

Norms, Expectations, and Deception: A Norm Violation Model of Veracity Judgments

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Violations of expectations have been advanced as an explanation for how people make veracity judgments, and previous research has found that unexpected weird behavior is rated as less honest than expected normal behavior. The current experiment (N = 128) varied norms and expectations independently to test four alternative models of veracity judgments. The models included a normative expectation model, an expectancy violation sufficient model, a model based on Expectancy Violation Theory, and a norm violation model. The data were consistent with a norm violation model. Aberrant behavior, whether expected or unexpected, was rated as less honest than normative behavior. Neither expectation violation nor actual message veracity affected deception judgments. These data provide additional evidence of the primacy of behavior over prior expectations in the evaluation of face to face communication.

Researchers have long been interested in how people make truth and lie judgments. While a variety of language (e.g., McCornack, Levine, Torres, Solowczuk, & Campbell, 1992), message recipient (e.g., McCornack & Levine, 1990), and relational (e.g., McCornack & Parks, 1986) factors affects veracity judgments, most attention has been given to the nonverbal behaviors of the source. Several decades of research suggest that people hold beliefs about the nonverbal behavioral profiles of truth tellers and liars, and that people rely, at least in part, on observations of source nonverbal behaviors when attempting to distinguish honest from deceptive messages (e.g., Miller & Stiff, 1993; Zuckerman, DePaulo & Rosenthal, 1981). More precisely, research suggests that people focus on a finite set of "deception cues" when making veracity judgments (Miller & Stiff; Zuckerman et al.).

Bond et al. (1992) challenged this commonly held view. They asserted that any behavior, whether stereotypically related to deception or not, that violates a nonverbal normative expectation should be seen as deceptive. According to their "expectancy violation model" of deception judgments, norms create expectancies, and when norms are violated, so too are the corresponding expectancies. The violations of expectations raise suspicion, create doubts, and ultimately lead to judgments of deceitful content and intent. To test their model, Bond et al. conducted three experiments showing that sources engaging in weird behaviors unrelated to deception beliefs were judged as more dishonest than those enacting normative behaviors.

Kam, Boldman, and Levine (1998) recently argued that Bond et al. (1992) confounded norms and expectations. In an experiment separating norm effects from expectations effects, Kam et al. found that while behaviors violating norms tended to be judged as less honest than normative behaviors, Bond et al.'s expectancy violation model provided a poor fit to their data. Unfortunately, however, limitations in the Kam et al. experiment made firm conclusions impossible.

The current experiment attempts to overcome the limitations in the Bond et al.

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(1992) and Kam et al. (1998) studies to provide a clear picture of the role of norm and expectation violations in the judgment of deceit. The literature on norms and expectations as related to deception is reviewed. Four rival models are detailed, and a norm violation model is advanced to explain the Bond et al. and Kam et al. findings. An experiment providing a critical test of these models is reported. This investigation begins by conceptually distinguishing between expectation and norm violations.

Expectation and Norm Violations

When communicating with others, people have preexisting expectations regarding the others' behavior. Expectancies refer to cognitions about the anticipated behavior of others (Burgoon & Walther, 1990). These expectations may stem from social norms (Burgoon et al., 1995; Honeycutt, 1991), stereotypes (Burgoon & LePoire, 1993; Jones, 1986), hearsay (Burgoon et al., 1995; Jones, 1986), and known idiosyncrasies of others based on previous interactions (Burgoon et al., 1995; Honeycutt, 1991; Jones, 1986). Expectations are thought to affect both conversational behavior (e.g., Burgoon & Hale, 1988; Burgoon et al., 1995; Honeycutt, 1989; 1991) and post interaction impressions (e.g., Burgoon & LePoire, 1993; Burgoon & Walther, 1989; Honeycutt, 1989).

When another's behavior sufficiently deviates from that which is expected, an expectancy violation is said to occur. Such violations are postulated to increase scrutiny of the other's behavior. Along with this increased attention, evaluations are made of the observed behavior and of the communicator enacting those behaviors (Burgoon et al., 1995). If the behavior is more desirable than expected, a positive violation of expectations is said to occur. Alternatively, a negative violation of expectations happens when actual behavior is evaluated as less desirable than anticipated.

Further, most people are aware that some communication behaviors are more socially appropriate than other behaviors. Behavioral norms refer to a product of group interaction that denote "a range of acceptable behavior" (Sherif, Harvey, White, Hood & Sherif, 1961, p. 9). Norms are situationally based standards for behavior "that prescribe certain actions and proscribe others" (Bond et al., 1992, p. 969). That is, norms dictate the range of behaviors that are socially appropriate and inappropriate given the situation. A norm violation might be said to occur when behavior falls outside the range of acceptable behavior and is deemed deviant or inappropriate.

Although norms may create expectations (Bond et al., 1992; Burgoon et al., 1995; Honeycutt, 1991), and people often expect normative behaviors from others, norms and expectations are conceptually and empirically distinct. Expectations may derive from bases other than norms (e.g., information from third parties or prior interaction), and it is possible to anticipate abnormal behavior. For example, inappropriate self-self disclosure might well be anticipated from a person known to be highly narcissistic. Such behavior would certainly violate norms, but would be entirely consistent with the expectations of those who know that person. Alternatively, polite behavior on the part of a usually rude person would violate expectations but not norms.

Because people usually expect normative behavior from others (unless reason exists to expect otherwise), norms and expectations are confounded in many, if not

most, situations. When a behavior violates both what is normative and what is expected, or when a behavior is both normative and expected, evaluations of that behavior may be a function of the normative value of the behavior, the expectation, and/or some additive or nonadditive combination of the two. Teasing out true expectation effects from true norm effects can only be accomplished by examining situations where norms and expectations diverge.

The Expectancy Violation Model of Deception Judgments

Bond et al. (1992) argued that “traditionally, deception judgments were thought to be based on a small set of behaviors stereotypically associated with deception” (p. 969) or behaviors that reflect verbal-nonverbal inconsistency, and that their “expectancy violation model offers a new perspective on deception judgments” (p. 969). According to their model,

deception cues are not tied to any small set of cues, nor do they presuppose a communicative contradiction. Theoretically, deception should be inferred from any nonverbal behavior that violates a norm (p. 970).

They also asserted that, “deception judgments are based on nonverbal behaviors that violate perceivers’ expectations” (p. 976). Specifically, Bond et al.’s model holds that norms embody expectations. Behaviors that violate norms, violate expectations. These violations of normative expectations provide a “nonspecific activation” of judgments of deceit. In short, Bond et al. predicted that “weird-looking nonverbal behaviors should make a person look dishonest” (p. 974) because these behaviors violate normative expectations.

Bond et al. (1992) tested their model with three experiments. In each, participants viewed a series of video clips in which the person on camera sometimes acted normally and was sometimes posed in a “weird” position. These weird behaviors were designed to violate normative expectations, and examples included raising an arm toward the ceiling or having eyes closed throughout the tape. Consistent with their predictions, message sources were seen as more dishonest when engaged in the strange behaviors than when acting normally. The third study replicated this finding cross-culturally. Based on these data, Bond et al. concluded support for their expectancy violation model.

Three problems with the Bond et al. (1992) study merit discussion. The most obvious limitation in Bond et al. is an apparent lack of ecological validity and mundane realism constituting a potentially serious threat to external validity. The series of posed behaviors, characterized by Bond et al. themselves as “weird,” “indisputably strange,” and “bizarre,” were chosen to demonstrate that normative expectancy violations other than stereotypical deception behaviors could produce deception attributions. While the behaviors in question certainly suited that purpose, each of the behaviors were quite deviant and would be extremely rare outside the laboratory. Although strong manipulations are desirable, one might question if Bond et al.’s finding would generalize to the violations people might actually encounter outside a research setting.

Second, demand effects provide a plausible rival explanation for the results. Participants were informed that the sources on the tape might be lying, witnessed people enacting highly unusual behavior, and knew that the researchers were interested in deception judgments. In short, the purpose of the study was transparent, and the possibility of deceit was planted by the experimenter. There is no

evidence whether or not the subjects would have made spontaneous deception judgments if not primed to do so, and hypothesis guessing was possible.¹

Third, and most importantly, Bond et al. (1992) empirically confound norms and expectations. Although they label their model an "expectancy violation model," they repeatedly specify norm violations as a necessary condition in their model. The three experiments reported each compared expected normative behaviors to behaviors that violated both expectations and norms. With such a design, the precise antecedent(s) of deception judgments are ambiguous. If Bond et al.'s results were not mere demand effects, the results still might be attributable to expectation violations, norm violations, and/or an interaction between the two. As shown below, several plausible models are consistent with Bond et al.'s results.

Noting these limitations in Bond et al. (1992), Kam et al. (1998) attempted to separate norm violations from expectancy violations. Expectations were established by an experimenter who led half of the participants to believe that they would be interviewing a very nonimmediate person. The other half of the subjects were not primed to expect anything unusual. Participants then actually interacted with a confederate who either violated norms with unusually nonimmediate behavior or who enacted norm-consistent levels of immediacy. The confederate either lied or told the truth during the interview.

Kam et al. (1998) found a hypothesized main effect for norm violations and a weaker unanticipated three-way interaction between norms, expectations, and confederate honesty. Across expectation and honesty conditions, norm-violating behaviors were rated as more deceptive than norm-consistent behaviors. In the lie condition, however, unexpected nonnormative behavior (i.e., a negative violation of expectations) was seen as more deceptive than expected norm violations (i.e., negative confirmation of expectations) while unexpected normative behavior (i.e., a positive violation of expectations) was seen as less deceptive than expected normative behavior (i.e., a positive confirmation of expectations). In the truth condition, only norm violation effects were apparent. Kam et al. concluded that Bond et al.'s (1992) expectancy violation model was inconsistent with their data.

Although the Kam et al. (1998) study overcame several of the limitations in the Bond et al. (1992) experiments, it too suffered from several threats to internal and external validity. In Kam et al., participants were not randomly assigned to the truth and lie conditions, and confederate veracity was confounded with message plausibility. This confounding made valid interpretation of the three-way interaction impossible. Further, because Kam et al. only used a single confederate to enact a single class of norm-violating behaviors, the generalizability of Kam et al.'s finding is also suspect. Recognizing these limitations, Kam et al. suggested that a more carefully controlled experiment was needed.

Four Rival Models

Although Bond et al. (1992) call their model an expectancy violation model, their model might be more accurately labeled the "violations of normative expectancies model." In this model, violations of both norms and expectations are necessary, and jointly sufficient to produce judgments of deceit. Bond et al.'s model holds that a norms violation creates a violation of expectation. A violation of expectations leads to increased scrutiny of the norm-violating behavior which activates a nonspecific activation of deception judgments. Bond et al.'s model thus predicts a magic cell

effect where behaviors violating both norms and expectations are rated as more deceptive than all other norm-expectancy combinations.

Theoretically, at least three other distinct models can also account for Bond et al.'s (1992) finding that weird behaviors are seen as deceptive. The first alternative model might be labeled the "expectancy violation sufficient model." This model holds that any violation of expectations, independent of the type of behavior observed, is sufficient to produce an increase in deception judgments. The logic of this model recognizes that the existence of a truth bias is perhaps the strongest and most reliable finding in deception research (Levine, Park, & McCornack, 1999). Truth judgments may be a "default" outcome of message comprehension (Gilbert, 1991), and the recognition that a message might be a lie would require some cognitive activation to reassess this default value. Because expectancy violations lead people to a more active state of cognitive processing, an expectancy violation may be sufficient to produce an increase in lie judgments.

A second alternative is based on J. Burgoon's Expectancy Violation Theory (EVT; Burgoon & Jones, 1976; Burgoon, 1978). EVT holds that expectancy violations increase scrutiny of the violator's behavior, and evaluations are made of the behavior in question and the communicator enacting those behaviors. These evaluations are labeled behavior valence and target valence respectively (Burgoon et al., 1995), and the effects of expectancy violations depend upon these evaluations. Behavior valence refers to whether or not the behavior is interpreted as desirable and wanted or as undesirable and unwanted. Target valence (also labeled reward value) refers to the "perceiver's net regard" for the person being evaluated (Burgoon et al., 1995, p. 294). Behavior valence, target valence, and expectation violations/confirmations are predicted to interact to affect the communication behaviors of the perceiver and the perceiver's post-interaction assessment of the observed person. Negative evaluations of unexpected behavior are more likely when behavior or target valence is negative, but positive evaluations may result when the behavior or target is seen in a favorable way.

The EVT model predicts that negative and positive violations of expectations will function differently. Specifically, behavior that unexpectedly violates a norm (i.e., a negative violation) should be rated as more deceptive than expected violations of a norm (i.e., a negative confirmation), while normative but unexpected behavior (i.e., a positive violation) should be rated as less deceptive than expected normative behavior (i.e., a positive confirmation). Kam et al.'s (1998) results in where consistent with the EVT model in the lie condition, but not the truth condition.

As a final alternative, we advance our "norm violation model." The norm violation model recognizes that behaviors violating norms are, by definition, socially inappropriate. Such behaviors should be evaluated negatively independently of whether the behaviors are anticipated or unexpected. People who engage in abnormal behavior will be viewed as less credible, and consequently their messages will be perceived as less sincere than those acting normatively. This model predicts a single main effect for norms such that behavior violating norms will be judged as less honest than norm-consistent behavior independent of expectancy violations.

Although many, if not most, previous studies of expectancy violations have confounded norms and expectancies, those that have not have been generally consistent with the norm violation model. In one recent study (Burgoon & LePoire, 1993; Burgoon et al., 1995), subjects were led to expect a person who was either

conversationally involved and pleasant or uninvolved and unpleasant. The subjects then interacted with a research confederate who displayed either an involved and pleasant or an uninvolved and unpleasant nonverbal interaction style. The effects for confederate behavior were substantially larger than expectation effects. Manusov, Winchatz, and Manning (1997) and Kam et al. (1998) also found that actual behaviors may have a greater influence than expectations.

Two final research issues need to be addressed. First, Kam et al.'s (1998) data raised the possibility that source veracity moderates norm and expectation effects. Therefore, we ask the research question, does source veracity moderate support for the four models articulated above? Second, as noted above, deception research indicates that people are almost always truth-biased (Levine et al., 1999). Therefore, we question if, in the absence of priming from an experimenter or strong demand effects, are expectation and/or norm violations sufficient to produce judgments of deceit?

Method

Overview

To provide a critical test of the four models detailed above, while overcoming the limitations in the Bond et al. (1992) and Kam et al. (1998) studies, several design considerations were salient. Each of the four models articulated makes identical predications in the context of research designs like the one used by Bond et al. When comparing unexpected abnormal behavior (i.e., a negative violation of expectations) to expected normative behavior (i.e., a positive confirmation of expectations), each model predicts exactly the same thing: that unexpected abnormal behavior will be rated as more deceptive than the expected normative behavior. However, only when norms are crossed with expectations can the divergent predictions of these models be assessed. Therefore, similar to Kam et al. and unlike Bond et al., expectations and norms were fully crossed in the current study. Also, unlike Bond et al., participants were not informed that the study focused on deception, and deception judgment items were imbedded within filler items (cf. McCornack & Levine, 1990) to minimize possible demand effects. To enhance ecological validity, while simultaneously maintaining a strong manipulation of norm violations, participants interacted with the source of face-to-face and an alternative set of abnormal behaviors were used in the abnormal conditions. Unlike Kam et al., multiple confederates and multiple abnormal behaviors were built into the design, and a more carefully controlled truth-lie variable was included.

Participants

One-hundred twenty-eight students (62 females, 58 males, 8 sex not disclosed) were recruited from an undergraduate public speaking course at the University of Hawaii to participate in the study. The participants ranged in age from 18 to 40 ($M = 20.95$, $SD = 3.54$), and were ethnically diverse (33.9% Japanese, 12.5% Chinese, and 12.5% mixed, 9.2% Caucasian, 8.3% Filipino, 7.9% Korean, 6.7% Hawaiian, 1.7% African American, 1.7% Non-Hawaiian Pacific Islanders, and 5.8% other). All participants gained course research credit in exchange for their participation.

Design

This experiment used a $2 \times 2 \times 2 \times 4 \times 4$ independent groups design. Levels of the normative value of the confederates' behavior (normal, abnormal) were crossed with an experimental expectancy induction (no induction, abnormal behavior anticipated), veracity condition (confederate honest, lying), and confederate identity (four confederates, two males, two females). Four types of abnormal behaviors (teeth picking, excessive stretching, exaggerated alternation of speaking volume, and unusual eye behavior) were nested within the abnormal confederate behavior condition, but crossed with the expectancy, veracity, and confederate identity factors. Participants were randomly assigned to each condition through the use of a complex randomization and counterbalancing scheme created by a researcher who was not involved in the data collection.² The assignment of participants to treatments was done in such a way as to guarantee equal cell sizes. Confederates were not aware of the expectancy condition, and the experimenter was blind to the normative behavior and veracity conditions.

Procedures

Upon arrival at the laboratory, participants were told that the experiment was focusing on "communication situations among strangers" and that they would be involved in an informal interview with another student from a different class. The other student was actually the confederate. It was explained that students had been randomly assigned to different experimental conditions, and that they were assigned the role of "interviewer." It was further explained that the other participant had arrived early, had already been given instructions, and was waiting in the next room for the experiment to begin. The participant was then given a list of ten interview questions, was instructed to ask all ten questions, not to elaborate or improvise, and to keep the interview on topic.³ She/he was then alerted to the fact that there would be a video camera in the corner of the room and told that the interview would take approximately five to ten minutes. At this time, half of the participants received the abnormal expectation induction (see the expectancy induction section below).

The participant was then led into the laboratory room, and was introduced to the waiting confederate. The experimenter asked both if they knew one another. In no case were the two acquainted. The experimenter then turned on the video camera, instructed the participant to begin, and left the room.

During the interview, the participant asked the confederate each of the ten questions one at a time. The confederate's answers were either completely truthful or lies, depending on the veracity condition. The confederate either enacted normal nonverbal behaviors or one of four abnormal behaviors throughout the interview.

Once the interview was completed, both the participant and the confederate were given a post-interview questionnaire to complete, and the two were separated. Once finished, each participant was thanked and given debriefing information. Participants were told that they were not to discuss any aspect of the experiment with others until all data were collected.

Expectancy Induction

Before meeting the confederate, those participants assigned to the abnormal expectancy condition were given additional information regarding the interviewee's

behavior. Specifically, they were told:

Oh, by the way, when I was giving the other person the instructions before you arrived, he/she seemed kinda weird. You'll see what I mean when you get in there. I'm only telling you this because as the interviewer, it's important that you stay on track, stick to the specific questions, and fulfill your role.

The other half of the participants (those randomly assigned to the normative expectancy condition) were given no information about what to expect from the confederate. It was presumed that in the absence of information to the contrary, participants would expect normal behavior from the confederate. This assumption was verified with a manipulation check (see the results section below).

Confederate Behavior

Four research confederates were used in the experiment. Each confederate received several hours of training and practice prior to the data collection. Effort was made to minimize differences within condition variance across confederates. The verbal content of the confederates' responses was scripted, practiced, and held constant across the normative and abnormal behavior conditions. Data collection began only after all the authors were satisfied with the performance of each confederate in practice sessions.

During each session, the confederate either behaved normally or abnormally. In the normal condition, the confederate behaved as naturally as possible. If the session called for abnormal behavior, the confederate engaged in one of four abnormal behaviors. These four weird behaviors were chosen on the basis of several criteria. The behaviors needed to be sufficiently strange and deviant to provide for a strong manipulation of norms, yet the behaviors needed to be sufficiently plausible (i.e., something a weird person might really do) so as to not be completely unrealistic. The behaviors could not be so inappropriate as to be offensive. Each behavior needed to be approximately equal in strangeness to maximize the chances of the findings being general across specific behaviors. Finally, the behaviors needed to be ones that the confederates could be trained to enact consistently and convincingly. Based on these criteria, four abnormal behavior conditions (loud, looking, teeth, and stretching) were created.

In the "loud condition," the confederate sporadically raised their voice to an usually high level of volume several times throughout the interview. That is, the confederate alternated, at varying intervals, between a normal conversational volume and a noticeably louder volume. The "looking condition" was characterized by odd eye movements in which the confederate appeared to be following the movements of an invisible flying insect as it moved around the room. The "teeth condition" involved the confederate compulsively picking at their teeth (in all different areas of the mouth) with their fingers. In the "stretching condition," the confederate engaged in extensive stretching exercises involving the arms and legs as if they were about to participate in a sporting event.

Veracity Conditions

For half of the interviews, the confederates answered all questions honestly. The confederates presented false information during the other half of the interviews. All truthful and deceptive answers were scripted and rehearsed.

Post-Interaction Questionnaire

Immediately following the interaction, participants were asked to complete a questionnaire containing filler items, perceptions of confederate honesty items, and manipulation check items. Four Likert-type items with 5-point response formats were used to assess perceptions of confederate honesty. Scores on these items were averaged to create the primary dependent variable ($M = 4.36$, $SD = .81$, $\alpha = .95$). Higher scores indicate more honesty. The honesty items were presented with several filler items assessing communication anxiety. The filler items were presented in the same format as the honesty items.

Eight semantic differential-type items were created as manipulation checks, with four items assessing prior expectations of normality and four items assessing the normality of the actual behavior observed. Each of the eight items used a 5-point response format, and scores were averaged across items. Both the expectation ($M = 2.48$, $SD = 1.42$, $\alpha = .98$) and the behavior ($M = 2.06$, $SD = 1.26$, $\alpha = .98$) scales were reliable. Higher scores on these two scales indicate greater norm or expectation violations.⁴

Results

Manipulation and Validity Checks

The effectiveness of the expectancy induction was tested with a 2 (norms) \times 2 (expectations) \times 2 (source veracity) \times 4 (confederate) independent groups ANOVA with the expected behavior manipulation check scale as the dependent measure. The expectancy manipulation worked as intended. Participants who were primed to expect abnormal behavior reported expecting weirder behavior ($M = 3.32$) than those who were not primed [$M = 1.63$, $F(1, 96) = 66.87$, $p < .001$, $\eta^2 = .35$]. All other main effects and interactions were nonsignificant.

The quality of the normal-abnormal behavior manipulation was assessed with a similar 2 (norms) \times 2 (expectations) \times 2 (source veracity) \times 4 (confederate) independent groups ANOVA with the behavior manipulation check scale as the dependent measure. As intended, behavior in the normal condition ($M = 1.51$) was rated as significantly and substantially more normal than behavior in the abnormal ($M = 2.60$) condition, $F(1, 96) = 30.86$, $p < .001$, $\eta^2 = .18$. In addition, a weaker confederate effect was evident, $F(3, 96) = 3.35$, $p < .03$, $\eta^2 = .06$. Across norm conditions, the two female confederates were rated as more normal ($M_s = 1.73$ and 1.82) than the two male confederates ($M_s = 2.18$ and 2.50). No other main effects or interactions were obtained. Because confederate identity did not interact with the norm manipulation, the confederate effects were not deemed problematic.

The four types of weird behaviors were compared to the normal behavior condition using a one-way ANOVA with the behavioral manipulation check items as the dependent measure. A significant effect for behavior type resulted, $F(4, 123) = 12.97$, $p < .001$, $\eta^2 = .30$. While each of the weird behaviors were rated as more abnormal than the normal behavior control, there was substantial variability in perceived strangeness across weird behaviors, and not all behaviors differed significantly from the normal behavior control group. Comparisons with Tukey's HSD tests indicated that the eye and stretching behaviors differed from the normal and loud behaviors. These findings are summarized in the first row of Table 1.

TABLE 1
EFFECTS OF BEHAVIOR TYPE ON NORMALITY AND HONESTY RATINGS

Dependent Measure	Normal (N = 64)	Eyes (N = 16)	Stretch (N = 16)	Teeth (N = 16)	Loud (N = 16)
Abnormality	1.52 _a	3.22 _b	3.08 _b	2.33	1.79 _a
Honesty	4.57 _a	3.75 _b	4.15	4.28	4.42

Note: Means with different subscripts are significantly different at $p < .05$ with Tukey HSD.

Model Testing

The four models and the research questions were initially investigated with a 2 (norms) \times 2 (expectations) \times 2 (source veracity) \times 4 (confederate) fixed effects, independent groups ANOVA with honesty ratings as the dependent measure.⁵ The effects of weird behavior type were investigated separately because of nesting. No significant main effects or interactions involving either the source veracity or the confederate factors were obtained. Participants did not rate truthful messages ($M = 4.39$) differently than lies ($M = 4.33$), $F(1, 126) = 0.123$, $p = ns$, $\eta^2 = .00$. Because the veracity and confederate factors were not relevant to the four models being tested, the results of a simplified 2 (norms) \times 2 (expectations) ANOVA are reported.

Consistent with the norm violation model, the 2-way ANOVA produced a single main effect for norm violations, $F(1, 124) = 8.86$, $p < .003$, $\eta^2 = .07$. The confederates were rated as more honest when they were in the normal behavior condition ($M = 4.57$) than when they were in the abnormal behavior condition ($M = 4.15$). Neither the main effect for expectations [$F(1, 124) = 0.47$, $p = ns$, $\eta^2 = .00$] nor the norms by expectations interaction [$F(1, 124) = 0.08$, $p = ns$, $\eta^2 = .00$] were significant. Means are presented in Table 2.

As a further test of the norms violation model, we regressed honesty scores onto participants' ratings of the observed behaviors' expectedness and abnormality. Expectation ratings did not significantly contribute to the prediction of honesty ratings, $\beta = .04$, $t(125) = 0.43$, $p = ns$, but abnormality ratings did, $\beta = .32$, $t(125) = 3.74$, $p < .001$. The zero-order correlation for abnormality, $r = .316$, was virtually identical to the multiple correlation, $R = .318$.

Bond et al.'s (1992) violations of normative expectations model was tested with an a priori contrast of +1, +1, +1, -3 where the -3 weight reflected the lower honesty ratings predicted in the unexpected abnormal behavior condition. The resulting contrast was not significant, $t(124) = 1.44$, $p = ns$. Examinations of the means in Table 2 shows the magic cell effects predicted by the normative expectations model were not apparent in the data, and expected abnormal behavior was rated as slightly less honest than unexpected abnormal behavior. Therefore, the data were not consistent with Bond et al.'s model.

The expectation violations sufficient model was tested by contrasting the two cells where the behavior was expected from the two cells in which expectancies were violated. Expectancy violating ($M = 4.39$) and expectancy-consistent ($M = 4.33$) cells did not differ in perceived honesty, $t(126) = -0.35$, $p = ns$. Thus, this model too was inconsistent with the data.

The EVT predictions failed as well. Recall that according to the EVT, expected violations of a norm (i.e., a negative confirmation) should be rated as more honest

TABLE 2
EFFECTS OF EXPECTATION AND NORM VIOLATIONS ON HONESTY JUDGMENTS

Expectation	Behavior		Across Conditions
	Normal	Abnormal	
Normal	4.66	4.18	4.42
Abnormal	4.48	4.12	4.30
Across Conditions	4.57	4.15	4.36

than behavior that unexpectedly violates a norm (i.e., a negative violation). This was not the case. Negative confirmations ($M = 4.12$) and negative violations ($M = 4.18$) did not differ, $t(62) = -0.31$, $p = ns$, and the means were in the wrong direction. Normative but unexpected behavior (i.e., a positive violation) should have been rated as less deceptive than expected normative behavior (i.e., a positive confirmation). Again, although not significant, the findings were in the wrong direction [positive violation, $M = 4.48$, positive confirmation, $M = 4.66$, $t(62) = -1.07$, $p = ns$]. Thus, the model based on EVT was also inconsistent with the data.

Supplemental Analyses on Behavior Type

The effects of normative behavior and each of the four weird behaviors on honesty ratings were tested with a five independent groups one-way ANOVA. Honesty ratings differed significantly across the groups, $F(1, 123) = 3.95$, $p < .006$, $\eta^2 = .11$. Post hoc tests, however, indicated that only weird eye behavior ($M = 3.75$) was rated as significantly less honest than the normal behavior control ($M = 4.57$). The means are presented in the second row of Table 1.

To test if the main effect for norms reported above might be solely attributable to the strange eye behavior condition, the norms by expectations ANOVA was recalculated with the data in the eye condition removed. The main effect for norm violations, although weaker, remained significant, $F(1, 108) = 3.96$, $p < .05$, $\eta^2 = .03$. Thus, abnormal behaviors types other than strange eye behavior were sufficient to produce the norm-violation effect.

An ANACOVA was conducted to ensure that the effects of behavior type were attributable to the perceived abnormality of behavior. In this analysis, behavior type was a fixed, independent groups factor with 5 levels (normal, and the four weird behaviors), participants' rating of abnormality (the behavior manipulation check scale) was the covariate, and honesty rating was the dependent measure. The behavior conditions no longer produced a significant effect, $F(1, 122) = 0.65$, $p = ns$, $\eta^2 = .01$, but the covariate effect was significant and substantial, $F(1, 122) = 12.35$, $p < .001$, $\eta^2 = .15$. This suggests that the effects of the behavior manipulation were attributable to perceived norm violations as intended.

Discussion

This study tested four models explaining why weird behaviors are seen as less honest than normal behavior. Three of the models evoked violations of expectations as either a necessary or a sufficient condition for judgments of dishonesty. The expectancy violations sufficient model predicted simply that behavior violating expectations will be judged as less honest than expected behaviors. Bond et al.'s (1992) expectancy violation model required violations of normative expectations

(i.e., that both norms and expectations be violated). The model derived from EVT added the further specification that unexpectedly normal behavior (i.e., positive violations) would be seen as more honest than expected normal behavior (i.e., positive confirmations).

The data were clearly inconsistent with each of the three expectancy violations models. Expectancies and expectancy violations did not affect honesty judgments. Simply put, when the effects of violations of expectations are separated from the effects of norm violations, expectancy violations failed to explain variance in the decline in honesty ratings.

One might argue that the failure of the expectance-based models might be attributable to a weak manipulation of expectations or low statistical power, and that had the manipulation been stronger or the sample size larger, one of the expectancy models might have been consistent with the data. Two reasons suggest that neither weak manipulations nor a small sample size were responsible for the lack of support obtained for these models. First, the expectation manipulation was stronger than the norms manipulation, yet significant effects were obtained for norms but not expectations. Second, although expectancy effects were not statistically significant, cell means were in a direction opposite to what was predicted by each of the three expectancy models. Thus, there is little reason to believe that a stronger test would have produced more support for these models.

The norms violations model, however, was consistent with the data. As predicted by the model, independent of receiver expectations, confederates enacting weird behaviors were rated as less honest than the same confederate acting normally. Ratings of normality were associated with ratings of honesty, and the effects of the behaviors on honesty ratings disappeared when statistically controlling for perceived normality. Thus, abnormal behaviors are sufficient to produce declines in perceived honesty.

According to our norms violation model, norms specify the range of socially acceptable behaviors in a situation. Behaviors that violate norms are, by definition, socially inappropriate, and therefore should be evaluated negatively by others. Lower credibility and less perceived honesty should be consequences of these general negative evaluations.

Although norms give rise to expectancies, and while norms and expectations often coincide, the negative evaluations stemming from norm violations do not require corresponding expectancy violations, but instead rest on the normative value of the behavior observed. Norm-violating behaviors are inappropriate whether anticipated or unexpected.

Our norm violations model should generalize to behavioral evaluations other than just veracity ratings. While this model was advanced specifically as a rival account of Bond et al.'s (1992) findings concerning honesty judgments, the model is not specific to judgments of deception. In fact, the logic of the model predicts that weird behavior will be seen as less honest because weird behavior is evaluated negatively, and lower honesty ratings are a reflection of these more general negative evaluations. Specifically, our thinking specifies general negative evaluations as a mediator between observed behaviors and perceived deception. Abnormal behavior leads to negative general evaluations, and this "negative halo effect" results in the decline in perceived honesty. Thus, we would anticipate similar effects if the

behavior was evaluated in terms of attractiveness, popularity, intelligence or other evaluative dimensions.

These data may shed some light on the “deceiver’s demeanor bias” (Zuckerman et al., 1981). The demeanor bias refers an individual difference in which some sender are perceived to be consistently more (or less) honest than others, regardless of whether a truthful or a deceptive message is produced. In other words, a common finding in deception experiments is that some people are just more believable than others. These individual differences may be attributable, at least in part, to differences in general evaluations. So, people who make good impressions tend to be believed, while those who are evaluated less positively are more likely to be doubted. The normative value of the behavior is an important determinant of impression valence and consequently affects veracity judgments.

Kam et al.’s (1998) data suggested that source honesty might moderate the effects of norms and expectations. While Kam et al.’s finding of a main effect for norms was replicated, Kam et al.’s interaction involving source honesty was not replicated. This suggests that the 3-way interaction reported by Kam et al. may have been artifactual.

In the current study, confederate veracity did not affect honesty judgments. In terms of deception detection accuracy, this finding means that accuracy did not significantly differ from chance levels. Although findings of accuracy rates slightly above chance levels are more common, the current findings are not unusual, and may stem from the rehearsed nature of the lies.

The current experiment showcased a number of design improvements over previous studies. Most notable was the unconfounding of norms and expectations by crossing the two. Future studies investigating expectancy-based explanations for various communication outcomes should take care not to confound norms and expectations in order to avoid possible spurious findings.

The demand and priming effects possible in the Bond et al. (1992) study were less likely in the current study. Participants were not told that the focus of the study was on deception, and truth-lie items were presented with filler items to disguise the true aim of the study. Given recent findings on the pervasiveness of truth-bias (cf. Levine et al., 1999), we wondered if observing weird behaviors would produce spontaneous lie judgments in the absence of experimenter priming. The results suggest that viewing abnormal behavior, without being otherwise alerted to the possibility of deception, reduces, but does not overcome, truth-bias. That is, although participants rated weird behaviors as less honest than normative behaviors, the means in all conditions were still well above the midpoint on the honesty scale. Hence, the effects of observing aberrant behavior are more accurately described as lowering honesty ratings rather than producing lie judgments.

An improvement in design over Kam et al. (1998) was the use of multiple confederates who enacted a variety of abnormal behaviors. The results proved reasonably general across confederates. A confederate effect was evident in the norms manipulation check. Fortunately, however, this confederate effect did not leak into the norms manipulation. That is, while some confederates were perceived as generally stranger than others, all confederates were stranger in the abnormal condition than in the normal condition, and differences between normal and abnormal conditions were uniform across confederates. Further, confederate identity did not significantly affect the dependent measure, and the main effect for norms was retained when the confederate condition was treated as a random factor.

The abnormal behavior type manipulation, however, was less than ideal. Not all abnormal behaviors were significantly different from the normal behavior control in either perceived weirdness or in honesty. Two supplemental findings, however, suggest that this was not a severe threat to validity. Across behavior conditions, perceived abnormality was significantly and negatively associated with honesty judgments, and when perceived abnormality ratings were included as a covariate, the effects of the behavior manipulation on perceived honesty fell to within sampling error of zero. These findings are consistent with the norm violations explanation, and suggests that the behavior manipulation worked as intended. Nevertheless, more uniformity in weird behaviors would have been desirable.

In conclusion, this experiment produced results consistent with a norms violation model and inconsistent with various expectancy violations accounts. Weird behavior is rated as less honest than normal behaviors because it is seen as deviant, not because it is unexpected. Future research should avoid confounding norms and expectations.

End Notes

¹Bond et al. (1992) recognized demand effects as a plausible rival explanation for their findings. They argued, however, that their third experiment conducted in India was less vulnerable to demand effects because the participants were not familiar with social scientific experiments.

²The randomization and counterbalancing protocol is available from the first author.

³The interview questions were about parents' occupations, the interviewee's best job, sports played, music liked, weekend activities, the legalization of gambling, cloning research, recycling, the legalization of marijuana, and the banning of fireworks.

⁴The expectancy manipulation check scale had participants respond to the question "Prior to the interview, I had the impression that he or she would act in a(n) _____ manner" on scales bounded with normal-weird, typical-atypical, average-strange, and natural-odd. The norms manipulation check scaling used in the same response options for the question, "During the interview, this person was acting in a(n) _____ manner."

⁵An alternative statistical analysis would have been to treat the confederate factor as a random effect in the ANOVA. The four models were not tested with the a random effects ANOVA because confederates were not randomly selected from a pool of all possible confederates, and because treating confederates as a random factor would substantially lower the power for tests of all four models. The reader should note, however, that the choice of treating confederates as a random or fixed factor does not alter the results of the ANOVA. When confederates were a random factor, the main effect for norms remained statistically significant, $F(1, 3) = 24.281$, $p < .02$, and the main and interaction effects involving expectations remained nonsignificant.

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