}	1.00	4.08 _a	1.11
Truth	4.19 _a	1.27	3.03 _a	1.24	3.47 _a	1.00

Note. Ratings were made on a scale from 1 (*totally not experienced*) to 7 (*totally experienced*). Within each column, means that do not share a subscript differ significantly ($p_{\text{rep}} > .88$).

Thus, it seems that not mimicking leads to a more accurate estimation of targets' experienced lie-related emotions. For a more stringent test of observers' accuracy in attributing lie-related emotions, we analyzed whether observers' estimates of targets' emotions correlated with the emotions the targets reported feeling. In the no-mimicry condition, observers' estimates and targets' self-reports of fear and guilt were significantly correlated, $r_{\text{fear}} = .55$ ($n = 14$), $p_{\text{rep}} = .89$, and $r_{\text{guilt}} = .58$ ($n = 14$), $p_{\text{rep}} = .91$. In contrast, observers' estimates and targets' self-reports were not significantly correlated in the mimicry condition, $r_{\text{fear}} = -.10$ ($n = 13$), $p_{\text{rep}} = .33$, and $r_{\text{guilt}} = -.14$ ($n = 13$), $p_{\text{rep}} = .40$, or in the control condition, $r_{\text{fear}} = -.01$ ($n = 17$), $p_{\text{rep}} = .09$, and $r_{\text{guilt}} = -.29$ ($n = 17$), $p_{\text{rep}} = .68$. The correlations for fear and guilt differed significantly between the no-mimicry and mimicry conditions (fear: $z = 1.65$, $p_{\text{rep}} = .88$; guilt: $z = 1.85$, $p_{\text{rep}} = .91$) and between the no-mimicry and control conditions (fear: $z = 1.55$, $p_{\text{rep}} = .86$; guilt: $z = 2.40$, $p_{\text{rep}} = .95$).

DISCUSSION

The results confirmed the hypothesis that nonmimickers are better able than mimickers to distinguish truth tellers from liars. Observers' direct estimates of the targets' truthfulness and observers' assessments of the targets' emotions both demonstrated this effect, and it was present whether mimicry was spontaneous (control condition) or the result of instructions to mimic.

Participants in all three conditions performed poorly in estimating targets' truthfulness, even though nonmimickers were more accurate than other participants. These results are in line with previous studies (e.g., Vrij, Edward, & Bull, 2001) showing that when asked directly, people are bad at detecting lies. Vrij et al. also found that the ability to detect liars improves when people are asked to make indirect assessments. We obtained the

same result, but only among nonmimickers: Nonmimickers' estimates of targets' emotions showed very strong correlations with targets' truly felt emotions.

Our results suggest that people's ability to detect deception is improved when they are given explicit instructions not to mimic. We attribute this effect to the fact that mimicry, whether spontaneous (as in the control condition) or the product of instruction, hinders observers in objectively assessing targets' true feelings. Alternatively, perhaps the microdifferences between expressions of liars and truth tellers (e.g., Frank & Ekman, 1997) are more easily perceived when one does not mimic. Also, compared with mimickers, nonmimickers may catch falsely displayed emotions to a lesser extent and may therefore be less emotionally influenced by such deceptive displays.

Theoretical Implications

Our study extends research on detection of deception via non-verbal cues, which has demonstrated that people are generally not good at detecting lies (e.g., DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996; Kraut, 1978; Vrij, 2000). Researchers have suggested many explanations for this inability (for an overview, see O'Sullivan, 2003). Our study provides an additional one: Mimicking hinders the ability to objectively assess whether someone is lying and to assess another person's true emotions. Given that people spontaneously mimic one another, our findings provide an important explanation for people's poor accuracy in detecting lies.

Our findings also have implications for the role of mimicry in theory of mind. Theory of mind refers to the ability to understand mental states of other people, such as their thoughts, beliefs, intentions, desires, and knowledge (e.g., Premack & Woodruff, 1978). Mimicry plays an important role in theory of mind (e.g., Gallese, 2005; Gallese, Keysers, & Rizzolatti, 2004; Loth & Gómez, 2006; Meltzoff & Gopnik, 1993; Stel, van den Heuvel, & Smeets, 2008) and has been shown to facilitate important aspects of it, such as emotion recognition, perspective taking, and emotional congruency (Stel, van Baaren, & Vonk, 2008; Stel & van Knippenberg, 2008). However, the present study implies that mimicry does not facilitate the ability to recognize a lie. Whereas mimicry has been demonstrated to have positive consequences, our study shows a downside of mimicry: When behaviors and expressions do not reflect the other person's true emotions, mimicry is not helpful.

Additionally, although previous studies showed a reduction of mimicry when its consequences were not functional (e.g., Johnston, 2002; Stel, van Baaren, Blascovich, et al., 2008), our results did not show a reduction of spontaneous mimicry reactions toward liars, compared with truth tellers. Perhaps this difference can be explained by participants' a priori evaluation of the targets in the previous studies. That is, in those studies, participants' liking for targets was a priori manipulated or was immediately influenced by the targets' characteristics of be-

longing to a stereotyped or stigmatized group, whereas for the participants in our study, it was not a priori clear whether or not the targets could be trusted and liked.

Practical Implications

Our study is also relevant for the detection of deception. First, the police sometimes use an imitation technique derived from neurolinguistic programming (NLP). According to the NLP model, other people's modes of thinking should be mimicked because that facilitates communication. This imitation technique is indeed helpful for facilitating communication and increasing understanding when interviewing victims (for an example, see Rhoads & Solomon, 1987), and it is applied when interviewing suspects as well. It has been argued that mimicking enhances the suspect's trust of the interviewer, which should increase the confession rate (Rhoads & Solomon, 1987). However, there is no empirical evidence that trust increases the number of confessions, or that mimicry is helpful in interviewing suspects (Vrij & Lochun, 1997). Our results suggest that interviewers will be more accurate in their assessments if they do not use these imitation techniques.

Second, as Vrij (1996) has demonstrated, spontaneous mimicry also occurs during police interviews. Unconsciously mimicking a suspect may influence an interviewer's feelings about the suspect's trustworthiness, and perceived trustworthiness may bias the gathering of information (e.g., Holton & Pyszcynski, 1989). Therefore, we advise that interviewers whose aim is to accurately assess a person's true feelings should not actively use imitation techniques. Moreover, they should attempt not to mimic the interviewee at all.

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