Attributional Orientations and the Prediction of Behavior: The Attribution–Prediction Bias

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Consistent with the proposal that people rely on implicit causal theories that relate different types of attributions to behaviors that differ in valence, 3 studies showed that in addition to predicting more positive than negative behavior in the target, participants produced an attribution-prediction bias. This bias indicated that persons with a dispositional orientation predicted more negative and less positive behavior from the target than persons with a situational orientation. The authors produced these findings in Studies 1 and 2 by manipulating the perceived characteristic motives of a target (dispositional, situational). In Study 3 the authors used a cultural operationalization of attributional orientations by examining the responses of Western students (dispositionalists) and East Asian students (situationalists). Finally, in support of the underlying mechanism, Study 4 showed that activating dispositional or situational knowledge facilitated the encoding of negative and positive behaviors, respectively.

The study of attributional processes continues to be an important topic of research in social psychology (e.g., McClure, 1998; Miller & Ratner, 1998; Sedikides, Campbell, Reeder, & Elliot, 1998; Smith, 1994). Although it is clear that people do not always engage in a detailed causal analysis of the behavior of others around them, they do carry with them implicit causal theories that allow them to readily interpret the behavior of others in their environment (S. T. Fiske & Taylor, 1991; Heider, 1944; Ichheiser, 1943; Jellison & Green, 1981; Kelley, 1972; Morris & Peng, 1994; Read, 1984). When people do engage in attributional analyses, they often do so to increase their ability to predict the behavior of others and thus gain a sense of control over the social environment (e.g., Eiser, 1983; S. T. Fiske, 1992; Heider, 1958; Jones, 1979; Jones & Davis, 1965; Kelley, 1967, 1972, 1973; Kelley, 1955; Pittman & Heller, 1987). One element of this process that can contribute to a sense of control is to use the attributions that have been made for past behavior as a basis for predicting future behaviors. In the present set of studies we examine a bias that occurs when people use attributions as a basis for predicting behavior.

Researchers have investigated the prediction of behavior from various perspectives; for example, as a function of having rendered previous trait judgments or assuming the existence of certain traits in targets (e.g., Lingle & Ostrom, 1979; Skowronski & Carlston, 1987), or as a function of having provided stability-of-cause judgments for the behavior of others (Saulnier & Perlman, 1981), others’ similarity to self (e.g., Sherman, Chassin, Presson, & Agostinelli, 1984), and the new target person’s similarity to an old target (Read, 1984). Other researchers have looked at how making behavior predictions induces people to confirm them when observing subsequent behavior (Sherman, 1980). However, relatively little attention has been devoted to how the prediction of another person’s behavior is affected by prior attributions (for an exception see Reeder, Henderson, & Sullivan, 1982). That is, when different types of attributions are used to explain the behavior of others, what behaviors are expected from them in the future? This question is the focus of the present set of studies.

The Nature of Social Understanding

The most important and widely used distinction among types of attributions is between factors that implicate the person enacting the behavior as the cause of the behavior (internal or dispositional attributions) and factors that implicate the environment as the cause of the behavior (external or situational attributions; e.g., Funder, 1982; Heider, 1944). This distinction has not only theoretical significance but practical importance as well. For example, expectations of recidivism and parole decisions are often driven by the extent to which people think of a prisoner’s behavior as dispositionally driven or open to situational influences (Carroll, 1978; Saulnier & Perlman, 1981). Whether people make dispositional attributions or situational attributions also affects their emotional reactions and attempts to regulate their own behavior in the future (Weiner, 1986).

A second important distinction discussed in the attribution literature concerns differences in the types of attributions that may occur for positive and negative behaviors. Kelley (1967) suggested that “it might be said that effects widely produced by virtue of their desirability tell us more about the properties of external situations or states—their intrinsic desirability, demand characteristics, etc.—than about the properties of the persons who act to produce
them” (p. 209). That is, it may be that for positive behavior, situational attributions tend to occur to a greater extent than dispositional attributions do because of the power of social environments, which impose codes of behavior and punish infractions of those norms and regulations (Lienhardt, 1964). The structure of social environments is such that socially desirable behavior is typically prescribed so that people, communities, and societies can coexist (Rousseau, 1899/1947). Positive behavior occurs frequently because it is reinforced by norms, social pressure, and rewards, and hence it is likely to occur when people try to conform to social conventions (cf. Jones, Davis, & Gergen, 1961). In contrast, negative behaviors occur less frequently and reflect a break with social conventions. They often represent a desire to not conform to social prescriptions or an inability to do so. Negative behavior seems to provide the perceiver with a window into the dispositional qualities of the person.

If negative behaviors reflect more on the dispositional qualities of persons than on the circumstances they are in, whereas positive behaviors reflect more on the situations that occasion such behaviors rather than people’s dispositions, it would be expected that people would more readily make dispositional judgments for negative behaviors than positive behaviors. Much available research is consistent with this proposal. For example, in a study by Rothbart and Park (1986) people required many instances of confirming behavior before they were willing to ascribe positive traits to others, but in ascribing negative traits to others, little confirming evidence was needed (also see Reeder & Spores, 1983). Other researchers (Lingle & Ostrom, 1979, Experiments 2 & 3) have shown that when making judgments following impression formation, people were faster at making such judgments after having formed negative rather than positive impressions. Another demonstration of the readiness with which people make dispositional inferences for negative behavior was provided by Wyer and Gordon (1982, Experiment 2). These researchers found that people who were asked to form impressions remembered more behaviors performed by the target person than did people who were told to memorize the behavioral information, but only when the behavioral information was negative in valence. Because the difference in memory between impression and memorization conditions is believed to result from making dispositional judgments about the behaviors and using such inferences to organize and elaborate the behavioral information in memory (Hamilton, Katz, & Leirer, 1980; Klein & Loftus, 1990), the findings obtained by Wyer and Gordon indicate that people more readily inferred dispositional causes from the negative behaviors than from the positive behaviors.

In contrast to the ease with which dispositional judgments about negative behaviors are made, it appears that it is difficult to ascribe positive characteristics to others, because their behavior is often seen to be occasioned by situational demands, pressures, or rewards. The findings of a variety of studies are consistent with this proposal. For example, work by Lee and Hallahan (1998, Study 1) has shown that when providing attributions for negative behavior, people rated the behavior as being more dispositionally than situationally caused. However, when providing attributions for positive behavior (Study 2), they rated the behavior as being more situationally than dispositionally caused. Research has also shown that people are more sensitive to situational cues when learning about a person who enacts negative behaviors than when learning about a person who enacts negative behaviors. Vonk and Van Knippenberg (1994, Study 1) manipulated whether a target enacted positive or negative behavior and whether the behavior conformed to or deviated from situational demands. The findings indicated that for the target who enacted positive behavior, participants’ impressions of the target varied depending on whether the target’s behavior signaled conformity or deviance. However, for the target who enacted negative behavior, impressions were unfavorable regardless of the conformity manipulation. The finding for the positive behavior conditions is consistent with the idea that when learning about others’ positive behaviors, people are attuned to the situation in which the behavior occurs, and as a consequence, situational factors play a bigger role in moderating the dispositional implications of positive behavior than negative behavior.

These attributional patterns also surface when people already have trait expectations for a target. Research has shown that when people have formed trait impressions of a target, subsequently processed impression-consistent and impression-inconsistent behaviors elicit different types of attributions. Impression-consistent behaviors tend to elicit dispositional attributions, whereas impression-inconsistent behaviors tend to elicit situational attributions (Crocker, Hannah, & Weber, 1983; Hastie, 1984; Kulik, 1983). These findings suggest that impressions often remain unchanged in the face of contradictory evidence because inconsistencies are explained away to situational forces (e.g., Hewstone, 1989). However, given the proposed relation between positive behaviors and situations, the current analysis would suggest that the situational attributions generally elicited by impression-inconsistent behaviors should be stronger for positive than for negative expectancy-inconsistent behaviors. Therefore, it would be expected that positive disconfirming behaviors would be less effective at changing impressions than negative disconfirming behaviors, because the former should elicit stronger situational (discounting) attributions.

Available research is consistent with this suggestion. On the basis of an initial sample of behaviors, Reeder and Coovert (1986) led participants to form favorable or unfavorable impressions of a stimulus person. After providing their preliminary impressions, participants received a description of one final behavior that was inconsistent with the initial impression; they then gave their revised impressions. The results of the study showed that impressions changed to a greater degree following the processing of the negative impression-inconsistent behavior than the positive impression-inconsistent behavior. Vonk (1993) has obtained comparable results.

Given the proposed links between negative behaviors and dispositional attributions and between positive behaviors and situational attributions, it would be expected that people would best recall behavior and attribution information that is consistent with one of these patterns. Research on person memory supports this suggestion. Ybarra and Stephan (1996; Ybarra, 1999) have found that the recall of behaviors that have been explained by either dispositional or situational attributions depends on the valence of the behaviors. In this research, the participants were presented with behavioral information that was accompanied by attributions, and later they were asked to recall as much of this information as they could. It was found that people showed superior recall for two types of combinations: negative behaviors that were dispositionally attributed and positive behaviors that were situationally attrib-
uted. Negative behaviors that were situationally attributed and positive behaviors that were dispositionally attributed were not recalled as well. Similar effects have also been found in studies of memory for information presented about the behavior of group members (Ybarra, Stephan, & Schaefer, 1998) and for the recall of actual behaviors of acquaintances (Ybarra, Schaefer, & Stephan, 1998).

In sum, the above review is consistent with a framework in which negative behavior is more readily attributed to dispositional causes than situational causes, whereas positive behavior is more readily attributed to situational causes than dispositional causes. Such divergent attributional tendencies may reflect people’s implicit causal theories regarding societal rules and the nature of individuals who do or do not abide by those rules. One implicit causal theory specifies that negative behaviors are more likely to be caused by dispositional than situational factors, whereas the other implicit causal theory specifies that positive behaviors are more likely to be caused by situational than dispositional factors.

If people do possess these implicit causal theories that they use to understand negative and positive behaviors, such theories should have implications for the prediction of future behaviors. That is, people may not only infer the causes of behavior by invoking one of these theories (e.g., if the behaviors are negative, the causes are likely to be dispositional), they may also use the theory as a basis for predicting behavior from an attributional orientation (e.g., if the causes of behavior are dispositional, then the behaviors are likely to be negative). In this manner, people who are primed to think of dispositional causes should expect that a target will enact more negative behaviors than people who are primed to think of situational causes. In contrast, people who are primed to think in terms of situational causes should expect that a target will enact more positive behaviors than people who are primed to think of dispositional causes. Experiment 1 was designed to test these ideas by manipulating participants’ beliefs about the typical causes of a target person’s behavior and then asking them to make behavioral predictions for the target. The belief manipulation was intended to induce an attributional orientation, which refers to a general proclivity to attribute the behaviors of others to dispositional factors or to situational factors.

Study 1

Method

Design and participants. Forty-two students taking an introductory psychology course at the University of Michigan were given course credit for participating in the study. All of the students were European Americans who were asked to make both positive and negative behavioral predictions regarding a fictional target person. However, before making their behavioral predictions, students received either a dispositional or a situational description of the target’s usual motives for behaving. The design of the study was a 2 (dispositional, situational orientation) × 2 (positive, negative behaviors) mixed factorial, in which the first factor varied between participants and the second factor varied within participants. The students were run in noninteracting groups of 2 to 4.

Materials and procedure. Students were brought into the lab and told that they would be participating in a study that dealt with thinking about other people. At this point, students were asked to spend a few moments forming an impression of a person named Bob, who was described as a person whose behavior was either the result of the kind of person he was (dispositional orientation condition) or the result of the circumstances in which he found himself (situational orientation condition).

The manipulation in the dispositional orientation condition read as follows:

According to people who know Bob, Bob often has a good understanding of why he behaves as he does. He is typically aware of his needs and generally does what he wants or expects of himself. He rarely does things just because the situation or circumstances require it.

The manipulation in the situational orientation condition read as follows:

According to people who know Bob, Bob often has a good understanding of why he behaves as he does. He is typically aware of the situational forces surrounding what he does and generally does what the situation requires him to do. He rarely does things just because it is what he wants to do.

Once they formed their impressions of Bob, students were given the behavior prediction task. For this task, students were asked to indicate the likelihood that Bob would engage in various behaviors, half of which were described positively and half negatively. The scale on which the students indicated these likelihood estimates ranged from 1 (extremely unlikely) to 7 (extremely likely). Students were asked to provide likelihood estimates for 10 types of behaviors: 5 positive (good behaviors, intelligent behaviors, friendly behaviors, agreeable behaviors, competent behaviors) and 5 negative (bad behaviors, dumb behaviors, hostile behaviors, offensive behaviors, and incompetent behaviors). It is important to note that both ability (e.g., intelligence) and morality-related behaviors (e.g., agreeableness) were represented in this task (for a discussion on the differential diagnosticity of ability- and morality-related acts, see Skowronski & Carlston, 1987, 1989). After completing the behavior prediction task, students were debriefed about the study and thanked for their participation.

Results

To analyze the students’ behavioral prediction responses, we created two scores for each student, one index that represented the prediction of positive behaviors and one index that represented the prediction of negative behaviors. In creating the first index, each student’s responses to the positive behaviors (good, intelligent, friendly, etc.) were summed and then averaged. A parallel index was created for the negative behaviors (bad, offensive, incompetent, etc.). The Cronbach’s alphas for the two indexes were .86 (positive behaviors) and .89 (negative behaviors).

The statistical design for the study was a 2 (dispositional, situational orientation) × 2 (positive, negative indexes) mixed factorial analysis of variance (ANOVA), with repeated measures on the latter factor. Table 1 displays the means for the analysis as

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<th>Behavior favorability</th>
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a function of the two factors. There was a main effect for behavior favorability, $F(1, 40) = 48.15, p < .0001$. This effect indicates that regardless of condition, people predicted that Bob would be more likely to enact positive behaviors than negative behaviors. This finding is consistent with previous research showing that people expect others to engage in more positive than negative behaviors (Reeder et al., 1982; Skowronski & Carlton, 1987). The finding is also consistent with the current analysis, which suggests that positive behavior occurs more frequently because it is socially prescribed and reinforced. With regard to the prediction of the different behaviors depending on the attributional orientation condition, the interaction was significant, $F(1, 40) = 4.25, p < .04$. The planned contrast for the negative behaviors showed that people who believed that Bob was motivated by dispositional factors indicated he was more likely to engage in negative behaviors than did people who thought he was motivated by situational factors, $F(1, 40) = 3.13, p < .04$, one-tailed. This pattern was reversed for the prediction of positive behaviors: In this case participants who thought Bob was motivated by situational factors indicated he was more likely to engage in positive behaviors than did people who thought Bob was motivated by dispositional factors, $F(1, 40) = 3.58, p < .03$, one-tailed. These results support the hypothesis that the prediction of behavior depends on both the typical causes of the target’s behavior and the valence of the predicted acts.

Discussion

In addition to the general tendency to predict that others will enact positive behaviors (cf. Reeder et al., 1982; Skowronski & Carlton, 1987), the first study demonstrated that the extent to which people expected a target person to engage in positive versus negative behaviors depended on the description of the characteristic causes of his behavior. A person thought to be motivated by dispositional factors was expected to engage in more negative behaviors than a person thought to be motivated by situational factors, whereas a person thought to be motivated by situational factors was expected to engage in more positive behaviors than a person thought to be motivated by dispositional factors. This attribution--prediction bias is consistent with the idea that people possess implicit causal theories suggesting that negative conduct is more likely to be associated with dispositional causes, whereas positive conduct is more likely to be associated with situational causes. The present findings are also consistent with research by Reeder and colleagues (Reeder et al., 1982). In their research they found that target persons thought to have moderate dispositions (e.g., moderately friendly) and who were similar to someone who is sensitive to the situation (e.g., situationally oriented Bob) were expected to enact socially desirable behavior more frequently than targets who had extreme dispositions.

Despite the consistency of the findings of Study 1 with the theoretical rationale proposed in this article, it might be argued that the method by which dispositional or situational orientations concerning the target were induced activated other cognitions in addition to or instead of attributional orientations. For example, when reading about the dispositionally oriented target, people might have emerged with a preliminary impression of Bob as a selfless person, as he “generally does what he wants.” In contrast, when learning about the situationally oriented target, participants might have emerged with a preliminary impression of Bob as a selfless person, as he “generally does what the situation requires him to do” and “rarely does things just because it is what he wants to do.” It would not be surprising if people expected more negative behavior from the potentially selfish target than from the selfless target, or if they expected more positive behavior from the potentially selfless target than from the selfish target. In Study 2 we eliminated the possibility of this alternative explanation by separating the attribution orientation manipulation from the target for whom people made behavioral predictions.

Study 2

Method

Design and participants. Thirty-six students taking an introductory psychology course at the University of Michigan were given course credit for participating in the study. All of the students were European Americans who were asked to make both positive and negative behavioral predictions regarding a fictional target person. However, before making their behavioral predictions, in an ostensibly unrelated study students read through an excerpt that argued for dispositionalism or situationalism in understanding human behavior (see below). The design of the study was a 2 (dispositionalism prime, situationalism prime) × 2 (positive behaviors, negative behaviors) mixed factorial, in which the first factor varied between participants and the second factor varied within participants. The students were run in noninteracting groups of 2 to 4.

Materials and procedure. Students were brought into the lab and told that they would be participating in an experimental session that included various unrelated studies that were being conducted together because of their brevity. The first study dealt with writing styles. Students were asked to evaluate a two-paragraph statement ostensibly taken from a prestigious psychology journal (Psychological Review) for its clarity in writing. In reality, the passage was written to prime either a dispositional orientation or a situational orientation, in that the passage emphasized the informativeness, or lack thereof, of human behavior. Students in the dispositional orientation condition read the following:

Recent reviews of the social psychological literature shed light on how we understand the people around us. For example, the process of social perception, by which people observe or learn about the behaviors of others and then determine what the behaviors mean, is very accurate. Many psychologists believe that the amount of meaning a person can derive from learning about another person’s behaviors is great.

Numerous studies show that a person’s behavior, despite situational influences and pressures and the circumstances persons find themselves in, does give an objective perceiver a clear idea of what the person is like. A person’s behavior, consistent with the adage that “actions speak louder than words,” appears to say a great deal about the true nature of a person.

Students in the situational orientation condition read the following:

Recent reviews of the social psychological literature fail to shed light on how we understand the people around us. For example, the process of social perception, by which people observe or learn about the behaviors of others and then determine what the behaviors mean, is not very accurate. Many psychologists believe that the amount of meaning a person can derive from learning about another person’s behaviors is very limited.

Numerous studies now show that because a person’s behavior is so many times the result of situational influences and pressures and the circumstances persons find themselves in that an objective perceiver really has no idea what the behavior says about the person they are
observing. A person’s behavior, contrary to the adage that “actions speak louder than words,” appears to say very little about the true nature of a person.

To reinforce the manipulation, we had students indicate, after reading the passage, how clearly the paragraphs had been written on a scale ranging from 1 (not very clear) to 7 (very clear). Students were then told the study was completed, and that they would now participate in the other unrelated studies being conducted in the session. At this point, students were presented with the second, “unrelated study,” which was the behavior prediction part of the experiment. Students were asked to spend a few moments bringing to mind their image of the average person. After a minute of pondering the concept of the average person, students were given the behavior prediction task used in Study 1, with the students’ average person substituted for Bob. After completing the task, students were carefully debriefed. None of the students indicated that they had suspicion about the link between the two unrelated studies.

**Results**

As in Study 1, two scores were created for each student: One index represented the prediction of positive behaviors, and one index represented the prediction of negative behaviors. The Cronbach’s alphas for the two indexes were .77 and .82, respectively.

Table 2 displays the means for the analysis as a function of the two factors. Similar to Study 1, the ANOVA yielded a main effect for behavior favorability, \( F(1, 34) = 139.67, p < .0001 \). Overall, people predicted that positive behaviors were more likely than negative behaviors to be enacted by the average person. More importantly, the interaction of behavior favorability and attributional orientation was also reliable, \( F(1, 34) = 6.11, p < .01 \). In comparing the predictions of negative behaviors, we found that participants who had received the dispositional orientation prime thought the average person was more likely to engage in negative behaviors than did participants who had received the situational orientation prime, \( F(1, 34) = 4.46, p < .02 \), one-tailed. This pattern was reversed for the prediction of positive behaviors. For positive behaviors, participants who received the situational orientation prime thought the average person was more likely to engage in positive behaviors than did participants who received the dispositional orientation prime, \( F(1, 34) = 3.21, p < .04 \), one-tailed. These results are equivalent to those obtained in Study 1.

**Discussion**

Because of the interpretational problems associated with Study 1, in Study 2 we used a different attributional orientation prime. Despite the different manipulation, the findings of Study 2 showed the same attribution–prediction bias, with participants who had a dispositional orientation prime being more likely to expect negative behavior in a target than were participants primed with a situational orientation. In contrast, positive behavior was expected to a greater degree by participants primed with a situational orientation than by participants primed with a dispositional orientation. The findings are consistent with the current conceptualization positing that people possess implicit causal theories that suggest that negative conduct is more likely to be caused by dispositions, but that positive conduct is more likely to be caused by situations.

**Study 3**

To test these ideas further, we conducted a third study that used a very different operationalization of attributional orientations. This study was a conceptual replication of Studies 1 and 2, but it also helped to extend the generalizability of the results by looking at cultural differences in behavior prediction.

One of the most important dimensions used to distinguish cultures is individualism–collectivism (Triandis, 1995). People from collectivist cultures differ from people from individualistic cultures in a variety of ways, such as in their greater emphasis on the in-group as opposed to the individual, their greater distinction between in-groups and out-groups, and their greater emphasis on harmony and saving the face of the other. In addition, collectivist and individualistic cultures differ in their tendencies to make dispositional and situational attributions. People from individualistic cultures tend to see behavior as static, consistent across time, and as residing within the person (e.g., Heider, 1944; Ichheiser, 1943; Jellison & Green, 1981; Markus & Kitayama, 1991; Nisbett & Ross, 1980; Ross, 1977). Thus, in Western, individualistic cultures there is a tendency to fall prey to a fundamental attribution error, which consists of a propensity to make dispositional attributions to explain the behavior of others (Ross, 1977). Cross-cultural studies suggest that this error may not be universal. Instead, it appears that people in collectivistic cultures are apt to emphasize situational factors as explanations for the behavior of others. Collectivists see behavior as more dynamic and driven by context (social situations, position in the social hierarchy, social roles) and not as residing within the person (e.g., Bond, 1983; Dalal, Sharma, & Bisht, 1983; A. P. Fiske, Kitayama, Markus, & Nisbett, 1997; Fletcher & Ward, 1988; Geertz, 1975; Jahoda, 1982; J. G. Miller, 1984; Morris & Peng, 1994; Newman, 1993; Shweder & Bourne, 1984; Zebrowitz-McArthur, 1988).

An example of research on these attributional orientations is that of Morris and Peng (1994). In their studies, participants were exposed to ambiguous social events and then asked to indicate the extent to which the protagonist’s behavior was the result of dispositional or situational factors. The findings indicated that Westerners were more likely to rely on dispositional factors in explaining the protagonist’s behavior, whereas people from an East Asian country were more likely to rely on situational factors. What is particularly noteworthy about this research is that the attributional orientations were invoked by the participants even when they were explaining the behavior of fish presented to them on computer screens.

If people associate attributions and the valence of behavior in a similar fashion across cultures (i.e., possess similar implicit causal theories), it would be expected that people who are chronically
primed to think of dispositional causes (e.g., European Americans, Westerners) should expect that a target will enact more negative behaviors than will people who are chronically primed to think of situational causes (e.g., East Asians, Easterners), because dispositional causes are more likely to be associated with negative behaviors than are situational causes. In contrast, people who are chronically primed to think in terms of situational causes should expect that a target will enact more positive behaviors than people who are chronically primed to think of dispositional causes, because situational causes are more likely to be associated with positive behaviors than are dispositional causes. To test these ideas, we examined the behavioral predictions of Easterners (people from Asian cultures) and Westerners (people from the United States).

Method

Design and participants. Forty-two introductory psychology students were given course credit for participating in the study. Half of the students were Westerners (European Americans), whereas the other half were Easterners (South Central and Southeast Asian students, whose native language was not English and whose parents were not born in the United States). All participants were asked to make both positive and negative behavior predictions. Thus, the design of the study was a 2 (Western, Eastern heritage) × 2 (positive, negative behaviors) mixed factorial, in which the first factor varied between participants and the second factor varied within participants. The students were run in noninteracting groups of 2 to 4.

Materials and procedure. The procedure was similar to that of Study 2. Students were asked to bring to mind an image of what they thought the average person was like. Then they were asked to make behavioral predictions for the five positive and five negative behavioral classes.

Results

As was done in the previous studies, two scores were created for each subject: One index represented the prediction of positive behaviors and one index represented the prediction of negative behaviors. The Cronbach’s alphas for the two indexes were .84 and .89, respectively.

Table 3 displays the means for the analysis as a function of the two factors. Similar to Studies 1 and 2, the ANOVA yielded a main effect for behavior favorability, $F(1, 40) = 63.16$, $p < .001$. Overall, people predicted that positive behaviors were more likely to be enacted by the average person than negative behaviors. More importantly, the interaction of behavior favorability and cultural heritage was also reliable, $F(1, 40) = 5.24$, $p < .02$. In comparing the prediction of negative behaviors, we found that Westerners thought the average person was more likely to engage in negative behaviors than did Easterners, $F(1, 40) = 3.78$, $p < .02$, one-tailed. This pattern was reversed for the prediction of positive behaviors: Easterners thought the average person was more likely to engage in positive behaviors than did Westerners, $F(1, 40) = 2.73$, $p < .05$, one-tailed. These results are conceptually equivalent to those obtained in Studies 1 and 2.

Discussion

The results of the third study indicate that people from Eastern collectivistic cultures regard positive behaviors as being more likely than do people from a Western individualistic culture (the United States). They also regard negative behaviors as being less likely than do people from an individualistic culture. This conceptual replication of the attribution–prediction bias provides additional support for the idea that people have implicit causal theories suggesting that negative behavior is more likely to be associated with dispositional factors, but that positive behavior is more likely to be associated with situational factors (Ybarra & Stephan, 1996). Ybarra, Stephan, & Schaberg, 1998). In the present study, the different attributional orientations were not brought to mind through recent sources of activation but instead reflect the prevailing approaches to explaining behavior in the East and the West (A. P. Fiske et al., 1997; Geertz, 1975; Shweder & Bourne, 1984). In the East, situational factors play a major role in explanations for social behavior (J. G. Miller, 1984; Morris & Peng, 1994); people’s behavior is much more circumscribed by their social roles, their positions in social hierarchies, and rituals and norms (De Mente, 1991). Thus, people from the East chronically use attributions that emphasize situational causes for behavior. For people from the West, individual choice plays a greater role in behavior (J. G. Miller, 1984). Behavior is seen as less under the control of situations and more under the control of the person (e.g., Heider, 1944; Markus & Kitayama, 1991; Nisbett & Ross, 1980; Ross, 1977). Thus, Westerners are apt to use attributions that emphasize dispositional factors to explain behavior (cf. Ichheiser, 1943; Jelison & Green, 1981).

This pattern of effects has some potentially important implications for intercultural interactions. Although there is a general tendency to expect positive behavior from others, it is possible that Westerners and Easterners enter interactions with strangers with basic assumptions about human behavior that are subtly different. It appears that Easterners, to a greater degree than Westerners, expect people to behave in positive ways and to refrain from behaving in negative ways. When Westerners do not confirm these expectations, Easterners may perceive Westerners as being rude or interpersonally insensitive. Westerners, on the other hand, may be predisposed to expect more negative behavior and to regard the polite behaviors they experience as overly solicitous and unnecessary. They may also think that people from the East are overly sensitive to minor deviations from social norms and may resent feeling that their behavior is being carefully scrutinized and evaluated. Thus, these subtle cultural differences in behavioral expectations may contribute to the discomfort and anxiety that often characterizes intercultural interactions.

In spite of the convergence of all three studies on the pattern of behavior prediction suggested by the current analysis, the mecha-
nism underlying these effects merits a more direct empirical test. The present framework suggests that such behavior prediction patterns emerge because people have implicit causal theories that relate behaviors differing in valence to different types of attributions. If people do have an implicit causal theory with which they can infer the greater occurrence of negative behaviors given a dispositional rather than a situational attributional orientation, it would be expected that negative behaviors would be better learned following the presentation of a dispositional rather than a situational causal context for those behaviors (e.g., the behavior “the person left the restaurant without paying” should be better encoded following “After plotting and devising a scheme” [dispositional context] than “After drinking too much and forgetting” [situational context]). This should occur because negative behaviors preceded by a dispositional causal context would better fit people’s implicit causal theory for negative acts (cf. Bransford & Johnson, 1972; Thorndyke, 1977). Similarly, if people do have an implicit causal theory with which they can infer the greater occurrence of positive behaviors given a situational rather than a dispositional attributional orientation, it would be expected that positive behaviors would be better learned following the presentation of a situational rather than a dispositional causal context for those behaviors (e.g., the behavior “Bob returned the extra change he received at the supermarket” should be better encoded following “After being seen by the person standing behind him” [situational context] than “As a matter of integrity” [dispositional context]). This should occur because the positive behaviors preceded by a situational causal context would better fit people’s implicit causal theory for positive acts (cf. Bransford & Johnson, 1972; Thorndyke, 1977). The premise for this prediction is that well-developed knowledge structures focus attention on information that is congruent rather than incongruent with them (Stangor & Ruble, 1989). If it is assumed that people’s implicit causal theories are well developed and widely used, as the review in the introduction indicates, congruity encoding, rather than incongruity encoding, should be the general process by which information in this experiment is encoded and recalled. The fourth experiment was designed to test these possibilities.

Study 4

Method

Design and participants: Thirty-eight introductory psychology students participated in the study for course credit. Participants were presented with dispositional or situational pretrial contexts followed by positive and negative behaviors. Participants’ recall of the behavioral statements was parsed into actor, verb, object, and preposition. Thus, the design of the study was a 2 (dispositional, situational pretrial context) × 2 (positive, negative behavior) × 4 (actor, verb, object, preposition sentence part) mixed factorial; all three factors varied within participants, even the priming contexts. Participants were run in noninteracting groups of 2 to 4.

Materials and presentations: The stimuli and pretrial contexts used in this study were a subset taken from Winter and Uleman (1984) and Lupfer, Clark, and Hutcherson (1990). The stimuli were composed of 14 behavior statements, of which half were positive and half were negative in valence. Each of the behaviors was presented with an introductory statement designed to create a dispositional or situational pretrial context for the behavior, as was done by Lupfer et al. The pretrial context and associated retrieval cues had been pilot tested by Lupfer et al. to verify not only their semantic relatedness but also their locus of causality. However, the favorability of the behaviors had not been determined. For the current research, a separate set of norming participants (n = 9) was asked to evaluate the valence of the behaviors on a scale that ranged from 1 (very unfavorable) to 9 (very favorable). The results validated the difference in the favorability of the behaviors. The negative behaviors were rated as unfavorable (M = 2.71) and the positive behaviors were rated as favorable (M = 6.76). F(1,8) = 206.43, p < .0001.

Two sets of the materials were created. In one set, the behaviors (positive: “The accountant takes the orphans to the circus”) followed a dispositional pretrial context (e.g., “An accountant talks with his business partners about sponsoring weekend outings for the children in an orphanage. His business partners turn him down. Even so, he volunteers to help on weekends”). In the other set, the same behavior followed a situational pretrial context (e.g., “As a gesture of community goodwill, a business sponsors weekend outings for the children who live in a nearby orphanage. Each employee has been asked by the owners to sign up for one outing every 6 months”). The same was done for the negative behaviors. For example, for the negative behavior “The deliveryman loses his savings in a poker game,” the dispositional pretrial context read “The deliveryman loves to gamble large sums of money, even when he doesn’t have the money and when his family objects. He borrows money from a loan company to pay for a weekend gambling junket. He loses money in a blackjack game.” The situational pretrial context read “The deliveryman and his buddies accept an invitation to a weekend gambling junket, not realizing that the organizers are corrupt. Several others have already been taken in by those con men. The deliveryman’s buddies lose a lot of money in a crooked blackjack game.”

Procedure: Participants were brought into the lab and told that they would be participating in an impression formation study. The experimenter informed participants that they would be presented with behaviors performed by different people and that they should form an impression of each person. Each pretrial statement and behavior were presented one set per page. The 14 sheets were collected in one of two booklets, which corresponded to one of two randomization schemes. The two randomization schemes were constructed such that each type of pretrial context and behavior combination (situational positive, dispositional positive, situational negative, dispositional negative) occurred in each of the three blocks of behaviors. Participants were paced through each pretrial statement and behavior pair at 10-s intervals. Pretesting had shown that this was enough time for participants to read each behavior and its associated introductory statement.

After participants finished forming their impressions, they were presented with a 5-min interpolated task to reduce working memory influences on recall. Participants were then presented with an 8-min surprise cued-recall task. For this task participants were given 14 words (1 for each behavior) to use as cues in trying to retrieve the behaviors learned during the impression formation task. The cues were taken from those used by Winter and Uleman (1984) and Lupfer et al. (1990) and were related to the pretrial context in which the target behavior was introduced. For example, in the stimulus set in which the positive behaviors were preceded by a situational context, during the recall task participants were provided with the corresponding situational cues. For the positive behaviors that occurred within dispositional contexts, participants were provided with the corresponding trait cues. The same was done for the negative behaviors. Once participants completed the recall task, they were thoroughly debriefed.

Results

A strict cueing criterion was used to score participants’ recall. That is, for behaviors to be scored they had to be triggered by their corresponding (correct) retrieval cue. In addition, similar to Winter and Uleman (1984), each correctly cued behavior was parsed into actor, verb, object, and preposition. Each element present in a recalled behavior was scored as 1 point, so that the total possible score for recalling a behavior was 4.
Participants' recall was submitted to a 2 (dispositional, situational prefatory context) × 2 (positive, negative behavior) × 4 (actor, verb, object, proposition sentence part) repeated measures ANOVA. The analysis produced a main effect for sentence part, similar to earlier research (Winter & Uleman, 1984), F(3, 35) = 32.02, p < .0001. Overall, recall was greater for the verb (M = 5.03) and object elements (M = 5.05) than the actor (M = 2.97) and proposition elements (M = 3.29). The sentence part factor did not interact with any of the other factors. Of greater interest was an interaction of prefatory context and behavior valence, F(1, 37) = 9.20, p < .004 (see Table 4). Consistent with the current framework, negative behaviors were remembered to a greater extent when cued by dispositional trait cues than by situational cues, F(1, 37) = 5.02, p < .01, one-tailed. In contrast, positive behaviors were better remembered when cued by situational cues than by dispositional trait cues, F(1, 37) = 2.65, p < .05, one-tailed.

Discussion

Studies 1, 2, and 3 demonstrated a bias in behavior prediction associated with attributional orientations. In Studies 1 and 2 we approached this issue by using experimentally manipulated attributional orientations, whereas in Study 3 we took advantage of naturally occurring tendencies to emphasize dispositions (Western students) or situations (East Asian students) as causes of behavior. The attribution--prediction bias indicates that people with a dispositional orientation predict more negative behaviors than do people with a situational orientation, whereas people with a situational orientation predict more positive behaviors than do people with a dispositional orientation. This apparent correspondence between attributional orientations and behavioral predictions points to the existence of implicit causal theories suggesting that negative conduct is more likely to be caused by dispositions, but that positive conduct is more likely to be caused by situations. The fourth study was designed to provide a more direct test of this mechanism. The findings indicated that dispositional prefatory contexts facilitated memory for negative behavior to a greater degree than did situational prefatory contexts. In contrast, situational prefatory contexts facilitated memory for positive behaviors to a greater degree than did dispositional prefatory contexts. These findings suggest that behaviors with causes fitting people's implicit causal theories tend to be better remembered than those that do not (cf. Bransford & Johnson, 1972; Thorndyke, 1977).

Conclusions

The findings of the present research provide a basis for developing a model of certain types of behavioral predictions. Specifically, it may be the case that frequently activated attributional orientations, which are reinforced by regularities in one's cultural environment, provide a general basis for behavior prediction. However, the mental framework in which these enduring orientations operate is flexible, allowing people to respond to attributional cues in the environment. Such cues can provide a source of recent activation for a dispositional or situational orientation, which will then influence subsequent predictions of behavior. For example, Westerners may be more apt to predict that people are likely to engage in negative behavior than Easterners would, but if the context cues the idea that people behave in accordance with situational constraints (e.g., being in front of spectators), Westerners may decrease the frequency with which they predict negative behaviors.

The present research also has implications for how people perceive others in their environment and how they regulate their behavior in response to them. For example, if a person's attributional orientation leads him or her to expect negative behaviors from others, there may be a lower threshold for enacting avoidance responses than when the attributional tendency leads to an expectation of positive behaviors from others. Further, it might be that the set of circumstances in which interactions take place serves to prime certain attributional orientations, with contexts that prime a dispositional attributional orientation raising expectations of negative behavior, whereas those that prime a situational attributional orientation increasing the expectation of positive behavior.1

1 The findings of the present research also have implications for theories of attribution. Although they consider the influence of situations on behavior, most available models of the attribution process place an emphasis on dispositional attributions (e.g., Ross, 1977). For example, Gilbert, Pelham, and Krull (1988) propose that people understand the causes of behavior by first drawing dispositional (e.g., trait) inferences and then adjusting those inferences by taking into account situational information through a more controlled cognitive process. Other researchers have discussed the use of situational information in the attribution process in different ways. For example, from Tropf's (1986) perspective, situational information may play a role in the identification of behavior, the outcome of which is then fed into a dispositional attribution stage. Shoda, Mischel, and Wright (1989) suggest that people have theories about the situations in which certain behaviors are likely to occur. However, according to these researchers, people's theories of situations and behavior represent theories of personality, that is, of dispositional causes. Finally, research by Krull (1993) suggests that the tendency to make dispositional attributions dominates unless it is overridden by explicit instructions for people to carefully understand the situation in which the behavior occurred. The present framework suggests that a situational causal understanding of behavior may readily occur, and that whether a dispositional or a situational inference is made depends on the favorability of the behavior that is to be explained. Negative behaviors are more likely to elicit dispositional inferences than positive behaviors are, whereas positive behaviors are more likely to elicit situational inferences than negative behaviors are. Further, given the certainty with which negative dispositional inferences are made (e.g., Lingle & Ostrom, 1979; Reeder & Spores, 1983; Rothbart & Park, 1986; Wyer & Gordon, 1982) and maintained (Reeder & Covert, 1986; Vonk, 1993), it seems that such inferences might not undergo much modification with situational information, even through a controlled cognitive process. The research by Reeder and Covert (1986) and Vonk (1993) has demonstrated this in the impression formation domain. Similarly, for positive behavior, it seems that such behaviors might not undergo much modification with dispositional information (i.e., information that favors making a positive dispositional inference).

Table 4

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<th>Mean Cued Recall as a Function of Prefatory Context and Behavior Favorability</th>
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<tr>
<td><strong>Behavior Favorability</strong></td>
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<td>Favorable</td>
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<td>Unfavorable</td>
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In addition to the influence of recent or chronic sources of activation on attributional orientations, it may be that other factors will also impact behavior prediction. Factors such as interaction goals, the nature of the relationship people have with the target, whether the target is an individual or a social group, the nature of the behavior domain (e.g., ability or morality), or whether the behaviors do or do not confirm to roles may influence the extent to which people predict positive and negative behavior. For instance, with regard to interaction goals, research has shown that people who are outcome dependent are less likely to draw dispositional inferences about others than are people who are not outcome dependent (e.g., S. T. Fiske, Neuberg, Beattie, & Milberg, 1987). This would suggest that outcome-dependent people might expect more positive behavior than non-outcome-dependent people, who in turn might expect more negative behavior from others. It is also possible that the current framework is less applicable when people are perceiving liked others or members of in-groups. It seems reasonable to expect that when predicting the behavior of liked others or in-group members, a dispositional orientation would not lead to the expectation of negative behavior, because people may have different implicit causal theories for liked others and in-group members (i.e., that positive acts reflect dispositions) than they do for disliked others and out-group members (i.e., that negative acts reflect dispositions: Ybarra, Schaberg, & Stephan, 1998; Ybarra, Stephan, & Schaberg, 1998).

A long-standing idea underlying attribution research is that people engage in causal analysis to have a sense of control over their social environment and be in a position to predict the behavior of others around them. An important distinction in the type of behavior people come to expect from others is whether they will behave in a positive or negative manner. The present research indicates that these expectations are intimately tied to whether people see others as being guided by dispositions or situations.

References


Knoll, D. S. (1993). Does the gris change the mill? The effect of the