Explaining the Justice–Performance Relationship: Trust as Exchange Deepener or Trust as Uncertainty Reducer?

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Past research has revealed significant relationships between organizational justice dimensions and job performance, and trust is thought to be one mediator of those relationships. However, trust has been positioned in justice theorizing in 2 different ways, either as an indicator of the depth of an exchange relationship or as a variable that reflects levels of work-related uncertainty. Moreover, trust scholars distinguish between multiple forms of trust, including affect- and cognition-based trust, and it remains unclear which form is most relevant to justice effects. To explore these issues, we built and tested a more comprehensive model of trust mediation in which procedural, interpersonal, and distributive justice predicted affect- and cognition-based trust, with those trust forms predicting both exchange- and uncertainty-based mechanisms. The results of a field study in a hospital system revealed that the trust variables did indeed mediate the relationships between the organizational justice dimensions and job performance, with affect-based trust driving exchange-based mediation and cognition-based trust driving uncertainty-based mediation.

Keywords: justice, trust, social exchange, uncertainty, performance

Research in the justice literature has linked fair treatment to a number of beneficial employee attitudes and behaviors (for a historical review, see Colquitt, Greenberg, & Zapata-Phelan, 2005). For example, research has linked justice perceptions to all three facets of job performance, including task performance, citizenship behavior, and counterproductive behavior (e.g., Masterson, Lewis, Goldman, & Taylor, 2000; Moorman, Blakely, & Niehoff, 1998; Rupp & Cropanzano, 2002; Tekleab, Takeuchi, & Taylor, 2005; Wayne, Shore, Bommer, & Tetrick, 2002). Some of those studies have focused on distributive justice, which reflects the perceived fairness of decision outcomes (Adams, 1965; Homans, 1961; Leventhal, 1976). Other studies have focused on procedural justice, which reflects the perceived fairness of decision-making processes (Leventhal, 1980; Thibaut & Walker, 1975). Still other studies have focused on interpersonal justice, which reflects the perceived fairness of the interpersonal treatment received as procedures are enacted (Bies & Moag, 1986; Greenberg, 1993).

What explains the significant connection between justice and job performance? One potential mediator that has been examined in past research is trust, defined as confident, positive expectations about the words, actions, and decisions of another in situations entailing risk (Lewicki & Bunker, 1995; McAllister, 1995). The notion that trust serves as a mediator of justice effects is partially responsible for an increased integration of the justice and trust literatures in recent years. A number of studies have included both justice and trust in their investigations (e.g., Ambrose & Schminke, 2003; Aryee, Budhwar, & Chen, 2002; Begley, Lee, & Hui, 2006; Cropanzano, Prehar, & Chen, 2002; Folger & Konovsky, 1989; Frazier, Johnson, Gavin, Gooty, & Snow, 2010; Kernan & Hanges, 2002; Konovsky & Pugh, 1994; Pillai, Schriesheim, & Williams, 1999; Stinglhamber, De Cremer, & Mercken, 2006). Moreover, meta-analytic reviews have revealed moderately positive correlations among justice and trust concepts (Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Dirks & Ferrin, 2002).

Despite that empirical integration, there remain many questions about the justice–trust connection (Colquitt & Mueller, 2008; Lewicki, Wiesthoff, & Tomlinson, 2005), two of which are relevant to understanding the justice–job performance relationship. First,
Justice and Affect- vs. Cognition-Based Trust

As noted above, an increasing number of studies have integrated justice and trust concepts, often in an attempt to explain relationships between justice and various performance behaviors (e.g., Ambrose & Schminke, 2003; Aryee et al., 2002; Begley et al., 2006; Cropanzano et al., 2002; Folger & Konovsky, 1989; Frazier et al., 2010; Kernan & Hanges, 2002; Konovsky & Pugh, 1994; Pillai et al., 1999; Stinglhamber et al., 2006). Given that trust scholars have criticized some of this work for its casual or simplistic approach to conceptualizing trust (Lewicki et al., 2005), some more extensive definitional discussion is warranted. There are at least three approaches to defining and conceptualizing trust in the extant literature: (a) trust as unidimensional confident, positive expectations; (b) trust as multidimensional confident, positive expectations; and (c) trust as the willingness to be vulnerable (see Rousseau, Sitkin, Burt, & Camerer, 1998, for more discussion of such definitional distinctions).

Trust as unidimensional confident, positive expectations is a perspective found in many of the seminal trust measures in the organizational sciences. Roberts and O’Reilly (1974) operationalized trust by asking employees how they would expect their supervisor to act in various situations, such as when they needed to discuss work problems or when the supervisor needed to make a decision that was contrary to employee interests. Gabarro and Athos (1976) assessed trust by asking employees whether they expected their supervisors to have good motives and intentions, to be open and upfront, and to act in an honest and predictable manner. Cook and Wall (1980) measured trust by asking employees whether their supervisor was efficient, made sensible decisions, and made concerted attempts to protect employee interests in an honest manner. Variations of these measures have been utilized by a number of justice scholars (e.g., Aryee et al., 2002; Begley et al., 2006; Cropanzano et al., 2002; Folger & Konovsky, 1989; Kernan & Hanges, 2002; Konovsky & Pugh, 1994), making the unidimensional confident, positive expectations perspective the default framework in studies of the justice–trust connection.

Trust as multidimensional confident, positive expectations is a perspective that gained prominence in the mid-1990s. Drawing in part on earlier theorizing by Lewis and Weigert (1985), McAllister (1995) suggested that conceptualizations of trust were actually

1. Our hypothesized model casts the justice dimensions as antecedents of affect- and cognition-based trust. Although this causal ordering matches the conventional wisdom in the literature, it does—at first glance—seem inconsistent with Tyler and Lind’s work on the group-value and relational models (Lind & Tyler, 1988; Tyler & Lind, 1992). Those models include a concept—sometimes labeled “trust” (Tyler, 1989), sometimes labeled “trustworthiness” (Tyler, 1994), and sometimes labeled “trust in benevolence” (Lind, Tyler, & Hsu, 1997)—that is viewed as an antecedent of fairness perceptions. However, a close inspection of the definition and operationalization of that construct shows that it has little in common with the trust variables in our study, despite its labeling. Instead, the construct tends to assess efforts to be fair (Lind et al., 1997; Tyler, 1989, 1994) and the provision of voice (Lind et al., 1997; Tyler, 1994). Such operationalizations serve as indicators of procedural justice rather than trust.
tapping two distinct concepts, with affect-based trust reflecting expectations of reciprocal care and concern and cognition-based trust reflecting expectations of reliability and dependability. Drawing on earlier theorizing by Shapiro, Sheppard, and Cheraskin (1992), Lewicki and Bunker (1995, 1996) drew a similar distinction, with identification-based trust reflecting expectations of a reciprocal understanding of wants and knowledge-based trust reflecting expectations of predictability. Given that there remain no published measures of Lewicki and Bunker’s trust types, McAllister’s trust scales have become the most common operationalization of the multidimensional version of trust. These scales have been used in two studies integrating justice and trust. Unfortunately, one study collapsed across affect- and cognition-based trust (Ambrose & Schminke, 2003) and the other omitted affect-based trust altogether (Stinglhamber et al., 2006).

Trust as the willingness to be vulnerable is a perspective rooted in Mayer, Davis, and Schoorman’s (1995) integrative model of trust. Mayer et al. defined trust as the willingness of a trustee based on positive expectations about the trustee’s actions. Those positive expectations, which were used to capture trust in the perspectives described above, were instead used to capture three components of “trustworthiness”: (a) benevolence, which captures expectations about caring and supportive motives; (b) ability, which captures expectations about competence and skills; and (c) integrity, which captures expectations about a consistent adherence to sound principles. Although the Mayer et al. and McAllister (1995) perspectives differ in the way they define the trust concept itself, it is important to acknowledge that benevolence has much in common with affect-based trust, whereas ability and integrity have much in common with cognition-based trust. Our study utilizes McAllister’s conceptualization because the confident, positive expectations version of trust has been used more frequently by justice scholars (see Colquitt and Mueller, 2008, for a conceptual discussion of justice and Mayer et al.’s trust conceptualization). However, all of our affect-based trust predictions could also be made for benevolence, and all of our cognition-based trust predictions could also be made for ability and integrity.

Predictions for Justice and Trust

Although the various justice dimensions are fostered by the adherence to distinct sets of justice rules, there are conceptual reasons to expect all of the dimensions to be positively related to both affect- and cognition-based trust, albeit for different reasons. Procedural justice is fostered when authorities provide employees with input into key decisions and when authorities utilize procedures that are consistent, accurate, unbiased, correctable, representative of group concerns, and ethical (Leventhal, 1980; Thibaut & Walker, 1975). Many of those procedural rules are likely to be especially relevant to cognition-based trust, as an emphasis on consistency and accuracy should create the kind of predictable and dependable track record that underlies that trust form. Procedurally just decision making also instills a sense of legitimacy to organizational authorities (Tyler & Lind, 1992), which should help promote a sense of professionalism and regard. With respect to affect-based trust, an emphasis on allowing employee input and learning about group concerns should foster the sort of mutual investment and sharing of information that underlies that trust form. Procedurally just decision making also fulfills key psychological needs on the part of employees, injecting a sense of belonging into organizational relationships (Cropanzano, Byrne, Bobocel, & Rupp, 2001).

Interpersonal justice is fostered when authorities treat employees with dignity and respect and refrain from improper remarks or comments during the enactment of procedures (Bies & Moag, 1986; Greenberg, 1993). These interpersonal rules are likely to be particularly relevant to affect-based trust, as it would be difficult
for a sense of reciprocal care and concern to develop in a context where communications were rude, disrespectful, or inappropriate. Indeed, such actions are associated with a number of negative emotions, including anger and hostility (Barclay, Skarlicki, & Pugh, 2005; Rupp & Spencer, 2006). The relevance of interpersonal justice rules is perhaps less immediately apparent to cognition-based trust. However, it is important to note that many organizations have climates that emphasize (or at least espouse to emphasize) social relations, supportiveness, morale, and warmth (Carr, Schmidt, Ford, & DeShon, 2003). From this perspective, violations of interpersonal justice rules would be indicative of a lack of professionalism—one component of cognition-based trust.

Distributive justice is fostered when authorities utilize appropriate allocation norms when doling out key outcomes (Leventhal, 1976). In most business contexts, the appropriate norm is equity, where outcomes are allocated in accordance with relevant inputs (Adams, 1965; Leventhal, 1976). Distributive justice is likely to be relevant to affect-based trust because equity has important affective consequences. Adams suggested that inequitable allocations will trigger a sense of equity distress, with anger resulting from underpayment inequity and guilt resulting from overpayment inequity. Those negative emotions are associated with action tendencies such as retaliation or withdrawal (Lazarus & Cohen-Charash, 2001), both of which could undermine the development of reciprocal sentiments and investments. Distributive justice should also be relevant to cognition-based trust. Making decisions about performance evaluations, salary increases, bonuses, job assignments, and informal spot rewards represents a key job duty for many organizational authorities. As such, failing to make such decisions in an equitable fashion could lead to doubts about an authority’s competence, dedication, reliability, and professionalism.

Ambrose and Schminke’s (2003) field study of employees in several different industries provides some empirical support for the predictions laid out above, as procedural and interpersonal justice had significant unique effects on an index combining affect- and cognition-based trust (though distributive justice lacked any significant effect). In addition, Stinglhamber et al.’s (2006) field study of telecommunications employees revealed a significant linkage between interpersonal justice and cognition-based trust (though distributive justice lacked any significant effect). In their review of the literature, Dirks and Ferrin (2002) referred to such studies as the relationship-based perspective in the trust literature, given that the work focuses on how followers come to understand the nature of their relationship with their manager.

Hypothesis 1: Procedural justice is positively related to affect- and cognition-based trust.

Hypothesis 2: Interpersonal justice is positively related to affect- and cognition-based trust.

Hypothesis 3: Distributive justice is positively related to affect- and cognition-based trust.

Trust as Exchange Deepener or Trust as Uncertainty Reducer?

Even if the relationships between justice and affect- and cognition-based trust can be used to explain effects on job performance, a key question remains: What exactly is it about trust that explains those effects? As noted above, the mediating role of trust could be explained by two distinct functional mechanisms: trust as an exchange deepener and trust as an uncertainty reducer.

Trust as an Exchange Deepener

In his discussion of exchange relationships, Blau (1964) described the unique character of social exchanges:

Blau’s (1964) description of social exchanges gained more visibility in the justice literature when Organ (1990) used it to describe why procedural justice might be associated with increased levels of citizenship behavior. Organ suggested that fair treatment would be viewed as a favor on the part of a supervisor that deserved reciprocation by the employee. That citizenship, in turn, would constitute a favor on the part of the employee that deserved reciprocation by the supervisor. The reciprocation-inducing effects of fair treatment can be described from two perspectives. First, high levels of the various justice dimensions may be the exception rather than the rule in some organizations, giving fairness a discretionary feel that warrants reciprocation. Alternatively, injustice may short-circuit the natural or default levels of reciprocation in many work units.

Konovsky and Pugh (1994) operationalized Organ’s (1990) assertions in one of the first studies that integrated justice and trust. They noted that trust provides the basis for social exchange relationships and serves as the key element in the emergence and deepening of such relationships. Trust is particularly vital during periods where one party’s contributions outweigh the other’s, as trust provides some assurance that obligations will balance out over the long term. Konovsky and Pugh suggested that trust would predict citizenship because an employee would be more willing to go the extra mile when the leader could be trusted to balance the scales down the road. Subsequent studies have continued to use trust as a means of operationalizing social exchange effects (Aryee et al., 2002; Cropanzano et al., 2002; Pillai et al., 1999; Stinglhamber et al., 2006), with trust emerging as a definitional component of such exchanges (Cropanzano & Mitchell, 2005; Shore, Tetrick, Lynch, & Barksdale, 2006). In their review of the literature, Dirks and Ferrin (2002) referred to such studies as the relationship-based perspective in the trust literature, given that the work focuses on how followers come to understand the nature of their relationship with their manager.
Despite the relevance of trust to Blau’s (1964) theorizing, any study that shows trust to be a mediator of justice–performance effects can only assume that such mediation represents a social exchange mechanism. Barring an explicit operationalization of the exchange-deepening function that trust is purported to foster, that assumption remains unsubstantiated. The key question therefore becomes, which construct could best serve as an operationalization of that exchange dynamic? Blau’s description suggests that the obligation concept lies at the core of social exchange. Blau (1964) described social exchange reciprocations as “given and repaid under obligation” (p. 89), noting that it “is a necessary condition of exchange that individuals, in the interest of continuing to receive needed services, discharge their obligations for having received them in the past” (p. 92). One construct that reflects such obligation is normative commitment, which Meyer and Herscovitch (2001) described as “the mind-set of obligation” (p. 317). Justice scholars have suggested that normative commitment could serve as a construct-valid representation of the exchange dynamic (Colquitt, Greenberg, & Scott, 2005).

We are not aware of any research linking trust and normative commitment, as Meyer and colleagues have typically focused on socialization experiences or organizational investments as antecedents of that commitment form (Meyer & Allen, 1997; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). However, Blau’s (1964) theorizing includes a number of ideas that support significant relationships between affect- and cognition-based trust and the sense of obligation represented by normative commitment. With respect to affect-based trust, Blau described how the steady expansion of mutual investments in a relationship can engender the sort of trust that encourages obligation. With respect to cognition-based trust, an authority that provides services such as advice, aid, or assistance signals that he or she is dependable and reliable, which makes the discharging of one’s obligations more customary. Indirect support for these assertions can be taken from Colquitt, Scott, and LePine’s (2007) suggestion that an authority’s benevolence and ability can serve as exchange currencies that foster a motivation to reciprocate. In a meta-analytic test, Colquitt et al. showed that benevolence and ability predicted social exchange when operationalized as affective commitment, noting that too few studies focused on obligation-based forms of commitment to include them in their review. We therefore hypothesized

**Hypothesis 4:** Affect- and cognition-based trust are positively related to normative commitment.

Meyer and Herscovitch’s (2001) model of commitment can be used to ground predictions regarding normative commitment and job performance (see also Meyer & Allen, 1991). Meyer and Herscovitch suggested that the “mind-set of obligation” binds one to courses of action that benefit the entity to which one is committed. In particular, they argued that the sense of obligation would increase efforts to fulfill the focal behaviors of one’s work role. The sense of obligation can also increase discretionary behaviors, especially when those behaviors benefit the target of the obligation. Empirically speaking, studies of normative commitment have lagged behind studies of affective commitment. Meta-analyses of the few studies that have been conducted have illustrated that normative commitment has a moderately strong positive relationship with citizenship aspects of job performance and weaker relationships with task performance aspects (Meyer et al., 2002). On the basis of Meyer and Herscovitch’s (2001) theorizing, we predicted

**Hypothesis 5:** Normative commitment is positively related to job performance.

**Trust as an Uncertainty Reducer**

Whereas trust is somewhat of a behind-the-scenes player in Blau’s (1964) discussion of social exchange theory, it is clearly front and center in discussions of fairness heuristic theory (Lind, 2001; van den Bos, 2001a; van den Bos et al., 2001). Fairness heuristic theory’s propositions are rooted in the “fundamental social dilemma” faced by all employees working for authority figures in organizations (Lind, 2001). This dilemma acknowledges that an employee’s outcomes are ultimately maximized by cooperating with authorities and fully participating in organizational activities. However, choosing to do so also opens the door to potential exploitation, as authorities may abuse their power by asking employees to perform assignments that will never be rewarded. This fundamental social dilemma therefore creates a sense of uncertainty that pervades working life, particularly early on in one’s tenure and during times of organizational change (Lind, 2001).

Fairness heuristic theory suggests that employees should, ideally, cope with this uncertainty by gauging their trust in authorities (Lind, 2001; van den Bos, 2001a; van den Bos et al., 2001). That theoretical premise is reminiscent of Luhmann’s (1979) conceptualization of trust as a reducer of complexity. Luhmann noted that individuals face an ever increasing level of complexity when navigating the social world, with complexity defined as an overload of possible events and threats to stability. Trust reduces that complexity by minimizing certain dangers (e.g., exploitation, breach) while highlighting possibilities for action that would otherwise have been impractical. Also along the lines of Luhmann’s theorizing, fairness heuristic theory acknowledges that trust must be learned. That learning process is difficult, however, because the building blocks of trust may be ambiguous or unobservable. In response to that difficulty, fairness heuristic theory argues that employees evaluate the fairness of the authority’s actions, using justice as a heuristic for guiding decisions about trust and cooperation. In practice, those justice evaluations may be grounded in procedural, distributive, or interpersonal justice, depending on which form of justice is first encountered in an organizational relationship and which is most easily interpreted (Lind, 2001; van den Bos, 2001a; van den Bos et al., 2001). Regardless, justice is used as a means of gauging trust, with trust used to help cope with the uncertainty regarding authority actions.

Uncertainty management theory, cast as the successor to fairness heuristic theory, broadened the importance of justice, noting that it could be used to help manage uncertainty in a much more general sense, whether rooted in authority dynamics, organizational events, or a pervading sense of anxiety or lack of control (Lind & van den Bos, 2002; van den Bos & Lind, 2002). In fact, previous research has demonstrated that fairness can help manage a wide range of uncertainty forms, including a general sense of being uncertain or not in control (van den Bos, 2001b) or even a sense of being uncertain about one’s own mortality or disruptions in one’s own personal life (van den
Bos & Miedema, 2000). The connection between justice and general uncertainty is purported to exist despite any real association between the uncertainty experienced and the treatment received. According to Lind and van den Bos (2002), the connection between fairness and uncertainty “is so fundamental . . . that it occurs whether there is a logical link between the fair treatment and the source of the anxiety or not” (p. 193). Thus, in addition to authority uncertainty, justice and subsequent trust can help individuals manage more general work uncertainty.

The theorizing described above does not draw a distinction between affect- and cognition-based trust, leaving open the question of whether one form is more relevant to uncertainty than the other. Are both trust forms uniquely relevant to an employee’s sense that his or her work life is predictable and foreseeable? A sense that an authority’s behavior is predictable lies at the core of cognition-based trust, as such predictability is fostered by a track record of dependability and reliability (Lewicki & Bunker, 1995, 1996; McAllister, 1995). When employees view authorities as dedicated and competent, they can feel more confident that key organizational decisions and events will be handled in an effective manner. The relevance of affect-based trust to uncertainty may be less apparent than the relevance of cognition-based trust. Still, the sense that an authority has made emotional investments of reciprocal care and concern into a relationship should signal that employee needs will be protected under conditions of risk, whatever these may prove to be (Lewicki & Bunker, 1995, 1996; McAllister, 1995). When employees sense that authorities legitimately care for them, that sense may provide comfort that mitigates even unrelated sources of anxiety or confusion. We therefore predicted

Hypothesis 6: Affect- and cognition-based trust are negatively related to uncertainty.

Finally, there are a number of conceptual reasons to expect perceptions of uncertainty to predict job performance. First, employees who experience uncertainty should have less cognitive energy available to dedicate to job performance. As described by trust scholars, the presence of uncertainty necessitates off-task allocations of time and attention. Mayer and Gavin (2005) noted that uncertainty can cause employees to restrict their behaviors, eschew potentially risky actions, and focus their attention on contingency plans rather than job success. Similarly, McAllister (1995) suggested that uncertainty creates a need for monitoring and defense behaviors as individuals attempt to protect their interests. In other words, uncertainty and worry should result in decreased focus of attention, which can detract from job performance. In addition, the literature on stress and strain provides arguments for a relationship between uncertainty and job performance. Models in that literature often frame uncertainty as a stressor that can place significant strain on an employee, eventually harming job performance (Sonnentag & Frese, 2003). We therefore predicted

Hypothesis 7: Uncertainty is negatively related to job performance.

Summary

In sum, our model of trust mediation, shown in Figure 1, provides two different mechanisms whereby trust can explain the relationships between justice dimensions and job performance. The exchange deepener mechanism travels through normative commitment, suggesting that justice fosters trust, which is important because trust instills a sense of obligation in exchange relationships (Blau, 1964). The uncertainty reducer mechanism travels through uncertainty perceptions, suggesting that justice fosters trust, which is important because trust reduces the sense of uncertainty that employees can feel in their organizational lives. Taken together, those linkages result in the following hypotheses:

Hypothesis 8: The relationship between justice and job performance is mediated by trust (both affect and cognition based) and normative commitment.

Hypothesis 9: The relationship between justice and job performance is mediated by trust (both affect and cognition based) and uncertainty.

Method

Sample

Participants were 195 employees of a hospital network located in the southeastern United States. The sample was predominantly female (86%). One hundred participants were Caucasian, 79 were African American, six were Hispanic, and three were Asian American, and the remainder indicated multiple ethnicities. Organizational tenure averaged 6.93 years. The sample was diverse in terms of pay grade (13) and functional background (nursing, medical technology, physical plant, customer service, records, laboratory testing, and information systems).

Procedure

Data were collected as part of a training evaluation conducted for the human resource management department of the hospital network. We used a longitudinal design with two data collections separated by 3-month intervals. The first data collection included the measures of justice, affect- and cognition-based trust, normative commitment, and uncertainty. Participants received $10 to complete the survey and return it in a self-addressed stamped envelope. The second data collection gathered information on job performance from archival data taken from company records. Missing data on one or more variables resulted in a final usable sample size of 156 employees.

Measures

The survey items used to measure the justice, trust, normative commitment, and uncertainty variables are shown in Table 1.

Justice. The justice dimensions were measured with Colquitt’s (2001) scales, with all items using response anchors of 1 = To a Very Small Extent to 5 = To a Very Large Extent. The procedural justice scale asked participants to consider the procedures their supervisor uses to make decisions about evaluations, promotions, and rewards. Its coefficient alpha was .90. The interpersonal justice scale asked participants to consider how they were treated by their supervisor during the implementation of procedures. Its coefficient alpha was .95. Finally, the distributive justice scale asked participants to consider the outcomes they received.
Table 1
Survey Items and Factor Loadings

<table>
<thead>
<tr>
<th>Survey item</th>
<th>Loading</th>
</tr>
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<tbody>
<tr>
<td><strong>Procedural justice</strong></td>
<td></td>
</tr>
<tr>
<td>1. Are you able to express your views during those procedures?</td>
<td>.75*</td>
</tr>
<tr>
<td>2. Can you influence the decisions arrived at by those procedures?</td>
<td>.73*</td>
</tr>
<tr>
<td>3. Are those procedures applied consistently?</td>
<td>.84*</td>
</tr>
<tr>
<td>4. Are those procedures free of bias?</td>
<td>.80*</td>
</tr>
<tr>
<td>5. Are those procedures based on accurate information?</td>
<td>.84*</td>
</tr>
<tr>
<td>6. Are you able to appeal the decisions arrived at by those procedures?</td>
<td>.74*</td>
</tr>
<tr>
<td>7. Do those procedures uphold ethical and moral standards?</td>
<td>.86*</td>
</tr>
<tr>
<td><strong>Interpersonal justice</strong></td>
<td></td>
</tr>
<tr>
<td>1. Has he/she treated you in a polite manner?</td>
<td>.96*</td>
</tr>
<tr>
<td>2. Has he/she treated you with dignity?</td>
<td>.98*</td>
</tr>
<tr>
<td>3. Has he/she treated you with respect?</td>
<td>.98*</td>
</tr>
<tr>
<td>4. Has he/she refrained from improper remarks or comments?</td>
<td>.88*</td>
</tr>
<tr>
<td><strong>Distributive justice</strong></td>
<td></td>
</tr>
<tr>
<td>1. Do those outcomes reflect the effort that you have put into your work?</td>
<td>.92*</td>
</tr>
<tr>
<td>2. Are those outcomes appropriate for the work you have completed?</td>
<td>.93*</td>
</tr>
<tr>
<td>3. Do those outcomes reflect what you have contributed to your work?</td>
<td>.98*</td>
</tr>
<tr>
<td>4. Are those outcomes justified, given your performance?</td>
<td>.97*</td>
</tr>
<tr>
<td><strong>Affect-based trust</strong></td>
<td></td>
</tr>
<tr>
<td>1. My supervisor and I freely share our ideas and feelings.</td>
<td>.93*</td>
</tr>
<tr>
<td>2. I can talk freely to my supervisor about difficulties I am having at work.</td>
<td>.93*</td>
</tr>
<tr>
<td>3. We would both feel a sense of loss if one of us was transferred.</td>
<td>.75*</td>
</tr>
<tr>
<td>4. My supervisor responds caringly when I share my problems.</td>
<td>.93*</td>
</tr>
<tr>
<td>5. My supervisor and I have invested a lot in our working relationship.</td>
<td>.88*</td>
</tr>
<tr>
<td><strong>Cognition-based trust</strong></td>
<td></td>
</tr>
<tr>
<td>1. My supervisor approaches his/her job with dedication.</td>
<td>.82*</td>
</tr>
<tr>
<td>2. I see no reason to doubt my supervisor’s competence for the job.</td>
<td>.93*</td>
</tr>
<tr>
<td>3. I can rely on my supervisor not to make my job more difficult.</td>
<td>.86*</td>
</tr>
<tr>
<td>4. Most people trust and respect my supervisor as a coworker.</td>
<td>.91*</td>
</tr>
<tr>
<td>5. My peers consider my supervisor to be trustworthy.</td>
<td>.92*</td>
</tr>
<tr>
<td>6. If people knew more about my supervisor, they would be more concerned and monitor his/her performance more closely.</td>
<td>.39*</td>
</tr>
<tr>
<td><strong>Normative commitment</strong></td>
<td></td>
</tr>
<tr>
<td>1. I do not feel any obligation to remain with my current employer.</td>
<td>.20*</td>
</tr>
<tr>
<td>2. Even if it were to my advantage, I do not feel it would be right to leave my organization now.</td>
<td>.57*</td>
</tr>
<tr>
<td>3. I would feel guilty if I left my organization now.</td>
<td>.65*</td>
</tr>
<tr>
<td>4. This organization deserves my loyalty.</td>
<td>.70*</td>
</tr>
<tr>
<td>5. I would not leave my organization right now because I have a sense of obligation to the people in it.</td>
<td>.88*</td>
</tr>
<tr>
<td>6. I owe a great deal to my organization.</td>
<td>.75*</td>
</tr>
<tr>
<td><strong>Uncertainty</strong></td>
<td></td>
</tr>
<tr>
<td>1. There is a lot of uncertainty at work right now.</td>
<td>.90*</td>
</tr>
<tr>
<td>2. Many things seem unsettled at work currently.</td>
<td>.95*</td>
</tr>
<tr>
<td>3. If I think about work, I feel a lot of uncertainty.</td>
<td>.91*</td>
</tr>
<tr>
<td>4. I cannot predict how things will go at work.</td>
<td>.76*</td>
</tr>
</tbody>
</table>

Note. $n = 156$. (R) = reverse-worded items. * $p < .05$.

from their supervisor, including their evaluations, promotions, and rewards. The coefficient alpha for distributive justice was .96.

One concern when utilizing self-report measures of the justice dimensions is whether such subjective appraisals truly capture differences in the objective qualities of treatment. For example, are procedural justice perceptions truly rooted in objective differences in the amount of voice, the accuracy of information, the availability of appeals, and so forth? Three different types of data suggest that self-report appraisals do pick up true variance in objective treatment. First, laboratory studies in the justice literature routinely yield strong relationships between objective manipulations of justice concepts and self-report manipulation checks (e.g., Brockner et al., 2007; De Cremer & Tyler, 2007; De Cremer, Van Knippenberg, Van Knippenberg, Mullenders, & Stinglhamber, 2005; Rupp & Spencer, 2006; Siegel, Post, Brockner, Fishman, & Garden, 2005). Second, laboratory versus field breakdowns in meta-analyses have shown that self-report justice measures yield outcome relationships that are similar to relationships with manipulated justice (Cohen-Charash & Spector, 2001). Finally, research on justice climate illustrates that multiple employees within work units hold similar appraisals of the way their supervisor or organization treats the unit (Dietz, Robinson, Folger, Baron, & Schulz, 2003; Johnson, Korsgaard, & Sapienza, 2002; Liao & Rupp, 2005; Naumann & Bennett, 2000, 2002; Sinclair, 2003).

**Trust.** Affect- and cognition-based trust were measured with McAllister’s (1995) scales, with all items using response anchors of 1 = Strongly Disagree to 5 = Strongly Agree. The affect-based trust items were designed to capture the emotional investment, mutual concern, and deep sentiments that characterize that form of trust. These items had a coefficient alpha of .93. The cognition-based trust items were designed to capture the sense of professionalism and dedication that characterize that form of trust. These items had a coefficient alpha of .88.

**Normative commitment.** Normative commitment was measured with Meyer and Allen’s (1997) scale, which is a revised version of the original Allen and Meyer (1990) measure. All items used response anchors of 1 = Strongly Disagree to 5 = Strongly Agree. The items reflected a sense of obligation toward one’s employer and the sense that a debt is owed to the organization. The scale had a coefficient alpha of .75.

**Uncertainty.** A measure created for this study was used to assess general perceptions of work uncertainty, in accordance with uncertainty management theory (Lind & van den Bos, 2002; van den Bos & Lind, 2002). The items incorporate the elements of uncertainty described by van den Bos and Lind (2002), Milliken (1987), and Sitkin and Pablo (1992), including the inability to predict or control future events, the existence of environmental volatility, and a sense of environmental complexity or heterogeneity. Note that the items were not referenced to any particular target (e.g., the supervisor), because the theory clearly states that its focal construct is very broad and general. The items used a scale of 1 = Strongly Disagree to 5 = Strongly Agree and had a coefficient alpha of .91.

**Job performance.** Archival data were used to measure job performance. The organization’s contact person provided the overall job performance ratings for the participants during the year in which they completed the survey, once all surveys had been completed. These ratings were kept in the organization’s Peoplesoft software system and had a scale of 1 = Unacceptable, 2 =
Needs Improvement, 3 = Effective, and 4 = Outstanding. On average, 100 days had elapsed between the participant’s completion of the justice scales and his or her supervisor’s completion of the performance rating in Peoplesoft. This supports some degree of temporal precedence for the justice–performance relationships that underlie our model.

Confirmatory Factor Analysis

We conducted a confirmatory factor analysis on our survey measures to verify their factor structure and to provide some evidence of construct validity. We conducted this analysis using LISREL 8.52 (Jöreskog, & Sörbom, 1996). Our default seven-factor model provided a good fit to the data: χ²(573) = 847.37, p < .001, comparative fit index (CFI) = .98, standardized root mean residual (SRMR) = .07, root-mean-square error of approximation (RMSEA) = .05. All factor loadings were statistically significant and are shown in Table 1. Given the typically high correlations between the justice dimensions and between affect- and cognition-based trust, we compared our default measurement model with models that collapsed across those dimensions. A model combining procedural, interpersonal, and distributive justice into a single justice factor provided a significantly worse fit to the data: χ²(584) = 1,687.01, p < .001, Δχ²(11) = 839.64, p < .001. Similarly, a model combining affect- and cognition-based trust into a single trust factor provided a significantly worse fit to the data: χ²(579) = 945.14, p < .001, Δχ²(6) = 97.77, p < .001. Our hypotheses were therefore tested following the structure in Table 1.

Results

Descriptive Statistics

The means, standard deviations, and zero-order correlations among the study variables are shown in Table 2. Coefficient alphas are reproduced on the diagonal.

Tests of Hypotheses

Given our sample size, we tested the model in Figure 1 using a “partially latent” approach in which scale scores were used as single indicators of the latent variables with error variances set to (1 − alpha) * variance (Kline, 2005). Given the absence of measurement repetition, no coefficient alpha was available for job performance. In a recent study of organizational justice and customer service attitudes, Ambrose, Hess, and Ganesan (2007) suggested that a .90 alpha be utilized for single-item measures that are factually based and a .70 alpha be utilized for single-item measures that represent subjective beliefs. We utilized a coefficient alpha of .80 for job performance because it was a compromise between those two levels and represented a more conservative choice than the .70 value. It should be noted, however, that the choice of alpha had little impact on our results.

We allowed the exogenous justice dimensions to covary to represent unmeasured common causes, such as a higher order organizational justice factor. We also allowed the disturbance terms for affect- and cognition-based trust to covary, again to represent unmeasured common causes, such as a higher order trust factor. We also included direct effects from the justice dimensions to job performance, because such paths are needed to test our mediation predictions (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). The resulting model provided a good fit to the data: χ²(9) = 20.44, p < .05, CFI = .99, SRMR = .05, RMSEA = .09. The unstandardized path coefficients from the default LISREL output are shown in Figure 2.

Hypotheses 1–3 predicted that procedural, interpersonal, and distributive justice would be significantly related to affect- and cognition-based trust, respectively. As shown in Figure 2, all three hypotheses were supported. Procedural justice was a significant predictor of affect-based trust (b = .33) and cognition-based trust (b = .34). Interpersonal justice was also a significant predictor of affect-based trust (b = .26) and cognition-based trust (b = .32). Similarly, relationships with distributive justice were significant for affect-based trust (b = .29) and for cognition-based trust (b = .22). Taken together, these results suggest that the justice dimensions are relevant to both trust forms.

Hypothesis 4 predicted that affect- and cognition-based trust would be positively related to normative commitment. This hypothesis was partially supported, as affect-based trust was a significant predictor of normative commitment (b = .51) but cognition-based trust was not. Hypothesis 5 predicted that normative commitment would be positively related to job performance. This hypothesis was supported, as normative commitment was a significant predictor of job performance (b = .38). Hypothesis 6 predicted that affect- and cognition-based trust would be negatively related to uncertainty. This hypothesis was partially sup-

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Procedural justice</td>
<td>3.32</td>
<td>0.91</td>
<td>(.90)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Interpersonal justice</td>
<td>4.17</td>
<td>0.98</td>
<td>.55*</td>
<td>(.95)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Distributive justice</td>
<td>3.24</td>
<td>1.19</td>
<td>.50*</td>
<td>.37*</td>
<td>(.96)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Affect-based trust</td>
<td>3.45</td>
<td>1.09</td>
<td>.55*</td>
<td>.65*</td>
<td>.49*</td>
<td>(.93)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Cognition-based trust</td>
<td>3.59</td>
<td>1.00</td>
<td>.55*</td>
<td>.67*</td>
<td>.43*</td>
<td>.77*</td>
<td>(.88)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Normative commitment</td>
<td>3.06</td>
<td>0.76</td>
<td>.22*</td>
<td>.22*</td>
<td>.33*</td>
<td>.31*</td>
<td>.23*</td>
<td>(.75)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Uncertainty</td>
<td>3.02</td>
<td>1.06</td>
<td>-.28*</td>
<td>-.38*</td>
<td>-.43*</td>
<td>-.47*</td>
<td>-.55*</td>
<td>-.19*</td>
<td>(.90)</td>
<td></td>
</tr>
<tr>
<td>8. Job performance</td>
<td>3.31</td>
<td>0.48</td>
<td>.15*</td>
<td>.25*</td>
<td>.27*</td>
<td>.28*</td>
<td>.24*</td>
<td>.23*</td>
<td>-.17*</td>
<td>(.80)</td>
</tr>
</tbody>
</table>

Note. n = 156. Values along diagonal are coefficient alphas. SD = standard deviation. *p < .05, two-tailed.
ported, as cognition-based trust was a significant predictor of uncertainty ($b = -.66$) but affect-based trust was not. Hypothesis 7 predicted that uncertainty would be negatively related to job performance. This hypothesis was supported, as uncertainty was a significant predictor of job performance ($b = -.32$).

Hypothesis 8 predicted that the relationship between justice and job performance would be mediated by trust and normative commitment. Hypothesis 9 made the same prediction, substituting uncertainty in place of normative commitment. We tested mediation using the “product of coefficients” approach described by MacKinnon et al. (2002), in which mediation is demonstrated by a statistically significant product of independent variable → mediator and mediator → outcome relationships (i.e., a statistically significant indirect effect). There are a number of variants of the product of coefficients approach, with the Sobel (1982) test being the best known. We specifically utilized LISREL’s effect decomposition statistics to derive the indirect and total effects of the justice dimensions on job performance. One benefit of using LISREL’s statistics is that they can calculate the statistical significance of indirect effects with three stages (i.e., where justice leads to trust, trust leads to normative commitment and uncertainty and normative commitment and uncertainty lead to performance) and indirect effects that involve multiple mediators (in the case of normative commitment and uncertainty). The traditional “causal steps” approach described by Baron and Kenny (1986) does not provide a direct estimate of the indirect effect, nor does it test the effect’s statistical significance (MacKinnon et al., 2002). It is also not designed for models with three stages or with multiple mediators. Finally, the Baron and Kenny approach contains unnecessary steps that cause it to have lower statistical power than most product of coefficients approaches (MacKinnon et al., 2002).

LISREL’s effect decomposition statistics are summarized in Table 3. As shown in the top panel, all three justice dimensions had significant indirect effects on job performance, with values of .11, .09, and .08 for procedural, interpersonal, and distributive justice, respectively. Mediation was only partial for procedural justice, as evidenced by the fact that it maintained a statistically significant direct effect on job performance when the mediators were also modeled ($b = .25$). For purposes of clarity, note that the indirect and direct effects sum to the total effects, with the total effects indicating what would occur if job performance was regressed onto the three justice dimensions.

To tease apart the dual components of the trust mediation, we attempted to isolate the exchange- and uncertainty-based mediation mechanisms. In particular, we tested a model in which the uncertainty → job performance path was constrained to be 0, forcing the justice dimensions to exert their indirect effects only through normative commitment. This model provided a significantly worse fit to the data than the structure in Figure 2: $\chi^2(10) = 39.44, p < .001, \Delta \chi^2(1) = 19.00, p < .001$. As shown in the middle panel of Table 3, the magnitude of the indirect effects was reduced by around 60%, with interpersonal justice no longer having a significant indirect effect on job performance. This pattern suggests that a considerable portion of trust’s mediating impact is due to effects on uncertainty. We also tested a model in which the normative commitment → job performance path was constrained to be 0, forcing the justice dimensions to exert their indirect effects only through uncertainty. This model also provided a significantly worse fit to the data than the structure in Figure 2: $\chi^2(10) = 49.47, p < .001, \Delta \chi^2(1) = 29.03, p < .001$. As shown in the bottom panel of Table 3, the magnitude of the indirect effects was reduced by around 40%, though all three justice dimensions retained their significant indirect effects. This pattern suggests that a substantial portion of trust’s mediating impact is due to effects on normative commitment.

**Discussion**

One potential explanation for the continued popularity of justice as a topic of study is the relationship between the justice dimensions and job performance. However, the theoretical and practical value in such effects depends, to some extent, on understanding
exchange-deepening and uncertainty-reducing mechanisms both based trust, what stands out most from our results is that the are reliable and dependable. trust for both “hot” and “cold” reasons. It can foster a sense of organizational authorities. These results show that justice is relevant to undermine affect-based trust while highlighting the sort of effec-
distributively just outcomes prevent the anger and guilt that could allow reciprocal care and concern to develop, encouraging affect-based trust, while signaling an adherence to professional norms and climates, encouraging cognition-based trust. Finally, distributively just outcomes prevent the anger and guilt that could undermine affect-based trust while highlighting the sort of effective role fulfillment that underlies cognition-based trust in organizational authorities. These results show that justice is relevant to trust for both “hot” and “cold” reasons. It can foster a sense of mutual emotional investment while also signaling that authorities are reliable and dependable.

Aside from the specific linkages with affect- and cognition-based trust, what stands out most from our results is that the exchange-deepening and uncertainty-reducing mechanisms both had significant mediating roles in the justice–performance relationship. When combined into the structure in Figure 2, they resulted in significant indirect effects for all three justice dimensions. Indeed, interpersonal and distributive justice failed to exert significant direct effects when the exchange and uncertainty-based trust effects were controlled. That the procedural justice direct effect remained significant represents an interesting avenue for future research. It may be that procedural effects are also transmitted through mechanisms from other theoretical perspectives. For example, Moorman and Byrne (2005) suggested that justice could impact performance behaviors though social-identity-based mechanisms, such as group identification or group pride. Regardless, our results showed that the exchange- and uncertainty-based mechanisms were both needed to fully capture the mediating effects of trust. Removing either mechanism from the structure in Figure 2 resulted in a significantly worse fitting model and less of a trust-based indirect effect of justice on performance.

Looking more closely at our results for trust as an exchange deepener, it is important to note that affect-based trust had a significant relationship with normative commitment but cognition-based trust did not. Drawing on Blau’s (1964) theorizing, we had reasoned that affect-based trust would reflect the sort of mutual investment that instills a mind-set of obligation among exchange partners, with cognition-based trust signaling an abundance of the instrumental services that Blau described. We suspect that the more significant effects of affect-based trust can be explained by its more reciprocal nature. McAllister’s conceptualization (1995) emphasizes a mutual sharing of ideas, a mutual sharing of work-related difficulties, and a mutual sense of caring and investment. That sense of reciprocation is echoed in Blau’s discussion of the social exchange dynamic, which emphasizes a mutual sense of obligation, owing, debt, and loyalty. It is also worth noting that both McAllister and Lewicki and Bunker (1995, 1996) viewed affect-based trust as signaling a more mature and established relationship. Indeed, they described affect-based trust as building

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Effect Decomposition Results for Mediation Tests</th>
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<tbody>
<tr>
<td>Justice dimension</td>
<td>Indirect effect</td>
</tr>
<tr>
<td>Exchange and uncertainty-based mediation (the structure in Figure 2)</td>
<td></td>
</tr>
<tr>
<td>Procedural justice</td>
<td>.11*</td>
</tr>
<tr>
<td>Interpersonal justice</td>
<td>.09*</td>
</tr>
<tr>
<td>Distributive justice</td>
<td>.08*</td>
</tr>
<tr>
<td>Exchange-based mediation only (uncertainty → performance constrained to 0)</td>
<td></td>
</tr>
<tr>
<td>Procedural justice</td>
<td>.05*</td>
</tr>
<tr>
<td>Interpersonal justice</td>
<td>.03*</td>
</tr>
<tr>
<td>Distributive justice</td>
<td>.04*</td>
</tr>
<tr>
<td>Uncertainty-based mediation only (normative commitment → performance constrained to 0)</td>
<td></td>
</tr>
<tr>
<td>Procedural justice</td>
<td>.07*</td>
</tr>
<tr>
<td>Interpersonal justice</td>
<td>.07*</td>
</tr>
<tr>
<td>Distributive justice</td>
<td>.05*</td>
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</tbody>
</table>

Note. n = 156.
*p < .05.
on a foundation of cognition-based trust in much the same way that Blau described social exchanges as supplanting economic exchanges. Regardless, these results suggest that much of the social-exchange-based mediation observed in past research may be due primarily to the affect-based aspect of trust.

In contrast, cognition-based trust had a significant relationship with uncertainty but affect-based trust did not. We had suggested that the dependability and reliability inherent in cognition-based trust would give employees a sense of confidence when thinking about future circumstances, with affect-based trust signaling that employee needs would be protected as a show of care and concern. It may be that a dependable track record is simply more salient in uncertain situations than a sense of emotional investment. In indirect support of that premise, past research has suggested that trustee ability is a stronger driver of risk-taking decisions than is trustee benevolence (Colquitt et al., 2007). Alternatively, it may be that the effects of the two trust forms would differ if the uncertainty was made more specific. Lind and van den Bos described a number of different forms of uncertainty in their writings on uncertainty management theory (Lind & van den Bos, 2002; van den Bos & Lind, 2002). Consistent with their explications, our measure of uncertainty perceptions was intentionally global, reflecting a general sense that work events were unpredictable. However, one might expect cognition-based trust to matter more during times of organizational crisis, whereas affect-based trust might matter more during political struggles or times of relationship conflict.

Taken together, these results offer three important theoretical contributions to the justice literature. First, they reinforce Lewicki et al.’s (2005) suggestion that justice scholars should adopt a more nuanced view of trust in their theorizing. It may be that the past reliance on the unidimensional confident, positive expectations perspective has obscured some potentially important distinctions that can explain exactly why justice impacts performance behaviors. We would therefore suggest that scholars continue to assess both affect- and cognition-based trust (or, alternatively, the benevolence-, ability-, and integrity-based forms of trustworthiness described by Mayer et al., 1995) in order to further explore those nuances (see also Colquitt & Mueller, 2008).

Second, our results show that social exchange theory should not be the only theoretical lens used to explain the effects of justice on performance behaviors. A combination of exchange-based mechanisms and mechanisms rooted in uncertainty management theory was needed to more fully explain why trust served as a mediator of justice effects. Supplementing social-exchange-based mechanisms with more uncertainty-based mechanisms could complement recent research that examines justice from a workplace stress lens (e.g., Greenberg, 2006). Given that work uncertainty is framed as a stressor in many stress models, justice could be viewed as having a buffering role that is similar to the functioning of supervisor or coworker support in the stress literature (Sonnentag & Frese, 2003).

Third, our results illustrate the value in integrating multiple theories when examining justice phenomena. The mechanisms in different theories may often be complementary to one another by emphasizing different aspects of the psychological experience of justice—aspects that may uniquely explain subsequent reactions. That observation is particularly relevant to the literatures on fairness heuristic theory and uncertainty management theory. We noted earlier that uncertainty management theory was cast as a successor to fairness heuristic theory. The discussions of uncertainty management theory ascribe no special importance to trust (Lind & van den Bos, 2002; van den Bos & Lind, 2002), and tests of the theory do not operationalize any trust-related constructs (van den Bos, 2001b; van den Bos & Miedema, 2000). Moreover, the introduction of uncertainty management theory seems to have had a dampening effect on studies that apply fairness heuristic theory to ground predictions or that use its mechanisms to inspire the choice of independent or mediating variables. Our results suggest that fairness heuristic theory remains a valuable conceptual lens because it simultaneously emphasizes the importance of trust and of uncertainty. As a result, there may be value in viewing fairness heuristic theory as a complement to uncertainty management theory, rather than as an ancestor that has lost its usefulness. Moreover, there may be value in moving beyond the global uncertainty that is described and tested in uncertainty management theory, to see if a more nuanced operationalization would shed new insights. For example, there could be value in articulating a taxonomy of work and nonwork-related uncertainty, to see if those facets contribute beyond a global form, or to see if justice is uniquely relevant to some facets more than others.

**Limitations**

This study has some limitations that should be noted. One limitation is the use of self-report scales for the justice, trust, normative commitment, and uncertainty variables. The reliance on self-reports raises the possibility that the relationships among those variables are inflated by common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, it should be noted that the relationships with job performance were not same source, given the use of archival data. Common method variance could have contributed to some of the high correlations between our predictors, especially affect- and cognition-based trust. Such significant multicollinearity raises questions about the robustness of the results for those predictors in Figure 2. Fortunately, a dominance analysis supported the relative importance of those predictors for normative commitment and uncertainty (Azen & Budeescu, 2003; Lebreton, Ployhart, & Ladd, 2004).2

Another limitation concerns the correlational nature of our data. The term mediation conveys a causal quality to the examined relationships that cannot be inferred from correlational data (Stone-Romero & Rosopa, 2004). Although our job performance data were collected several months after our self-report variables, we would have needed to collect experimental or cross-lagged data to test the causal nature of the relationships among justice, trust, and performance. In the absence of such data, the only means of judging the validity of our causal order is to compare the structure in Figure 2 with structures with alternative orderings of the justice, trust, and mediator linkages. We investigated five such alternatives. Four provided a worse fit to the data, three of those to a statistically significant degree (full details of this analysis are available from the first author upon request). The fifth alternative provided an equivalent fit and cast normative commitment and uncertainty as antecedents of the trust dimensions and the trust

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1 These analyses are available from the first author upon request.
dimensions as antecedents of the justice dimensions. However, we are not aware of any theories that would support that structure, unlike our a priori structure in Figure 2.

Other limitations concern our use of normative commitment to operationalize the exchange-deepening dynamic in our study. We chose to use normative commitment because it captures the notion of obligation, which is central to Blau’s (1964) description of social exchange relationships. Other common operationalizations of social exchange, such as Eisenberger, Armeli, Rexwinkle, Lynch, and Rhoades’s (2001) perceived support (e.g., Masterson et al., 2000; Moorman et al., 1998; Tekleab et al., 2005; Wayne et al., 2002), Graen and Uhl-Bien’s (1995) leader–member exchange (e.g., Masterson et al., 2000; Wayne et al., 2002), and Meyer and Allen’s (1991, 1997) affective commitment (e.g., Shore & Tetrick, 1991; Shore & Wayne, 1993) do not reference a sense of obligation in any way. However, four of the six items in Meyer and Allen’s (1997) normative commitment scale bound the obligation to the desire to remain, which is only one aspect of reciprocation. A better operationalization of the exchange-deepening dynamic might therefore have been Eisenberger et al.’s felt obligation construct, which represents a more all-encompassing sense of reciprocation. Alternatively, we could have utilized Morrison and Phelps’s (1999) felt responsibility scale, or we could have conceptualized obligation as a broadening of role definitions, along the lines of McAllister, Kammard, Morrison, and Turban (2007). Our normative commitment measure was also referenced to the organization, whereas our justice and trust measures were referenced to the supervisor. Although we believe that employees can reciprocate for beneficial supervisory treatment with attitudes and behaviors that support the organization—because the supervisor is an agent of the organization—a supervisor-targeted measure of obligation would have yielded a cleaner test. We therefore suspect that the path coefficients involving normative commitment would have been stronger if supervisory normative commitment (or felt obligation toward one’s supervisor) had served as our operationalization of the exchange dynamic.

Practical Implications

Despite those limitations, our results offer a number of practical implications. First and foremost, the justice effects observed in our data reinforce the practical value in sensitizing managers to justice concerns. Fortunately, a stream of research has shown that managers can be successfully trained to adhere to justice rules (for a review, see Skarlicki & Latham, 2005). Such training could become an aspect of the managerial and executive development programs that are already so common in today’s organizations. We would further suggest pairing such programs with annual survey assessments of justice and trust variables. Many organizations already conduct annual attitude surveys, but often those surveys focus more on general job attitudes than on specific justice or trust variables. Such survey efforts would allow individuals to identify the departments or work units in which justice or trust is particularly low, making justice training a more immediate priority. Our results for affect-based trust illustrate the value in initiatives that increase the frequency and transparency of communications with employees, as the frequent sharing of ideas and information is a key component of that trust form (McAllister, 1995). Finally, our results for cognition-based trust reinforce the importance of staff-training and training strategies, all of which can be leveraged to improve the competence and reliability of organizational employees (Arthur, Bennett, Edens, & Bell, 2003; Rynes, 1991). Fostering affect- and cognition-based trust in these manners should help employees cope with uncertain periods in their organizational lives while they maintain their focus on their work obligations.

References


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