Curiosity as a moderator of explanation effects on counterproductive outcomes

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ABSTRACT

Although research has shown that adequate explanations can prevent counterproductive reactions to negative events, scholars have yet to explore the person variables that can make explanations more effective for some individuals than for others. The study proposed that curiosity, an individual difference that captures the desire for knowledge, moderates the effects of explanation adequacy on counterproductive behaviors (theft and task performance) and emotional reactions (anger and anxiety). A laboratory study induced an unexpected reduction in extra credit points and manipulated two aspects of explanation adequacy: specificity and medium (N = 233). The analyses showed that explanation adequacy has more beneficial effects on behavioral and emotional reactions for individuals high in curiosity than for those low in curiosity. Surprisingly, the results showed that the provision of an adequate explanation has deleterious effects on counterproductive reactions for individuals low on curiosity. Although these findings were unexpected, the pattern appears to be consistent with individual differences in information processing strategies associated with personality-based curiosity. The findings have important implications for the theoretical discourse on the processes by which individuals determine the fairness of organizational outcomes. The results are consistent with fairness theory, in that, curious individuals carefully evaluated the information contained in an explanation when forming a judgment of fairness. However, the predictive utility of fairness theory will not transpire when judgments are formed through the use of simple decision rules or cognitive heuristics. The construct of curiosity offers a means with which to better understand how individuals interpret and react to explanations.

Keywords: organizational justice, explanations, personality, curiosity, information processing

Research in the explanations literature has shown that providing an adequate explanation for negative events can prevent counterproductive behaviors, defined as intentional behaviors that, when viewed from the organization's perspective, are contrary to its legitimate interests (Sackett & Devore, 2001). For example, two studies by Greenberg revealed that providing an adequate explanation for the reasons behind a pay cut reduced theft levels following the cut (Greenberg, 1990, 1993). Konovsky and Cropanzano (1991) showed that providing an adequate explanation for a new drug testing policy prevented any decreases in job performance. At a more affective level, Shapiro (1991) demonstrated that an adequate explanation for an unethical act reduced negative emotions following the act. Recently, a meta-analysis by Shaw, Wild, and Colquitt (2003) yielded a moderate to strong negative relationship between explanation adequacy and "retaliation responses," a variable that captured counterproductive behavioral and emotional reactions.

Of course, adequate explanations are not always effective in preventing counterproductive reactions, and Shaw et al.'s (2003) meta-analytic review pointed to the existence of moderators of explanation effects. A recent narrative review by Bobocel and Zdaniuk (2005) argued that some moderators might be rooted in the receiver of the explanation, as individuals are not passive recipients of explanations but rather active information processors who engage in causal analysis. In particular, the authors suggested that future research should explore "the moderating role of person variables that might influence receivers' proclivity to ask why" (p. 489). One variable that reflects Bobocel and Zdanuik's (2005) "proclivity to ask why" is a personality-based form of *curiosity*, defined as a desire for acquiring new knowledge or sensory experiences that motivates exploratory action (Berlyne, 1954; Litman & Spielberger, 2003; Loewenstein, 1994). It may therefore be well-suited to explain variations in responses to adequate explanations for negative events.

To investigate the relevance of curiosity to the functioning of explanations, we tested the conceptual model summarized in Figure 1 (Appendix). Specifically, we explored whether curiosity moderated the effects of adequate explanations on two types of counterproductive reactions to negative events: behavioral reactions (e.g., theft and decreased task performance) and emotional reactions (e.g., anger and anxiety).

EXPLANATION ADEQUACY

Understanding the beneficial effects of explanation adequacy requires describing exactly what it means for an explanation to be "adequate." Shapiro, Buttner, and Barry (1994) conducted three independent studies identifying the most critical criteria of explanation adequacy, measured as the participants' satisfaction with the explanation received. One criterion was *specificity*—the degree to which the explanation offers detailed unambiguous information about why a negative event occurred. Another criterion was *verbal medium*—the degree to which the explanation is delivered face-to-face in an oral fashion, as opposed to a written memo or letter. Shapiro et al.'s (1994) analyses showed that specific, verbal explanations were perceived as most satisfactory.

Adequate explanations have been shown to prevent a number of counterproductive behaviors (for a review, see Shaw et al., 2003). To explain the beneficial effects of explanations, many scholars rely on fairness theory (Folger & Cropanzano, 2001). This theory suggests that reactions to an event depend on assessments of three counterfactuals that compare the present circumstance to imagined alternatives: (1) the "would" counterfactual, which compares a person's current state of well-being with other potential states; (2) the "could" counterfactual,

which assesses whether other feasible options were available to the authority; and (3) the "should" counterfactual, which assesses whether the event violated moral or ethical standards. The theory predicts that negative emotional and behavioral consequences, such as anger, resentment, blame or retaliation, will occur when individuals believe that an authority could have and should have acted differently, and that their well-being would have been enhanced if those alternate actions had played out. One means of mitigating these negative consequences is by providing a specific, verbal explanation for why the event occurred.

Specific explanations provide information that can shape beliefs about the "could have" and "should have" components of fairness theory (Colquitt & Chertkoff, 2002; Folger & Cropanzano, 2001; Gilliland, Groth, Baker, Dew, Polly, & Langdon, 2001; Shaw et al., 2003). A specific explanation can illustrate that feasible options were not available (could not have acted differently) or that the chosen course of action was justified on some ethical grounds (should not have acted differently). If individuals feel that the authority could not and should not have acted differently, they are less likely to want to "get even" and less likely to engage in subsequent retaliation. In contrast, offering individuals a vague explanation may be incapable of reshaping counterfactual beliefs if too little information is provided. The end result is that a vague explanation is less capable of preventing the emotions and counterproductive behaviors that accompany a negative event. In the language of fairness theory, vague explanations may suggest that the authority "could have" and perhaps "should have" acted differently.

Explanations that are delivered verbally rather than in writing can also provide information that is relevant to the fairness theory components. Media richness theory suggests that face-to-face verbal communication is the "richest" medium because it has the capacity to transmit multiple cues such as body language, facial expression, voice tone, and inflection (Daft & Lengel, 1984, 1986). These cues offer unique information that goes beyond the actual content of the explanation. For example, Stiff, Miller, Sleight, Mongeau, Garlick, and Rogan (1989) demonstrated that participants primarily relied on visual cues (e.g., posture shifts, eye blinks, broken eye contact, smile duration), as opposed to message content, when making truthfulness judgments. For this reason, a verbal explanation can aid in the assessment of "could have" and "should have" concerns by providing cues as to the truthfulness of the explanation content, as well as by increasing the perceived strength of the explanation. Thus, holding content constant, verbal explanations should be more likely to mitigate the negative emotional and behavioral consequences associated with negative events.

CURIOSITY AS A MODERATOR

Modern scholarly interest in curiosity can be traced back to Berlyne (1954), who distinguished between two forms of curiosity. "Perceptual curiosity" is aroused by novel stimulus patterns and can be used to explain the exploratory behaviors of humans when they encounter unusual sights or sounds (Berlyne, 1954, 1966). In contrast, "epistemic curiosity" reflects a drive for knowledge aroused by novel, surprising, or puzzling situations and questions (Berlyne, 1954). The epistemic form of curiosity is believed to spur scientific advancement and educational achievement (Loewenstein, 1994). The remainder of this manuscript will use the term "curiosity" to reflect "epistemic curiosity."

The mechanisms that underlie curiosity have been explored by a number of scholars. In Berlyne's (1954) view, curiosity represents a drive to satiate the aversive arousal created by the need to explain novel, surprising, or puzzling situations. That drive can be satiated by a number

of behavioral sequences, including thinking, observing, and consulting authorities. In Kagan's (1972) view, curiosity reflects one of four basic human motives—the need to resolve uncertainty. Still other scholars have viewed curiosity as a natural human tendency to make sense of the world, particularly when violated expectations occur during some event (Loewenstein, 1994). In an integration of several of these perspectives, Loewenstein (1994) described curiosity as a "reference-point phenomenon." It is activated when one's current level of knowledge falls short of the "informational reference-point" that captures what one wants to know. Curious individuals are particularly drawn to facts and details that can help them close this "information gap." Such individuals often are more motivated by the aversiveness of not possessing the information than by the anticipated pleasure from attaining the information (Loewenstein, 1994; Spielberger & Starr, 1994).

Like many motivational and emotional constructs, curiosity can be viewed as both a state and a personality variable (Litman & Spielberger, 2003; Loewenstein, 1994; Spielberger & Butler, 1971; Spielberger, Peters, & Frain, 1976, 1981). A personality-based form of curiosity captures individual differences in sensitivity to information gaps and individual differences in the intensity of information seeking tendencies. High levels of personality-based curiosity reflect an interest in exploring new ideas, a desire to discover solutions to novel problems, and an interest in figuring out how things work across contexts and across situations (Litman & Spielberger, 2003). Because of its focus on sensitivity to information gaps, uncertainty, and violated expectations, the personality-based form of curiosity seems well-suited to capturing the "proclivity to ask why" referenced by Bobocel and Zdaniuk (2005). It may therefore be uniquely suited to explaining variations in responses to adequate explanations for negative events. After all, from a fairness theory perspective, the central purpose of an explanation is to fill an information gap to shape the questions triggered by uncertainty and violated expectations (Colquitt & Chertkoff, 2002; Folger & Cropanzano, 2001; Gilliland et al., 2001; Shaw et al., 2003).

BEHAVIORAL REACTIONS: THEFT AND PERFORMANCE

As noted at the outset, adequate explanations have been shown to prevent a number of counterproductive behavioral reactions, ranging from increased theft to decreased task performance (Greenberg, 1990, 1993; Konovsky & Cropanzano, 1991). When negative events go unexplained, such behaviors can comprise a form of retribution or revenge—attempts to "get even" (Bies & Tripp, 1996; McLean Parks, 1997; Tripp, Bies, & Aquino, 2002). Although often viewed as a "hot" or "emotional" phenomenon, a qualitative study by Bies and Tripp (1996) revealed that revenge is often "cool and calculated." That is, revenge acts are often the result of a rational, self-controlled attempt to restore some general sense of balance or justice. Alternatively, revenge actions may occur in order to restore a sense of status or to "stand up for oneself" (Tripp & Bies, 1997).

Why are adequate explanations a potentially effective means of preventing revenge following negative events? One reason is that revenge begins with blame (Bies & Tripp, 2002) and perceptions of blame can be shaped by adequate explanations (Folger & Cropanzano, 2001). Fairness theory suggests that adequate explanations can answer the "could the authority have acted differently?" question by pointing out that other courses of action were not feasible (Colquitt & Chertkoff, 2002; Folger & Cropanzano, 2001; Gilliland et al., 2001; Shaw et al., 2003). Adequate explanations can also answer the "should the authority have acted differently?"

question by pointing out that the chosen course of action was morally justified (Colquitt & Chertkoff, 2002; Folger & Cropanzano, 2001; Gilliland et al., 2001; Shaw et al., 2003). According to fairness theory, if an explanation satisfies either the "could have" or "should have" question, the authority will not be blamed for the negative event (Folger & Cropanzano, 2001).

High levels of personality-based curiosity should magnify the importance of adequate explanations for two reasons. First, curious individuals should be more likely to react to a negative event by engaging in counterfactual thinking. Curious individuals engage in more specific exploration by attempting to acquire knowledge to reduce the uncertainty and gap in information revealed by a discrete event (Berlyne, 1954, 1966; Kagan, 1972; Litman & Spielberger, 2003; Loewenstein, 1994). The counterfactual thinking described by fairness theory is itself a process of reducing uncertainty, with individuals trying to decide whether an authority should be held accountable for a negative event. It therefore follows that curious individuals will be more likely to engage in counterfactual thinking, making the information present in specific and verbal explanations more impactful.

Second, curious individuals should also be more attentive to the unique information offered by the body language, facial expression, and vocal cues inherent in a verbal explanation. In this way, curious individuals become more active participants in decision events, being more motivated to understand why an event occurred and what role the authority figure played. This increased motivation should positively affect the persuasiveness of the message when adequate explanations are presented, as curious individuals should be more attentive to the explanation. Thus, adequate explanations should be especially beneficial to curious individuals. We therefore predicted:

> Hypothesis 1: Curiosity moderates the effects of explanation specificity on behavioral reactions (theft, performance), such that specific explanations improve behavioral reactions more for individuals high in curiosity rather than low in curiosity.
> Hypothesis 2: Curiosity moderates the effects of verbal medium on behavioral reactions (theft, performance), such that verbal explanations improve behavioral reactions more for individuals high in curiosity rather than low in curiosity.

EMOTIONAL REACTIONS: ANGER AND ANXIETY

Though perhaps examined with less frequency than other outcomes, adequate explanations for negative events have also been shown to prevent adverse emotional reactions such as anger, resentment, disapproval, and condemnation (Baron, 1990; Bies, Shapiro, & Cummings, 1988; Davidson & Friedman, 1998; Folger & Martin, 1986; Shapiro, 1991). Linking explanations to negative emotions is consistent with referent cognitions theory—the precursor to fairness theory—which argues that individuals respond to negative events with anger and resentment, particularly when the events are unjustified (Folger, 1986, 1987, 1993). The linkage is also consistent with fairness theory, which acknowledges that counterfactual thinking can trigger a number of negative emotions, including anger (Cropanzano, Weiss, Suckow, & Grandey, 2000). In keeping with this past empirical and theoretical work, our study included anger as a counterproductive emotional reaction. However, we also included anxiety on the grounds that adequate explanations can help reduce the uncertainty felt by individuals (Schweiger & DeNisi, 1991). Recent theorizing has suggested that fair treatment is valued primarily because it helps individuals manage the uncertainty experienced in day-to-day life

(Lind & Van den Bos, 2002; Van den Bos & Lind, 2002). A taxonomy of discrete emotions offered by Lazarus and Cohen-Charash (2001) noted that anger is felt after a "demeaning offense against me and mine" (p. 62), whereas anxiety is felt when "facing an uncertain threat" (p. 64).

Curiosity should moderate the emotional effects of adequate explanations for many of the same reasons described above, with curious individuals being more likely to (a) engage in counterfactual thinking in response to negative events, and (b) attend to the content and delivery of the explanations received. However, there are reasons to expect curiosity to moderate emotional effects. Scholars have explained the "drive to know" on the part of curious individuals by suggesting that information gaps create an aversive affective arousal (Berlyne, 1954; Litman & Jimerson, 2004; Litman, Hutchins, & Russon, 2005; Loewenstein, 1994). The exploratory behaviors triggered by curiosity, such as thinking, observing, and consulting with authorities (Berlyne, 1954), are more focused on relieving that negative affect than on attaining the pleasure that might accompany the desired facts and details (Loewenstein, 1994; Spielberger & Starr, 1994). It therefore follows that withholding those facts and details should be more likely to have negative emotional consequences for curious individuals, because their aversive arousal will not be satiated. We therefore predicted:

> Hypothesis 3: Curiosity moderates the effects of explanation specificity on emotional reactions (anger, anxiety), such that specific explanations reduce negative emotions more for individuals high in curiosity rather than low in curiosity.
> Hypothesis 4: Curiosity moderates the effects of verbal medium on emotional reactions (anger, anxiety), such that verbal explanations reduce negative emotions more for individuals high in curiosity rather than low in curiosity.

METHOD

Sample

The participants were 234 undergraduates enrolled in an introductory management course at a large, southeastern university. Females composed 49% of the sample. In exchange for participation, participants were given course credit.

Procedure

The hypotheses were tested using a 2 (explanation specificity: high or low) x 2 (explanation medium: verbal or written) factorial design. Upon entering the laboratory, participants were seated at one of six desks separated by walled partitions, ensuring participants could not see each other or communicate with one another. Each desk had a pen holder containing fifteen expensive-looking pens. Participants were told that they could choose a pen to use during the study, and that they could keep the pen they chose as a sign of the experimenter's appreciation. The participants then filled out a questionnaire that assessed curiosity, along with other personality scales. Next, the experimenter informed participants that there had been a change to the study and, as a result, they would only receive one extra credit point instead of the two points that were initially promised. Participants were then given a form described as an addendum that generally described the changes to the study, without providing any specific

details. The purpose of the addendum was to reinforce the information concerning the reduction in extra credit points.

The experimenter then provided a cover story to justify the kinds of measures that participants would complete. Explanation specificity and explanation medium were then manipulated. In the specific explanation condition, the experimenter provided subjects with a considerable amount of information regarding the decision to reduce the extra credit points. In the vague explanation condition, participants were given few details for the reduction in points. In the written conditions, the explanations were handed out to participants on a sheet of paper. In the verbal conditions, the experimenter delivered the explanation from memory. The content and wording of the explanations were held constant across the verbal and written conditions.

Following the explanation manipulations, participants were asked to complete a second questionnaire assessing emotional states. Participants were then given a brainstorming task followed by a reading comprehension task. The experimenter then announced that the study had concluded, but that the participants needed to fill out a departmental evaluation form used to assess the performance of experimenters. This form contained the manipulation check items.

After the experimenter handed out those forms, he told the participants to refrain from keeping the pen. Following the procedure used by Colquitt, Scott, Judge, and Shaw (2006) to operationalize theft, the experimenter informed participants that previous sessions had depleted the supply of pens and that all pens would be needed for the remaining sessions. The experimenter then left the room, giving participants the opportunity to take pens from their individual pen holders. Once all the participants had exited the room, the experimenter debriefed them about the true nature of the experiment as well as informing them that they would receive the full two points of extra credit.

Measures

Curiosity. Following past research by Litman and colleagues (Litman, Collins, & Spielberger, 2005; Litman, Hutchins, et al., 2005; Litman & Jimerson, 2004; Litman & Spielberger, 2003), curiosity was measured with the Epistemic Curiosity scale developed by Litman and Spielberger (2003). The coefficient alpha for the epistemic curiosity scale was .85.

Theft. Theft was measured by the number of pens taken from each participant's pen holder (pen holders held fifteen pens in total). Theft ranged from 0 (no pen taken) to 5 (the maximum number of pens taken by a participant), with most participants stealing one pen.

Performance. Task performance was assessed by scoring each participant's performance on a reading comprehension task. Number of correct answers served as the measure of reading comprehension performance, with correct answers ranging from a possible score of 0 (no correct answers) to 8 (all answers correct). We also used an idea generation task as a separate measure of task performance. Idea generation performance was measured using individual brainstorming output, in which participants were asked to generate different uses for a brick. The unit of measure was the total number of uses generated for the brick, which ranged from 2 to 25 among our participants. Our choice of tasks was driven by the desire to minimize individual differences in performance. In other words, performance differences should be the result of our manipulations rather than individual differences. Therefore, we chose measures that were slightly less ability driven than other performance measures. We also chose to use two relatively different task performance measures to capture different aspects of performance. Specifically,

our reading comprehension task could be said to capture diligence, carefulness, and verbal comprehension while our idea generation task captures things like novelty and speed of thought.
Negative Emotions. Anger and anxiety were measured with the PANAS-X (Watson & Clark, 1994). Sample items for the anger scale included: angry, hostile, disgusted, and scornful. Sample items for the anxiety scale included: nervous, jittery, and shaky. All ratings were based on short-term time instructions, with participants asked to indicate to what extent they felt a given way "right now, that is, at the present moment." Participants responded on a 5-point scale ranging from 1 = Very Slightly or Not at All to 5 = Extremely. Coefficient alphas were .83 for anger and .78 for anxiety.
Control Variables. We controlled for neuroticism when examining the emotional reactions, given that neuroticism reflects a general tendency to experience negative affective states (Perrewe & Spector, 2002). We also controlled for orderliness when examining performance using a reading comprehension task, as this facet of conscientiousness tends to affect performance. Given that our idea generation task captures different aspects of performance than the reading comprehension task, we chose openness to experience as a control variable. Research indicates that openness to experience predisposes individuals to be more creative (for a review, see Zhou & Shalley, 2003), and therefore should result in better performance on an idea generation task. Resulting from the inclusion of these individual differences, statistical power was enhanced (Cohen, Cohen, West, & Aiken, 2003). In addition to boosting statistical power, openness to experience was also measured to examine its relationship with curiosity. In fact, several Big Five conceptualizations include curiosity as a facet of openness (e.g., Costa & McCrae, 1992; Digman & Inouye, 1986; Goldberg ,1992 ; Goldberg, Johnson, Eber, Hough, Ashton, & Cloninger, 2006; John, Donahue, & Kentle, 1991; McCrae & Costa, 1987). All three personality traits were measured using a 5-point scale of 1 = *Strongly Disagree* to 5 = *Strongly Agree*. Coefficient alphas were .81, .82, and .87, respectively.
Manipulation Checks. Our first manipulation check was aimed at assessing whether participants had perceived the reduction in extra credit from 2 points to 1 point. We accomplished this by asking participants whether any details of the experiment had changed between when they signed up and when they arrived at the laboratory. Participants responded to this item by checking "yes" or "no." Explanation specificity was then assessed with one item: "Did the experimenter's explanation provide a lot of very specific details about why the change occurred?" (1 = *Definitely Not* to 5 = *Definitely*). The manipulation of explanation medium was assessed with one item: "Did the experimenter give you a verbal (i.e., face-to-face, oral communication) explanation detailing the exact reasons why this change occurred?" (1 = *Definitely Not* to 5 = *Definitely*).

RESULTS

Manipulation Checks

Of the 234 participants, 233 correctly perceived the reduction in extra credit from 2 points to 1 point (the remaining participant was excluded from further analyses). The specific explanation condition included 109 participants while the vague condition included 114. There were 68 participants in the written condition and 155 in the verbal condition. Initially, we were interested in examining the perceived warmth of the verbal explanation. Thus, we varied explanation warmth (warm vs. off-putting conditions) for participants in the verbal condition.

Unfortunately, an ANOVA revealed no significant main effect of the warmth manipulation on the warmth manipulation check. Therefore, we collapsed across warmth and off-putting conditions, which resulted in a larger number of subjects for the verbal condition, as compared to the written condition.

With respect to the explanation manipulations, an ANOVA revealed a significant main effect of the explanation specificity manipulation on the specificity check: $F(1, 233) = 27.45$, $p < .001$, $M = 4.28$ vs. 3.22, $SD = 1.46$), with no significant effect on the verbal medium check and no interaction effects. There was also a significant main effect of the verbal medium manipulation on the verbal medium check: $F(1, 233) = 58.19$, $p < .001$, $M = 4.69$ vs. 3.49, $SD = 1.26$), with no significant effect on the specificity check and no interaction effects.

Tests of Hypotheses

Table 1 (Appendix) presents the means, standard deviations, and zero-order correlations among the study's variables. Hypotheses 1 and 2 predicted that curiosity would moderate the effects of explanation adequacy on theft and task performance. The moderated regressions used to test these predictions are shown in Tables 2 and 3 (Appendix), respectively. Consistent with the recommendations of Cohen et al. (2003), we mean-centered curiosity before computing the product terms. The verbal medium x curiosity product term was significant for both theft and idea generation performance, with the pattern of those interactions shown in Figure 2 (Appendix). As predicted, the effects of a verbal medium were more beneficial (in terms of lowering theft and raising performance) for high curiosity individuals than for low curiosity individuals. The specificity x curiosity product term was significant for reading comprehension performance, with the pattern of that interaction shown in Figure 3 (Appendix). As predicted, the effects of a specific explanation were more beneficial for high curiosity individuals. Hypotheses 1 and 2 therefore received partial support.

Hypotheses 3 and 4 predicted that curiosity would moderate the effects of explanation adequacy on anger and anxiety. The moderated regressions used to test these predictions are shown in Table 4 (Appendix). The specificity x curiosity product term was significant for both anger and anxiety, with the pattern of those interactions shown in Figure 4 (Appendix). As predicted, the effects of a specific explanation were more beneficial (in terms of lowering anger and anxiety) for high curiosity individuals than for low curiosity individuals. Contrary to predictions, the verbal medium x curiosity interactions were not significant for either emotional reaction, failing to support Hypothesis 4.

DISCUSSION

Although past research has shown that adequate explanations can prevent counterproductive reactions to negative events (Greenberg, 1990, 1993; Konovsky & Cropanzano, 1991; Shapiro, 1991; Shaw et al., 2003), scholars have yet to explore the person variables that can make explanations more effective for some individuals than for others (Bobocel & Zdaniuk, 2005). We drew on fairness theory to identify personality–based curiosity as one potential moderator of explanation effects. Fairness theory describes how and why explanations can alter reactions by shaping the "could have" and "should have" questions triggered by negative events (Colquitt & Chertkoff, 2002; Folger & Cropanzano, 2001; Gilliland et al., 2001; Shaw et al., 2003). Curiosity captures a sensitivity to information gaps that prompts

individuals to ask such questions in the first place (Berlyne, 1954; Litman & Spielberger, 2003; Loewenstein, 1994). We therefore suggested that individuals with this built-in "need to know" would be more affected by adequate explanations because they would place more value on the information provided.

Our results showed some support for that general assertion, as curious individuals were more likely to respond to a verbal explanation with decreased theft and increased performance on an idea generation task. We reasoned that curious individuals would prefer to supplement the content of the account with information on body language, facial expression, voice tone, eye contact, pauses, and so forth (Daft & Lengel, 1984, 1986). Given that curious individuals react to novel and ambiguous stimuli with a more intense search for knowledge (Litman & Jimerson, 2004; Litman & Spielberger, 2003), it seems likely that they paid closer attention to this added source of information when reacting to the explanation.

Our results further showed that curious individuals were more likely to respond to a specific explanation with better performance on a reading comprehension task, less anger, and less anxiety. More detailed accounts offer the additional information that curious individual's desire. Those additional details can help reduce the affective aversion to uncertainty that curious individuals experience when information gaps arise (Lowenstein, 1994; Spielberger & Starr, 1994). From the perspective of fairness theory, the additional details can help curious individuals answer the "could this have happened differently?" and "should this have happened differently?" questions that are needed to completely understand negative events.

Whereas the results reviewed above supported many of our predictions, other hypotheses failed to receive support. For example, curiosity moderated the effects of specificity on negative emotions but not the effects of verbal medium. This result may be explained by the aversive arousal felt by curious individuals when reacting to information gaps (Litman & Jimerson, 1994; Loewenstein, 1994). It may be that the details given in the explanation content were more instrumental in removing that aversive arousal than the details offered by the nonverbal cues in the verbal medium condition. As another example, curiosity moderated the effects of verbal medium on theft but not the effects of specificity. It may be that verbal medium was a more significant predictor of theft because the more personal nature of verbal accounts reinforces a sense of status and respect on the part of recipients. In fact, research suggests that revenge behaviors, such as theft, are often directed at restoring one's status (Tripp & Bies, 1997).

One interesting pattern was that the mere provision of an adequate explanation was not always sufficient to mitigate counterproductive reactions. For example, individuals low on curiosity were more likely to respond to a verbal explanation with increased theft and lower idea generation. Our results further showed that those low on curiosity were more likely to react to a detailed explanation with lower performance on a reading comprehension task as well as increased anger and anxiety. Although these findings were unexpected, they should perhaps not be surprising given that personality-based curiosity reflects individual differences in information processing tendencies. The Elaboration Likelihood Model (ELM; Petty, 1995; Petty & Cacioppo, 1986) is a theory of persuasion that distinguishes between two broad categories of information processing—systematic and heuristic. In brief, systematic processing is the result of considerable cognitive effort, carefully evaluating all the information present in a persuasive message with the goal of determining the merit of the arguments. In contrast, heuristic processing results from the application of simple decision rules, or cognitive heuristics (e.g., credibility of the source, presentation of explanation, or attractiveness of the source), rather an effortful analysis of the information in the message that takes place under systematic processing. Petty and colleagues

(Petty, 1995; Petty & Cacioppo, 1986) suggest that individuals are predisposed to engage in either a systematic or heuristic cognitive processing style when evaluating the information contained in a persuasive message.

Consistent with systematic processing suggested by the ELM, curious individuals naturally engage in a comprehensive and analytic scrutiny of the arguments in an explanation. In fact, research suggests that as the extent of information processing increases, argument quality increases in importance (Petty, 1995; Petty & Cacioppo, 1979; 1990). According to Goldman and Thatcher (2002), counterfactual thinking described by fairness theory corresponds to a systematic processing model in that it assumes individuals expend considerable effort in a complex cognitive evaluation of the arguments offered in an adequate explanation. Our results support this reasoning, as the provision of adequate explanations had beneficial effects on behavioral and emotional reactions when the receivers are curious.

Although research has shown that specific and verbal explanations are not always effective in preventing counterproductive reactions (Shaw et al., 2003), it remains unclear why an adequate explanation would exacerbate counterproductive behavioral and emotional responses for those low on curiosity. One possible explanation for these inconsistent results may be an unintended methodological issue in the research design. As described in the Method section, participants received the explanation for the reduction in extra credit points after a considerable amount of time had elapsed, approximately 10 minutes. In accord with heuristic processing described by the ELM, it seems plausible that those low on curiosity may have quickly formed a judgment after the experimenter informed participants of the reduction in extra credit points, rather than considering any new information offered in the subsequent explanation. As noted above, studies have linked the absence of adequate explanations to counterproductive reactions including decreased levels of cooperation (e.g., Colquitt, 2001; Konovsky & Cropanzano, 1991), increased levels of retaliation (e.g., Greenberg, 1990; Wanberg, Bunce, & Gavin, 1999), and increased levels of withdrawal (e.g., Ball, Trevino, & Sims, 1993; Konovsky & Cropanzano, 1991). It therefore follows that the information present in specific and verbal explanations would be of little importance in preventing negative reactions when the recipients are low on curiosity.

These results have important implications for the theoretical discourse on the processes by which individuals determine the fairness of organizational outcomes. As noted above, fairness theory assumes that individuals engage in deep, effortful processing of information contained in an explanation when formulating judgments of fairness (Goldman & Thatcher, 2002). Consistent with fairness theory, curious individuals are predisposed to engage in systematic processing, or counterfactual thinking, when trying to decide whether an authority should be held accountable for a negative event. The end result is that adequate explanations have beneficial consequences on counterproductive reactions for receivers high on curiosity.

However, findings from this study challenge the assumption that judgments of fairness are always the result of deliberate, effortful information processing. In contrast to the careful evaluation of the arguments in an explanation, individuals low on curiosity employ heuristic processing, a much simpler means of evaluation resulting from the operation of peripheral cues as a substitute for cognitive effort. The result of information processing involved in heuristic processing is typically a justice judgment formed very quickly, not based on the quality of arguments presented in the explanation. Taken together, our results are consistent with the counterfactual processing suggested by fairness theory in that curious individuals carefully evaluated the information contained in an explanation when forming a judgment of fairness.

However, the predictive utility of fairness theory in the context of explanations will not transpire when judgments are formed through the use of heuristic processing.

SUGGESTIONS FOR FUTURE RESEARCH

Although further work is needed to replicate the interactions observed in our data, it seems warranted to call for future research on personality-based curiosity. The construct has almost no presence in industrial/organizational psychology and organizational behavior, possibly because it is unclear whether it is redundant with the five-factor model of personality. We included openness to experience in our study to assess whether any curiosity effects were actually tapping openness effects. Despite demonstrating a relatively strong positive correlation between curiosity and openness to experience (r = .46), the curiosity interactions observed in our data remained statistically significant when openness was controlled in the initial step of the regressions. Moreover, openness yielded only two significant interactions when cast as a moderator of explanation adequacy effects, versus five for curiosity. Such results complement research suggesting that targeted, narrow traits may be more powerful moderators of fair treatment than the Big Five (Colquitt et al., 2006; Scott & Colquitt, 2007).

In particular, field research on curiosity and explanations seems warranted. It is important to replicate the sorts of interactions observed in our data, to see if curious employees in organizations respond differently to variations in explanation content and medium. Future research could also cast curiosity as a predictor of the kinds of explanations typically offered by managers. It may be that curious individuals proactively seek explanations in the same way that "feedback seekers" seek knowledge about their own performance (Ashford, 1986).

LIMITATIONS

This study has some limitations which should be noted. First, our study consisted of a laboratory study, which raises concerns about generalizability and external validity. However, external validity is more a function of a stream of research rather than one study. A second limitation concerns the explanation used in the study, which would be categorized as a justification, given that it does not remove the responsibility from the decision maker. Thus, it remains unclear whether curiosity would have exhibited the same interactions if an excuse had been utilized, by attributing the reduction in extra credit points to some change in university policy.

PRACTICAL IMPLICATIONS

Despite these limitations, these results have practical implications for authorities who provide explanations in a variety of contexts (e.g., business organizations, educational institutions, government agencies). Explanation scholars have described how authorities attempt to distance themselves from "bad news" by providing a short, vague, written account for negative events (Folger & Skarlicki, 2001). Our results suggest that such explanation forms may result in negative behavioral and emotional reactions when the receivers are curious. Fortunately, research has suggested that authorities can be trained to act in a fairer manner and, as a result, increase citizenship behaviors as well as reduce theft levels on the part of explanation recipients (Greenberg, 1998; Latham & Skarlicki, 1996).

However, distortion of the message is a possibility as recipients interpret the message in such a way that is not consistent with the content of the explanation. As described above, individuals low in curiosity are more likely to engage in a simple evaluation of the explanation which requires relatively little cognitive effort. Therefore, peripheral cues impact the evaluation of the explanation producing complex outcomes possibly resulting in unintended consequences. In light of that, the results of the study underscore the importance of organizations to promote a "culture of justice" that incorporates fairness into all managerial activities.

REFERENCES

Ashford, S. J. (1986). Feedback-seeking in individual adaptation: A resource perspective. *Academy of Management Journal, 29*, 465-487.

Baron, R. A. (1990). Countering the effects of destructive criticism: The relative efficacy of four interventions. *Journal of Applied Psychology, 75*, 235-245.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

Berlyne, D. E. (1954). A theory of human curiosity. *British Journal of Psychology, 45*, 180-191.

Berlyne, D. E. (1966). Curiosity and exploration. *Science, 153*, 25-33.

Bies, R. J., Shapiro, D. L., & Cummings, L. L. (1988). Causal accounts and managing organizational conflict: Is it enough to say it's not my fault? *Communication Research, 15*, 381-399.

Bies, R. J., & Tripp, T. M. (1996). Beyond distrust: "Getting even" and the need for revenge. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations*: *Frontiers of theory and research* (pp. 246-260). Thousand Oaks, CA: Sage.

Bies, R. J., & Tripp, T. M. (2002). "Hot flashes, open wounds": Injustice and the tyranny of its emotions. In S. W. Gilliland, D. D. Steiner, & D. P. Skarlicki (Eds.), *Emerging perspectives on managing organizational justice*. Greenwich, CT: Information Age.

Bobocel, D. R., McCline, R. L., & Folger, R. (1997). Letting them down gently: Conceptual advances in explaining controversial organizational policies. In C. L. Cooper & D. M. Rousseau (Eds.), *Trends in organizational behavior* (Vol. 4, pp. 73-88). New York: John Wiley & Sons.

Bobocel, D. R., & Zdaniuk, A. (2005). How can explanations be used to foster organizational justice? In J. Greenberg & J. A. Colquitt (Eds.), *Handbook of organizational justice* (pp. 469-498). Mahwah, NJ: Lawrence Erlbaum Associates.

Chen, P. Y., & Spector, P. E. (1992). Relationships of work stressors with aggression, withdrawal, theft and substance use: An exploratory study. *Journal of Occupational and Organizational Psychology, 65*, 177–184.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Erlbaum.

Colquitt, J. A., & Chertkoff, J. M. (2002). Explaining injustice: The interactive effect of explanation and outcome on fairness perceptions and task motivation. *Journal of Management, 28*, 591-610.

Colquitt, J. A., Hollenbeck, J. R., Ilgen, D. R., LePine, J. A., & Sheppard, L. (2002). Computer-assisted communication and team decision-making performance: The moderating effect of openness to experience. *Journal of Applied Psychology, 87*, 402-410.

Colquitt, J. A., Scott, B. A., Judge, T. A., & Shaw, J. C. (2006). Justice and personality: Deriving theoretically-based moderators of justice effects. *Organizational Behavior and Human Decision Processes, 100*, 110-127.

Costa, P. T, Jr., & McCrae, R. R. (1992). The NEOPI-R: Revised NEO personality inventory and NEO five-factor inventory. Lutz, FL: Psychological Assessment Resources.

Cropanzano, R., Weiss, H. M., Suckow, K. J., & Grandey, A. A. (2000). Doing justice to workplace emotion. In N. M. Ashkanasy, C. E. J. Hartel, & W. J. Zerbe (Eds.), *Emotions in the workplace* (pp. 49-62). Westport, CT: Quorum Books.

Daft, R. L., & Lengel, R. H. (1984). Information richness: A new approach to managerial behavior and organizational design. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 6, pp. 191-233). Homewood, IL: JAI Press.

Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science*, *32*, 554-571.

Davidson, M., & Friedman, R. A. (1998). When excuses don't work: The persistent injustice effects among black managers. *Administrative Science Quarterly*, *43*, 154-183.

Digman, J. M., & Inouye, J. (1986). Further specification of the five robust factors of personality. *Journal of Personality and Social Psychology*, *50*,116-123.

Folger, R. (1986). Rethinking equity theory: A referent cognitions model. In H. W. Bierhoff, R. L. Cohen, & J. Greenberg (Eds.), *Justice in social relations* (pp. 145-162). New York: Plenum.

Folger, R. (1987). Reformulating the preconditions of resentment: A referent cognitions model. In J. C. Masters & W. P. Smith (Eds.), *Social comparison, justice, and relative deprivation*: *Theoretical, empirical, and policy perspectives* (pp. 183-215). Hillsdale, NJ: Erlbaum.

Folger, R. (1993). Reactions to mistreatment at work. In K. Murnighan (Ed.), *Social psychology in organizations*: *Advances in theory and research* (pp. 161-183). Englewood Cliffs, NJ: Prentice Hall.

Folger, R., & Cropanzano, R. (2001). Fairness theory: Justice as accountability. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organizational justice* (pp. 1-54). Stanford, CA: Stanford University Press.

Folger, R., & Martin, C. (1986). Relative deprivation and referent cognitions: Distributive and procedural justice effects. *Journal of Experimental Social Psychology, 22*, 531-546.

Folger, R., & Skarlicki, D. P. (2001). Fairness as a dependent variable: Why tough times can lead to bad management. In R. Cropanzano (Ed.), *Justice in the workplace*: *From theory to practice* (pp. 97-118). Mahwah, NJ: Erlbaum.

Fox, S., & Spector, P. E. (1999). A model of work frustration-aggression. *Journal of Organizational Behavior*, *20*, 915-931.

Fox, S. Spector, P. E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior*, *59*¸ 291-309.

Gilliland, S. W., Groth, M., Baker, R. C., Dew, A. F., Polly, L. M., & Langdon, J. C. (2001). Improving applicants' reactions to rejection letters: An application of fairness theory. *Personnel Psychology*, *54*, 669-703.

Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, *4*, 26-42.

Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. C. (2006). The International Personality Item Pool and the future of public-domain personality measures. *Journal of Research in Personality, 40*, 84-96.

Goldman, B. M., & Thatcher, S. M. B. (2002). A social information processing view of organizational justice. In S. W. Gilliland, D. D. Steiner, & D. P. Skarlicki (Eds.), *Emerging perspectives on managing organizational justice* (pp. 103-130). Greenwich, CT: Information Age Publishing.

Greenberg, J. (1990). Employee theft as a reaction to underpayment inequity: The hidden cost of pay cuts. *Journal of Applied Psychology*, *75*, 561-568.

Greenberg, J. (1993). Stealing in the name of justice: Informational and interpersonal moderators of theft reactions to underpayment inequity. *Organizational Behavior and Human Decision Processes*, *54*, 81-103.

Greenberg, J. (1998). The cognitive geometry of employee theft: Negotiating "the line" between taking and theft. In R. W. Griffin, A. O'Leary-Kelly, & J. Collins (Eds.), *Dysfunctional behavior in organizations* (pp. 147-193). Greenwich, CT: JAI.

Griffin, B., & Hesketh, B. (2004). Why openness to experience is not a good predictor of job performance. *International Journal of Selection and Assessment*, *12*, 243-251.

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory – Versions 4a and 54*. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research.

Kagan, J. (1972). Motives and development. *Journal of Personality and Social Psychology*, *22*, 51-66.

Konovsky, M. A., & Cropanzano, R. (1991). Perceived fairness of employee drug testing as a predictor of employee attitudes and job performance. *Journal of Applied Psychology*, *76*, 698-707.

Korsgaard, A. M., Roberson, L., & Rymph, D. R. (1998). What motivates fairness? The role of subordinate assertive behavior on manager's interactional fairness. *Journal of Applied Psychology*, *83*, 731-744.

Latham, G. P., & Skarlicki, D. P. (1996). The effectiveness of situational, patterned behaviour, and conventional structured interviews in minimising in-group favouritism of Canadian francophone managers. *Applied Psychology*: *An International Review*, *45*, 177-184.

Lazarus, R. S., & Cohen-Charash, Y. (2001). Discrete emotions in organizational life. In R. L. Payne & C. L. Cooper (Eds.), *Emotions at work* (pp. 45-81). New York: John Wiley & Sons.

Lind, E. A., & Van den Bos, K. (2002). When fairness works: Toward a general theory of uncertainty management. In B. M. Staw & R. M. Kramer (Eds.), *Research in organizational behavior* (Vol. 24, pp. 181-223). Boston, MA: Elsevier.

Litman, J. A., Collins, R. P., & Spielberger, C. D. (2005). The nature and measurement of sensory curiosity. *Personality and Individual Differences*, *39*, 1123-1133.

Litman, J. A., Hutchins, T. L., & Russon, R. K. (2005). Epistemic curiosity, feeling-of-knowing, and exploratory behavior. *Cognition and emotion*, *19*, 559-582.

Litman, J. A., & Jimerson, T. L. (2004). The measurement of curiosity as a feeling of deprivation. *Journal of Personality Assessment*, *82*, 147-157.

Litman, J. A., & Spielberger, C. D. (2003). Measuring epistemic curiosity and its diversive and specific components. *Journal of Personality Assessment*, *80*, 75-86.

Loewenstein, G. (1994). The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin*, *116*, 75-98.

Markus, M. L. (1994). Electronic mail as the medium of managerial choice. *Organization Science*, *5*, 502-527.

McCrae, R. R., & Costa, P. T., Jr. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*, 81-90.

McLean Parks, J. (1997). The fourth arm of justice: The art and science of revenge. In R. J. Lewicki, B. H. Sheppard, & R. J. Bies (Eds.), *Research on negotiation in organizations* (Vol. 6, pp. 113-144). Greenwich, CT: JAI Press.

Perrewe, P. L., & Spector, P. E. (2002). Personality research in the organizational sciences. In J. J. Martocchio & G. R. Ferris (Eds.), *Research in personnel and human resources management* (Vol. 21: pp. 1-63). Boston, MA: Elsevier.

Petty, R. E. (1995). Attitude change. In A. Tesser (Ed.), *Advanced social psychology* (pp. 195-255). Boston, MA: McGraw-Hill.

Petty, R. E., & Cacioppo, J. T. (1979). Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology*, *37*, 1915-1926.

Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.

Petty, R. E., Wells, G. L., & Brock, T. C. (1976). Distraction can enhance or reduce yielding to propaganda: Thought disruption versus effort justification. *Journal of Personality and Social Psychology*, *34*, 874-884.

Reio, T. G. Jr., & Callahan, J. L. (2004). Affect, curiosity, and socialization-related learning: A path analysis of antecedents to job performance. *Journal of Business and Psychology*, *19*, 3-22.

Robinson, S. L., & Bennett, R. J. (1997). Workplace deviance: Its definition, its manifestations, and its causes. *Research on Negotiations in Organizations*, *6*, 3-27.

Sackett, P. R. & DeVore, C. J. (2001). Counterproductive behaviors at work. In N. Anderson, D. S. Ones, H. K. Sinangil, & C. Viswesvaran (Eds.), *Handbook of industrial, work, and organizational psychology* (Vol. 1, pp. 145–164). London: Sage.

Schweiger, D. M., & DeNisi, A. S. (1991). Communication with employees following a merger: A longitudinal field experiment. *Academy of Management Journal*, *34*, 110-135.

Scott, B. A., & Colquitt, J. A. (2007). Are organizational justice effects bounded by personality? An examination of equity sensitivity, exchange ideology, and the Big Five. *Group and Organization Management*, *32*, 290-325.

Shapiro, D. L. (1991). The effects of explanations on negative reactions to deceit. *Administrative Science Quarterly*, *36*, 614-630.

Shapiro, D. L., Buttner, E. H., & Barry, B. (1994). Explanations: What factors enhance their perceived adequacy? *Organizational Behavior and Human Decision Processes*, *58*, 346-368.

Shaw, J. C., Wild, R. E., & Colquitt, J. A. (2003). To justify or excuse?: A meta-analysis of the effects of explanations. *Journal of Applied Psychology*, *88*, 444-458.

Spector, P. E. (1975). Relationship of organizational frustration with reported behavioral reactions of employees. *Journal of Applied Psychology*, *60*, 635-637.

Spector, P. E. (1978). Organizational frustration: A model and review of the literature. *Personnel Psychology*, *31*, 815-829.

Spector, P. E., & Fox, S. (2002). An emotion-centered model of voluntary work behavior: Some parallels between counterproductive work behavior and organizational citizenship behavior. *Human Resource Management Review*, *12*, 269-292.

Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, *68*, 446-460.

Spector, P. E., Penner, L. A., & Hawkings, H. L. (1975). The effects of thwarting of aggression on subsequent aggression. *Social Behavior and Personality*: *An International Journal*, *3*, 233-241.

Spielberger, C. D., & Butler, T. F. (1971). *On the relationship between anxiety, curiosity, and arousal*: *A working paper*. Unpublished manuscript, Florida State University, Tallahassee.

Spielberger, C. D., Peters, R. A., & Frain, F. (1976). *The state-trait curiosity inventory*. Unpublished manuscript, University of South Florida, Tampa.

Spielberger, C. D., Peters, R. A., & Frain, F. (1981). Curiosity and anxiety. In H. G. Voss & H. Keller (Eds.), *Curiosity research*: *Basic concepts and results*. Weinheim, Federal Republic of Germany: Beltz.

Spielberger, C. D., & Starr, L. M. (1994). Curiosity and exploratory behavior. In H. F. O'Neil, Jr. & M. Drillings (Eds.), *Motivation*: *Theory and research* (pp. 221-243). Hillsdale, NJ: Lawrence Erlbaum Associates.

Stiff, J. B., Miller, G. R., Sleight, C., Mongeau, P., Garlick, R., & Rogan, R. (1989). Explanations for visual cue primacy in judgments of honesty and deceit. *Journal of Personality and Social Psychology*, *56*, 555-564.

Storms, P. L., & Spector, P. E. (1987). Relationships of organizational frustration with behavioural reactions: The moderating effect of locus of control. *Journal of Occupational Psychology*, *60*, 227-234.

Sullivan, C. B. (1995). Preferences for electronic mail in organizational communication tasks. *Journal of Business Communication*, *32*, 49-64.

Tripp, T. M., & Bies, R. J. (1997). What's good about revenge? The avenger's perspective. In R. J. Lewicki, B. H. Sheppard, & R. J. Bies (Eds.), *Research on negotiation in organizations* (Vol. 6, pp. 145-160). Greenwich, CT: JAI Press.

Tripp, T. M., Bies, R. J., & Aquino, K. (2002). Poetic justice or petty jealousy? The aesthetics of revenge. *Organizational Behavior and Human Decision Processes*, *89*, 966-984.

Van den Bos, K., & Lind, E. A. (2002). Uncertainty management by means of fairness judgments. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 34, pp. 1-60). Boston, MA: Elsevier.

Watson, D. & Clark, L. A. (1994). Emotions, moods, traits, and temperaments: Conceptual distinctions and empirical findings. In P. Ekman & R. J. Davidson (Eds.), *The nature of emotion*: *Fundamental questions* (pp. 89-93). New York: Oxford University Press.

Zhou, J., & Shalley, C. E. (2003). Research on employee creativity: A critical review and directions for future research. In J. J. Martocchio & G. R. Ferris (Eds.), *Research in personnel and human resources management* (Vol. 22, pp. 165-217). Boston, MA: Elsevier.

APPENDIX

Table 1
Descriptive Statistics and Zero-Order Correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Specificity	.49	.50	---									
2. Verbal Medium	.68	.47	-.08	---								
3. Curiosity	2.97	.58	.02	.04	---							
4. Theft	.15	.37	.06	-.10	-.03	---						
5. Performance (Idea)	13.33	4.47	-.09	.05	.09	-.20*	---					
6. Performance (Reading)	5.88	1.45	.04	.06	-.05	-.06	.05	---				
7. Anger	1.32	.44	-.04	.01	.17*	-.03	.05	-.04	---			
8. Anxiety	1.20	.35	.01	-.02	.08*	-.06	-.08	-.13*	.51*	---		
9. Neuroticism	2.84	.65	.15*	-.09	-.22*	-.07	-.06	.00	.14*	.16*	---	
10. Openness	3.67	.57	.11*	.02	.46*	-.06	.22*	-.06	.01	.03	-.17*	---
11. Orderliness	3.62	.62	.06	-.04	-.02	-.03	.01	-.09	-.06	.05	.07	.03

Note. n = 233. * $p < .05$, two-tailed.

Table 2
Moderated Regression Results for Theft

Theft	Model 1			Model 2			Model 3		
	R^2	ΔR^2	B	R^2	ΔR^2	B	R^2	ΔR^2	B
1. Specificity	.01	.01	.04	.01	.01	.04	.01	.01	.04
Verbal Medium			-.07			-.07			-.08
2. Curiosity	.			.01	.00	-.02	.01	.00	-.03
3. S x Curiosity							.07*	.06*	-.06
VM x Curiosity									-.32*

Note. N = 233. * p < .05, two-tailed.

Table 3
Moderated Regression Results for Performance

Reading Comprehension	Model 1			Model 2			Model 3			Model 4		
	R^2	ΔR^2	B	R^2	ΔR^2	B	R^2	ΔR^2	B	R^2	ΔR^2	B
1. Orderliness	.01	.01	-.21	.01	.01	-.21	.01	.01	-.21	.01	.01	-.17
2. Specificity				.01	.00	.15	.01	.00	.15	.01	.00	.15
Verbal Medium						.20			.21			.23
3. Curiosity	.						.02	.01	-.17	.02	.01	-.16
4. S x Curiosity										.05*	.03*	.93*
VM x Curiosity												-.06

Note. N = 233. * p < .05, two-tailed.

Idea Generation	Model 1			Model 2			Model 3			Model 4		
	R^2	ΔR^2	B	R^2	ΔR^2	B	R^2	ΔR^2	B	R^2	ΔR^2	B
1. Openness	.05*	.05*	1.76*	.05*	.05*	1.86*	.05*	.05*	1.94*	.05*	.05*	1.88*
2. Specificity				.06	.01	-1.02	.06	.01	-1.03	.06	.01	-.97
Verbal Medium						.29			.30			.37
3. Curiosity	.						.06	.00	-.17	.06	.00	-.12
4. S x Curiosity										.09*	.03*	.99
VM x Curiosity												2.72*

Note. N = 233. * p < .05, two-tailed.

Table 4
Moderated Regression Results for Emotional Reactions

Anger	Model 1			Model 2			Model 3			Model 4		
	R^2	ΔR^2	B	R^2	ΔR^2	B	R^2	ΔR^2	B	R^2	ΔR^2	B
1. Neuroticism	.02*	.02*	.10*	.02*	.02*	.10*	.02*	.02*	.14*	.02*	.02*	.16*
2. Specificity				.02	.00	-.06	.02	.00	-.07	.02	.00	-.07
Verbal Medium						.01			.01			.00
3. Curiosity	.						.09	.01	.19*	.08*	.06*	.20*
4. S x Curiosity										.13*	.04*	.32*
VM x Curiosity												-.08

Note. n = 233. * p < .05, two-tailed.

Anxiety	Model 1			Model 2			Model 3			Model 4		
	R^2	ΔR^2	B	R^2	ΔR^2	B	R^2	ΔR^2	B	R^2	ΔR^2	B
1. Neuroticism	.02*	.02*	.08*	.02*	.02*	.08*	.02*	.02*	.10*	. 02*	. 02*	.11*
2. Specificity				.02	.00	-.01	.02	.00	-.01	.02	.00	-.02
Verbal Medium						-.01			-.01			-.01
3. Curiosity	.						.04*	.02*	.09*	.04*	.02*	.09*
4. S x Curiosity										.07*	.03*	-.21*
VM x Curiosity												.02

Note. n = 233. * p < .05, two-tailed.

Figure 1. Conceptual model summarizing study predictions.

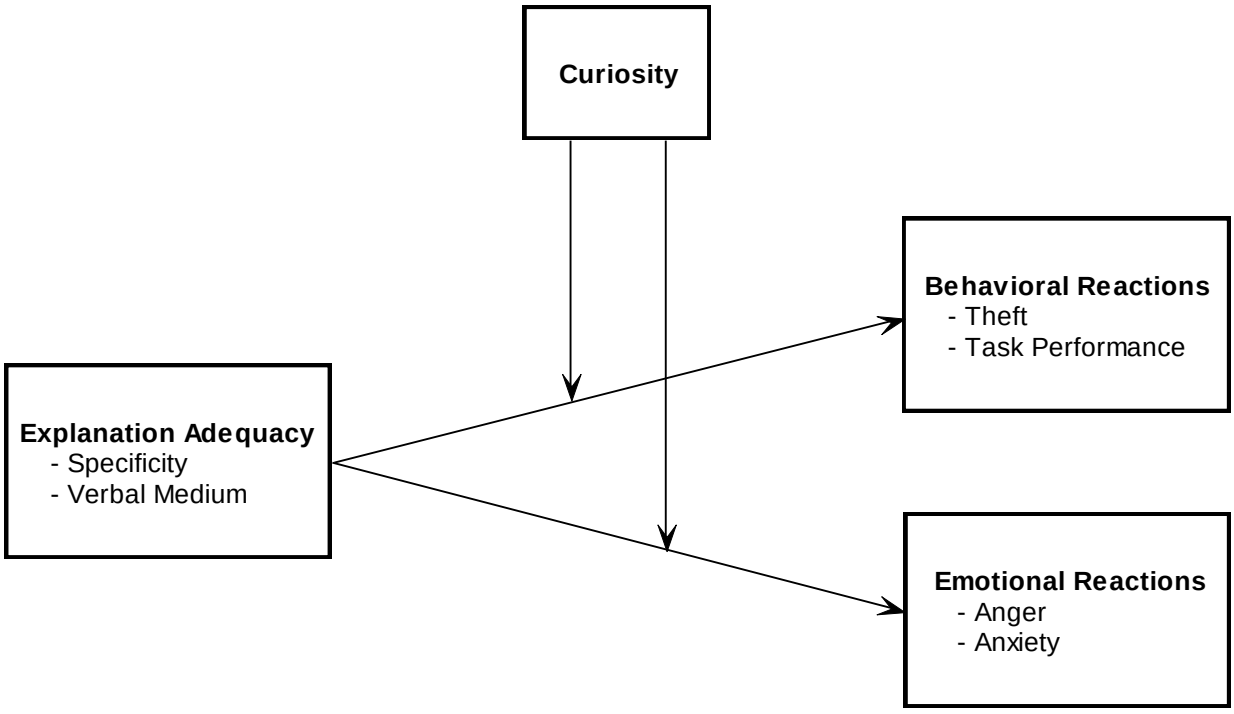
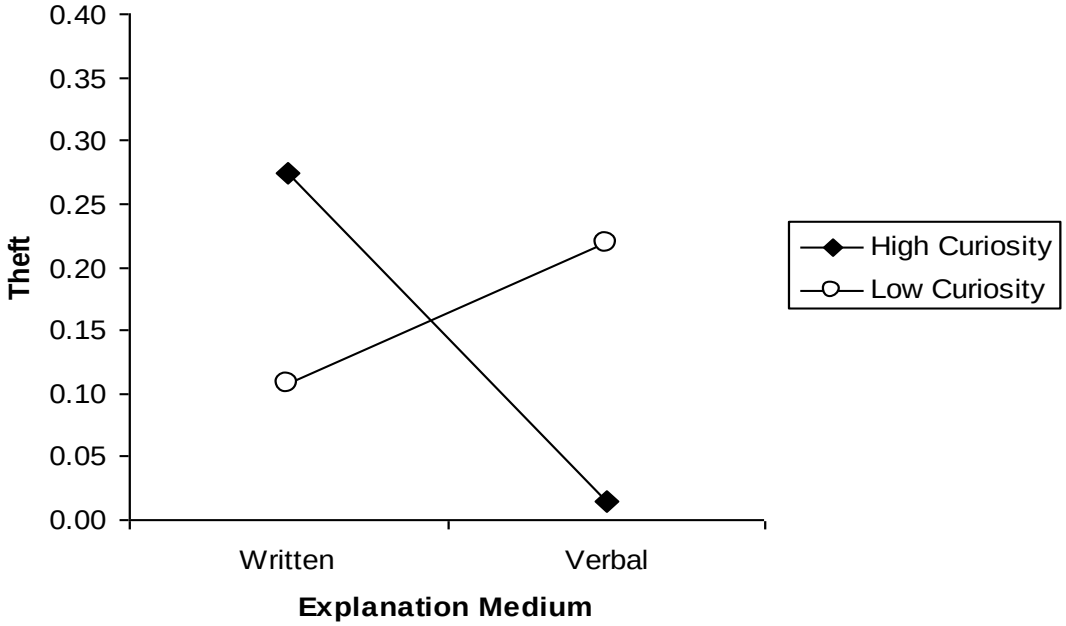


Figure 2. Explanation medium x curiosity interactions for theft.



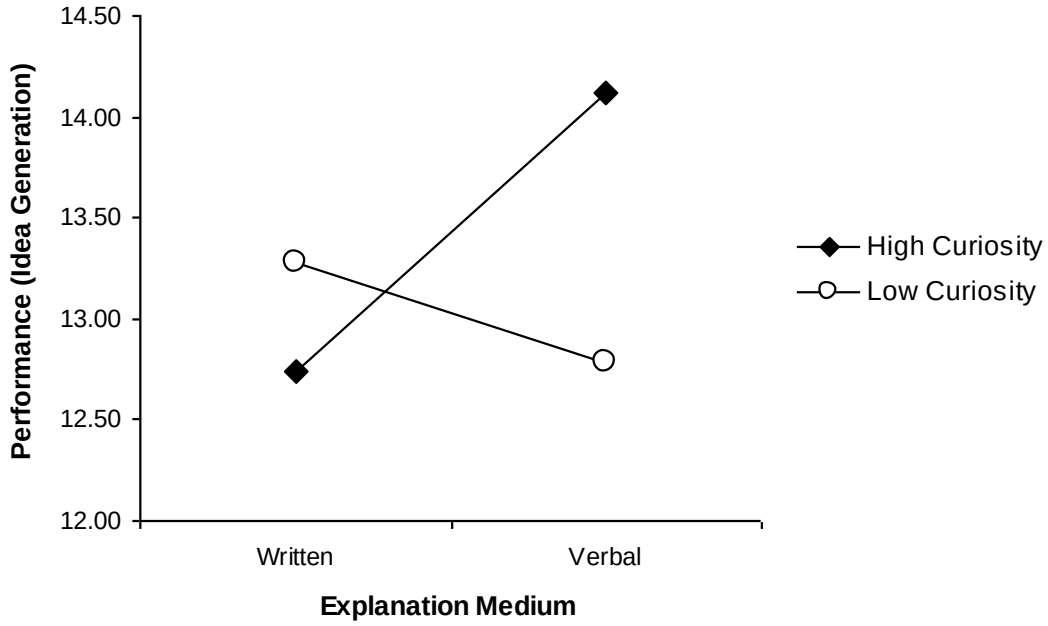


Figure 3. Explanation specificity x curiosity interaction for performance.

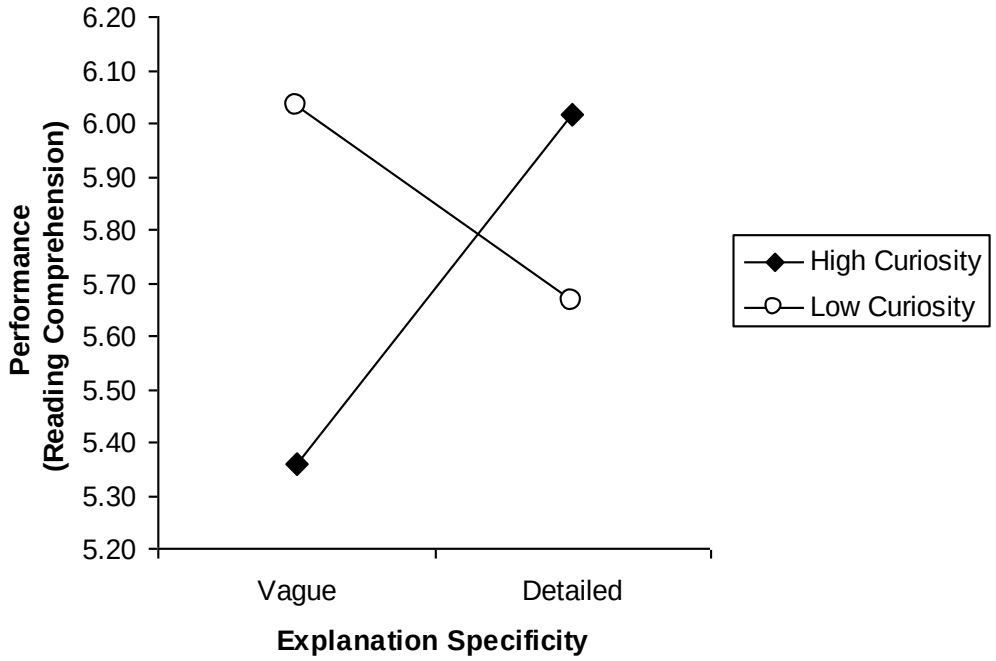


Figure 4. Explanation specificity x curiosity interactions for emotions.