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# Trust Primacy: A Model of the Reciprocal Relations Between Trust and Perceived Justice

Brian C. Holtz
*Temple University*

*Management scholars have historically framed trust as a consequence of organizational justice that develops slowly over time. However, theory and empirical research outside of the management literature suggest that trust is inevitably present prior to the initiation of exchange relationships. For instance, neuroscientific evidence suggests that the human brain has evolved mechanisms capable of automatically evaluating the trustworthiness of potential exchange partners without conscious deliberation. This article presents a new theoretical model suggesting that trust forms rapidly and exerts significant influence on employee perceptions of justice. Implications for research and practice are discussed.*

***Keywords:*** *trust; fairness; social exchanges*

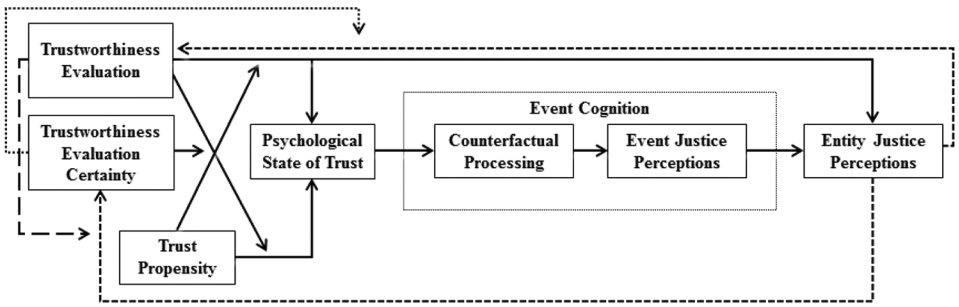
Trust and justice are core constructs in the organizational sciences with noted benefits for the effective functioning of organizations (e.g., Cohen-Carash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Dirks & Ferrin, 2001; Kramer, 1999). Management scholars have traditionally argued that trust develops slowly based on a series of favorable interactions with an exchange partner (e.g., Holmes, 1991; Luhmann, 1979; Rempel, Holmes, & Zanna, 1985; Zand, 1972). Reflecting this perspective, the dominant research paradigm suggests that trust is best viewed as a consequence of perceived justice. However, recent developments outside of the management literature challenge the notion that justice experiences precede the psychological state of trust.

Evolutionary theorists, for example, argue that rapid inferences of trustworthiness would have been essential for survival in humans' evolutionary history. As a result of selective pressures, the human brain evolved cognitive mechanisms designed to rapidly assess the intentions of potential exchange partners (Cosmides & Tooby, 1992). Theoretical arguments

*Corresponding author: Brian C. Holtz, Temple University, Fox School of Business, Philadelphia, PA, 19122, USA*

*E-mail: bholtz@temple.edu*

**Figure 1**
**Trust Primacy Model**




regarding cognitive adaptations for rapid trust are buttressed by a growing body of neuroscientific research that demonstrates that the human brain automatically and subconsciously evaluates the trustworthiness of other entities (for a review see Todorov, 2011). For instance, research suggests the brain only requires milliseconds of visual exposure to judge the trustworthiness of an unfamiliar entity (Todorov, Pakrashi, & Oosterhof, 2009). Thus, a burgeoning line of research suggests that humans are not only capable of developing trust prior to gaining direct experience with an exchange partner but are "hardwired" to do so. This article presents a theoretical model that integrates contemporary knowledge regarding trust development with extant justice literature to help extend our understanding of the temporal relations between trust and justice in employment contexts (see Figure 1).

The core arguments of the proposed *trust primacy model* are predicated on two basic principles. First, trust develops quickly. This article brings together evolutionary theory, neuroscientific research, and psychological perspectives on dispositional trust to build a strong case for the rapid development of trust. Second, trust influences perception. Scholars have argued that trust colors perception in a manner consistent with confirmation bias (Dirks & Ferrin, 2001; Kramer, 2009; McKnight, Cummings, & Chervany, 1998). However, to date, no theoretical frameworks have explicated the specific cognitive mechanisms through which trust exerts its influence on employee perceptions of justice. This article draws upon fairness theory (Folger & Cropanzano, 2001) and the counterfactual processing literature (e.g., Kahneman, 1995) to offer an explanation of *how* trust affects perceptions of justice. Specifically, it is argued that counterfactual processing of events will generally recapitulate one's trust-related expectations. Additionally, principles of fairness heuristics theory (Lind, 2001; Van den Bos, Lind, & Wilke, 2001) are incorporated into the model to articulate a feedback loop between event justice perceptions, entity justice perceptions, and subsequent trust. As a final point of interest, scholars have argued that trust models failing to consider the certainty of trustworthiness evaluations are incomplete (Bhattacharya, Devinney, & Pillutla, 1998). Accordingly, this article draws upon the psychological literature on attitude certainty to illuminate the critical role of evaluation certainty in the formation of trust. The article concludes by discussing the implications of the proposed model.

## Model Development

### *Trust and Trustworthiness*

Interest in trust spans a wide array of scholarly disciplines including economics, political science, psychology, sociology, and management. Not surprisingly, numerous definitions of trust have emerged across these disciplines. In an effort to distill the core commonalities of trust conceptualizations, Rousseau, Sitkin, Burt, and Camerer (1998: 395) offered the following integrative definition: "*Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions of another.*"

This definition underscores two important and broadly accepted points. First, some degree of risk is essential to the experience of trust. If there were no potential for loss, then trust would not be needed (Gambetta, 1988; Rousseau et al., 1998). Within organizational contexts, there is almost always a degree of risk for employees. While an employment relationship can provide a variety of benefits (e.g., an enhanced sense of identity, financial and social rewards), it may also result in undesirable consequences (e.g., exploitation, social rejection, diminished personal identity) for employees. In fact, these risks are salient in virtually all social exchange relationships (Lind, 1995, 2001).

The second important point in the above definition is that the psychological state of trust is driven by expectations that an entity will (or will not) prove trustworthy in future interactions (Hardin, 2003; Lewis & Weigert, 1985; Mayer, Davis, & Schoorman, 1995; Tomlinson & Mayer, 2009; Williams, 2001). Trust scholars have conceptualized these expectations in different terms while generally converging on similar themes. McAllister (1995), for instance, argued that beliefs about the trustworthiness of others could be measured along two dimensions. Namely, he distinguished between affective-based (e.g., care, consideration) and cognitive-based (e.g., competence, reliability) foundations for trust. In a similar vein, Mayer and colleagues described that trustworthiness is based on inferences that an entity has the *ability* (e.g., wisdom, knowledge, skill, expertise), *benevolence* (e.g., loyalty, caring, honesty, selflessness), and *integrity* (e.g., morality, ethicality, credibility, consistency) characteristic of a beneficial exchange partner (Mayer & Davis, 1999; Mayer et al., 1995). Consistent with this view, recent meta-analytic evidence indicates that evaluations of ability, benevolence, and integrity are strongly associated (i.e., correlations ranging from .62 to .68) and account for significant unique variance in the psychological state of trust ($\beta$ = .39, .26, and .15, respectively; Colquitt, Scott, & LePine, 2007). Regardless of the particular labels adopted by scholars, the core idea that expectations regarding an entity's future behavior provide the foundation for trust is well established in organizational theory. Consistent with the dominant conceptualizations of trust and trustworthiness, this model begins with the following proposition:

*Proposition 1:* The psychological state of trust follows from evaluations of entity trustworthiness.

### *Evolutionary Foundation for Rapid Evaluations of Trustworthiness*

The human brain accounts for about 2% of our body weight and consumes 20% of our energy and nutrients (Aiello & Wheeler, 1995; Pinker, 1997). According to the social brain

hypothesis (Brothers, 1990; Dunbar, 1998, 2007), the biological extravagance of the human brain is a product of evolutionary forces associated with living in social groups. Specifically, anthropological evidence suggests that our early hominid ancestors lived in groups and were engaged in social exchange relationships for millions of years (Tooby & Cosmides, 2005). Living in large social exchange communities exposed our ancestors to unique threats and opportunities that presented complex computational demands. For example, coordinating, compromising, and gauging the trustworthiness of others represented computationally difficult tasks; the chances of survival and reproduction in the evolutionary environment of adaptation would have improved to the extent that an organism could *rapidly* navigate these social complexities (Dunbar, 1998, 2007).

Prominent theorists have described that the human brain adapted specialized cognitive mechanisms, beyond general information processing capabilities, used explicitly to navigate social exchange (Baron-Cohen, 1997; Dunbar, 1998, 2007; Tooby & Cosmides, 2005; Tooby, Cosmides, & Price, 2006). As Hoffman, McCabe, and Smith (1998: 336) noted, "mental modules for solving social problems are as much a part of the adapted mind as our vision and hearing-balance faculties." Among the most important of these cognitive adaptations is the ability to quickly infer the intentions of others (e.g., theory of mind capabilities). More specifically, humans (and other primates, to a lesser extent) have a unique ability to infer the mental states and intentions of other entities based on a general understanding of how the mind functions (Baron-Cohen, 1997; Dunbar, 1998, 2007; Jellema & Perrett, 2009; Tooby et al., 2006). Understanding an entity's intentions is critical for determining trust (Rousseau et al., 1998).

Of course, people cannot directly observe the constructs that underlie trustworthiness (e.g., integrity, benevolence, ability; Mayer et al., 1995). Rather, we infer the trustworthiness of others based on biological signs and sociocultural signals (Ahn, Janssen, & Ostrom, 2004; Bacharach & Gambetta, 2001; Eckel & Wilson, 2003). Signal detection is routine in day-to-day life. For instance, it is a common experience to classify a complete stranger as trustworthy or untrustworthy based only on a quick glance (Bacharach & Gambetta, 2001; Eckel & Wilson, 2003). The list of possible signals that can drive inferences of trustworthiness is virtually endless. Biological cues including facial expressions, eye contact, body language, and tone of voice can signal that a potential exchange partner is trustworthy (Eckel & Wilson, 2003). Further, a person's implicit theories, or stereotypes, about demographic groups may shape inferences of competence, benevolence, and integrity (Kramer, 2009; McKnight et al., 1998). For instance, research suggests that cues including physical attractiveness (Hosoda, Stone-Romero, & Coats, 2003; Huffcutt, 2011), age (Rupp, Vodanovich, & Crede, 2006), gender (Hekman et al., 2010; Nguyen & Ryan, 2008), height (Judge & Cable, 2004), weight (Rudolph, Wells, Weller, & Baltes, 2009), disability (Leasher, Miller, & Gooden, 2009), and race (Hekman et al., 2010; Nguyen & Ryan, 2008) influence judgments regarding the ability or competence of others. Beyond biological factors, a range of sociocultural cues including clothing, tattoos, jewelry, credentials, diplomas, and socioeconomic status are used to infer trustworthiness (Bacharach & Gambetta, 2001; Eckel & Wilson, 2003). Similarly, a person's occupation or organizational position may signal that he or she is trustworthy (Meyerson, Weick, & Kramer, 1996). For example, based on entry requirements and job characteristics, one might generally assume engineers have high abil-

ity, social workers are benevolent, or medical professionals possess high integrity. Taken together, research suggests that there are innumerable cues that help guide initial evaluations of the trustworthiness of a potential exchange partner.

### *Neuroscientific Evidence for Rapid Evaluations of Trustworthiness*

Similar to fight-or-flight reactions, the human brain automatically and subconsciously processes the trustworthiness of others (Burnham, McCabe, & Smith, 2000). Among the myriad possible cues that influence perceptions of trustworthiness, human facial characteristics have received the most systematic examination in the neuroscientific literatures. Facial signals communicate a great deal of information and are often rooted in neurological processes that are difficult to fake (Ahn et al., 2004). Empirical evidence suggests people infer a wide variety of information just by glancing at a face, including kinship (DeBruine, 2002), social dominance (Mazur, Mazur, & Keating, 1984; Mueller & Mazur, 1996), and most important for the current discussion, trustworthiness (for a review see Todorov, 2011).

Early evidence regarding the neurological basis of trustworthiness evaluations largely stemmed from studies of patients suffering brain injuries. For example, research demonstrated that individuals with bilateral damage to the amygdala region of the brain (a region linked to emotions) had difficulty discriminating between trustworthy and untrustworthy faces (Adolphs, Tranel, & Damasio, 1998). Advances in neuroimaging technology have allowed researchers to further delineate the neurological foundations of rapid trustworthiness cognitions. For instance, using functional magnetic resonance imaging (fMRI), Winston, Strange, O'Doherty, and Dolan (2002) demonstrated that evaluations of trustworthiness occur implicitly in response to stimuli. Specifically, participants were presented with a series of pictures of different faces and asked to complete one of two tasks: judge the person's trustworthiness or categorize the person's age. Results revealed greater amygdala activation in response to faces that were later rated as untrustworthy by participants. Importantly, participants showed similarly strong brain activation in response to untrustworthy faces, whether or not they were explicitly evaluating trustworthiness. Additionally, untrustworthy faces stimulated the right insula brain region. This finding is particularly interesting because the insula is thought to be important in mapping autonomic changes. Substantively, this suggests amygdala stimulation may engender bodily changes that are mapped back to the insula such that an individual perceives a "gut feeling" about the stimulus (Winston et al., 2002: 280).

In a similar experiment, Engell, Haxby, and Todorov (2007) had participants complete what was billed as a memory task, in which blocks of multiple faces were presented and individuals were asked to determine if particular faces had appeared in the previous blocks. In reality, the experimenters were interested in brain responses to trustworthy and untrustworthy faces. Consistent with Winston et al.'s (2002) findings, more untrustworthy faces elicited stronger amygdala activation in the participants. Interestingly, the authors also collected trustworthiness judgments from a control group and found the average rating from the control group predicted fMRI participants' amygdala activation better than the fMRI participants' own judgments of trustworthiness collected after the fMRI portion of the experiment.

This finding suggests that it is the structural facial characteristics, rather than a person's idiosyncratic perceptions, that are driving brain reactions (Todorov, 2008).

Further, Willis and Todorov (2006) demonstrated that people make reliable judgments of the trustworthiness of faces with only 100 ms of visual exposure. Interestingly, this time period is too brief to make saccadic eye movements. Thus, this experiment demonstrated that individuals form judgments of trustworthiness in single glances (Todorov, 2008). Building on this research, Todorov et al. (2009) demonstrated that when participants were exposed to an untrustworthy face subliminally (20 ms), they subsequently rated neutral faces as significantly less trustworthy than when no prime was introduced. Thus, it seems neurological reactions may occur even if individuals are not consciously aware of observing an untrustworthy face (Todorov et al., 2009). Subsequent evidence suggests that brain activation in response to faces is nonlinear (quadratic), in that activation is particularly heightened in response to very trustworthy and very untrustworthy faces (Said, Baron, & Todorov, 2009). Even more specifically, the strongest brain activation occurs in response to untrustworthy faces. This finding makes sense from an evolutionary perspective because failing to detect an untrustworthy entity would carry the gravest consequences (Todorov, 2008).

It is important to reiterate that faces are by no means the only signal people attend to in evaluating the trustworthiness of potential exchange partners; the list of possible cues is virtually endless. Rather, the human face has been the most systematically investigated signal of trustworthiness in the neuroscientific literature to date. This body of research suggests that trustworthiness evaluations are formed automatically, at a subconscious level, whether or not one consciously attempts to judge the trustworthiness of another (e.g., Todorov et al., 2009; Winston et al., 2002). Taken together, theory and empirical evidence suggest that humans are hardwired to quickly evaluate the trustworthiness of entities in our proximity.

*Proposition 2:* Normal functioning adults automatically evaluate the trustworthiness of potential exchange partners, prior to initiating exchange relationships.

### *Trust Propensity*

Environmental cues play a large role in trust formation. Additionally, individual differences affect one's willingness to accept vulnerability (i.e., to trust). Pioneering psychological research by Rotter (1967, 1971) suggested that individuals vary in their general predisposition to trust others. Individual differences in willingness to trust have since been discussed under a variety of labels including dispositional trust (Kramer, 1999), generalized trust (Stack, 1978), trusting stance (McKnight et al., 1998), and trust propensity (Mayer et al., 1995). Theory suggests that trust propensity shapes trust *prior* to the acquisition of direct experiential evidence regarding the trustworthiness of others (Mayer et al., 1995; McKnight et al., 1998; Meyerson et al., 1996). Further, meta-analytic evidence suggests that trust propensity is positively related to trust, above and beyond the effects of perceived trustworthiness alone (Colquitt et al., 2007).

Trust propensity is shaped by a variety of factors, including early developmental experiences (Bowlby, 1982), culture (Hofstede, 1980), and past experiences with the population in

question (McCabe, Rassenti, & Smith, 1998). Recent research has begun to uncover the neuroendocrinological underpinnings of trust propensity. Specifically, neuroeconomists have demonstrated that the neuropeptide oxytocin plays an important role in shaping peoples' trust propensity. Oxytocin is thought to have evolved primarily to facilitate mating by diminishing the fear response common when animals are in close proximity to others (Zak, 2008). Kosfeld, Heinrichs, Zak, Fischbacher, and Fehr (2005) conducted an experiment in which participants were given an intranasal dose of oxytocin (or a placebo) just prior to playing an economic trust game for real stakes. Results indicated that oxytocin administration led to significantly greater initial trust in one's exchange partner. Similarly, an international study conducted by Zak and Fakhar (2006) found that oxytocin and estrogen correlates (e.g., consumption of plant-based estrogen, environmental pollution) were significantly related to trust propensity at the country level of analysis. Interestingly, Zak (2008) describes that safe and nurturing environments seem to bolster the effects of oxytocin, while stressful environments can diminish the effects of oxytocin on trust propensity.

It is important to emphasize that trust propensity should not be equated with gullibility (Rotter, 1980). That is, although trust propensity facilitates trust, it does not lead individuals to indiscriminately assume that all entities are trustworthy. Rather, trust propensity is associated with greater trust in the context of favorable or ambiguous signs of trustworthiness. For instance, if there were absolutely no cues available to help infer the trustworthiness of another entity, a person with high trust propensity will trust to a greater extent than a person with low trust propensity (Mayer et al., 1995; Meyerson et al., 1996). Similarly, in the presence of favorable trustworthiness cues, high trust propensity will result in higher trust than low trust propensity. But in response to signs that an entity is untrustworthy, people with high trust propensity will distrust to a similar extent as people with low trust propensity (for reviews see Rotter, 1980; Yamagishi, 2001). Thus, the effect of trust propensity on trust depends on the favorability of trustworthiness cues in the environment. In other words, trustworthiness and trust propensity have interactive effects on trust (Mayer et al., 1995).

*Proposition 3a:* Trust propensity is positively related to the psychological state of trust.

*Proposition 3b:* Trustworthiness evaluations and trust propensity have interactive effects on the psychological state of trust. More specifically, the positive relationship between trustworthiness and the psychological state of trust is stronger for individuals high, rather than low, on trust propensity.

## Relationships Between Trust and Perceived Justice

### *Effects of Trust on Event Justice Perceptions*

The purpose of the article up to this point has been to advance the perspective that a level of trust is inevitably present *prior* to the initiation of an exchange relationship. Now, turning from the development of trust to the consequences of trust, the following section argues that trust has significant implications for individuals' perceptions regarding the fairness of exchange events. The view that trust forms prior to, and ultimately influences, perceived justice is counter to the bulk of research in this area. The overwhelming majority of published

studies in the management literature have conceptualized trust as an outcome of justice (extant studies are summarized in Table 1).[1]

Blau's (1964) classic formulation of social exchange theory is often used to argue that trust represents a consequence (rather than antecedent) of perceived fairness. This perspective is, of course, theoretically defensible as Blau did suggest that trust gradually expands in response to positive interactions. However, Blau also described that trust is required for the initiation of social exchange. For instance, Blau (1964: 146) argued that peoples' initial attraction (or repulsion) to a potential exchange partner hinges upon their expectations that the entity will (or will not) behave in accordance with accepted standards of social conduct and will (or will not) provide beneficial social rewards in excess of potential costs. Such expectations represent the foundation of contemporary definitions of trust (i.e., Rousseau et al., 1998). Further, consistent with the research reviewed previously, Blau speculated that initial expectations would be based on the perception of environmental symbols rather than direct experience.

Mirroring Blau's views, trust scholars have described that trust essentially boils down to an approach-or-avoid decision (e.g., Gambetta, 1988; Schoorman, Mayer, & Davis, 2007). At the lowest levels of trust, individuals are unwilling to be vulnerable and avoid exchange relations so that they do not place themselves at risk (Burnham et al., 2000; Schoorman et al., 2007; Tooby et al., 2006; Yamagishi, 2001). Researchers have used game theoretic experiments to empirically illustrate the influence of trust on initial decisions of whether or not to engage with potential exchange partners. For example, reasoning that an earnest smile is an important signal of trustworthiness, Eckel and Wilson (2003) hypothesized that participants in a computerized economic trust game (with real financial stakes) would be more likely to engage in exchange with another player if that player were pictured smiling (unbeknownst to participants, game play was against a computer program). Consistent with predictions, first movers initiated exchange at significantly higher rates when the other players were pictured smiling versus not smiling. More recently, a computer simulation study by Janssen (2006) demonstrated that the greater number of trustworthiness signals available in the environment, the more likely an individual is to engage with a potential exchange partner. Further, a study by Bell, Wiechmann, and Ryan (2006) found applicants' expectations of whether or not an organization would provide fair treatment (a concept similar to trust) influenced their likelihood of accepting job offers. Thus, theory and empirical research suggest that a person's initial level of trust influences decisions to initiate or avoid exchange relationships. As Gambetta (1988) summarized, trust forms *before* a person has the opportunity to monitor the actions of others.

Blau (1964) argued that in addition to affecting decisions to enter into exchange relationships, peoples' expectations influence their interpretation of subsequent interactions with exchange partners (see also Gambetta, 1988). To explicate the specific effects of trust on perceived justice, it is important to consider the cognitive processes responsible for the development of justice perceptions. To this end, Folger and Cropanzano's (2001) fairness theory provides the most comprehensive framework for understanding the cognitive processes underlying the formation of event justice perceptions.[2] Fairness theory stresses that events are not inherently fair or unfair; rather they must be interpreted to assign meaning. In other words, justice is a subjective phenomenon that rests upon individual interpretations.

**Table 1**
**Empirical Articles Testing Directional Hypotheses Between Trust and Justice**

| Article | Direction of Hypothesis | Concurrent Measurement | Theoretical Framework | Focal Entity | Average Length of Relationship |
|---|---|---|---|---|---|
| Alexander & Ruderman (1987) | J→T | Yes | * | Mgmt | >1 yr (org) |
| Ambrose & Schminke (2003) | J→T | Yes | SET | Supervisor | 5.4 yrs (org) |
| Aryee, Budhwar, & Chen (2002) | J→T | Yes | SET | Supervisor | 6.88 yrs (org) |
| Begley, Lee, & Hui (2006) | J→T | Yes | FHT | Org | 6 yrs (org) |
| Brashear, Manolis, & Brooks (2005) | T→J | Yes | GVM | Supervisor | * |
| Brockner, Wiesenfeld, & Martin (1995) | J→T | Yes | SET/BDT | Mgmt | 10+ yrs (org) for 66% of sample |
| Camerman, Cropanzano, & Vandenberghe (2010) | J→T | Yes | SET | Staffing Agent | * |
| Chen, Chen, & Xin (2004) | J→T | Yes | * | Mgmt | * |
| Choi (2008) | J→T | Yes | FHT | Supervisor | 4.2 yrs (org) |
| Cropanzano, Prehar, & Chen (2002) | J→T | Yes | SET | Upper Mgmt | 8 yrs (org), 3.5 yrs (supervisor) |
| DeConinik (2010) | J→T | Yes | SET | Org & Supervisor | Multiple samples: 8.4 & 11.8 yrs (org) |
| Den Hartog & De Hoogh (2009) | J→T | Yes | * | Supervisor & Coworkers | 10 yrs (org) |
| Folger & Konovsky (1989) | J→T | Yes | * | Supervisor | 5 yrs (org) |
| Gopinath & Becker (2000) | J→T | No | * | New Ownership | 18 yrs (org) |
| Holtz & Harold (2008) | T→J | Yes | FT/AJM | Supervisor | 2.3 yrs (org), 1.8 yrs (supervisor) |
| Holtz & Harold (2009) | T→J | No | AJM | Org & Supervisor | 1.6 yrs (org), 1.2 yrs (supervisor) |
| Jones & Martens (2009) | J→T | Yes | FHT | Senior Mgmt Team | * |
| Kernan & Hanges (2002) | J→T | No | ASM | Mgmt | 10.1 yrs (org) |
| Khazanchi & Masterson (2011) | J→T | Yes | FHT/GVM | Org & Supervisor | * |
| Kiefer (2005) | J→T | Yes | AET | Org | 8.4 mths (org) |
| Kim & Mauborgne (1993) | J→T | Yes | SET | Head Office Mgmt | 17 yrs (org), 4 yrs (job) |
| Konovsky & Cropanzano (1991) | J→T | Yes | GVM | Mgmt | 4.3 yrs (org) |
| Konovsky & Pugh (1994) | J→T | Yes | SET | Supervisor | 10.5 yrs (org) |
| Korsgaard & Roberson (1995) | J→T | Yes | * | Supervisor | 11.4 yrs (org) |
| Korsgaard, Roberson, & Rymph (1998) | J→T | Yes | * | Supervisor | 1.5 yrs (org) |
| Korsgaard, Schweiger, & Sapienza (1995) | J→T | No | GVM | Team Leader | 5 yrs (org) |
| Lee & Farh (1999) | J→T | Yes | * | Supervisor | * |
| Lee, Pillutla, & Law (2000) | J→T | Yes | * | Supervisor | 3 yrs (org), 33 mths (job) |
| McNall & Roch (2009) | J→T | Yes | SET | Supervisor | 43.6% of sample 0–3, 22.6% 4–6, 31.1% 6+ mths (org) |

*(continued)*

**Table 1 (continued)**

| Article | Direction of Hypothesis | Concurrent Measurement | Theoretical Framework | Focal Entity | Average Length of Relationship |
|---|---|---|---|---|---|
| Pearce, Bigley, & Branyiczki (1998) | J→T | Yes | * | Coworkers | * |
| Pillai, Schriesheim, & Williams (1999) | J→T | Yes | SET | Supervisor | Multiple samples: 3.26 & 2.8 yrs (org) |
| Pillai, Williams, & Tan (2001) | J→T | Yes | * | Supervisor | Multiple samples ranging from 3.26 to 8.6 yrs (org) |
| Stinglhamber, De Cremer, & Merken (2006) | J→T | Yes | SET | Org & Supervisor | 2.5 yrs (org) |
| Tyler (1994) | T→J | Yes | GVM | Supervisor | * |
| Van Dijke, De Cremer, & Mayer (2010) | J→T | Yes | FHT/FT | Supervisor | Multiple samples: 5.55 & 2.10 yrs (org) |
| Yang, Mossholder, & Peng (2009) | J→T | Yes | FHT | Supervisor | 1.88 yrs (supervisor) |

Notes: J→T = justice hypothesized to influence trust; T→J = trust hypothesized to influence justice; AET = Affective Events Theory; AJM = Anticipatory Justice Model; ASM = Agent-System Model; BDT = Behavioral Decisions Theory; FHT = Fairness Heuristics Theory; FT = Fairness Theory; GVM = Group-Value Model or Relational Model; SET = Social Exchange Theory; Mgmt = management; org = organization; yr = year; yrs = years; mths = months. *Information not explicitly stated in the article.

Fairness theory suggests that the determination of accountability for one's subjective state of wellbeing is critical for interpreting the meaning of particular events. These determinations are driven by counterfactual cognitions. That is, aspects of an event (as it is perceived) are mentally altered to provide a referent standard by which one can judge the event.

More specifically, event fairness perceptions hinge upon three counterfactual comparisons. First, *would* counterfactuals contrast one's wellbeing following an event to their imagined wellbeing had events unfolded differently. Second, *could* counterfactuals evaluate whether an alternative state of affairs is reasonable or possible given the circumstances. Third, *should* counterfactuals determine whether an event unfolded in a manner consistent with moral or ethical standards. For instance, if a person conceives that 1) they *would* be better off if an event had developed differently, 2) an event *could* have been handled differently, and 3) an event *should* have been handled differently, then the person will attribute blame and perceive the event as unfair. On the other hand, if a person believes that he or she would not be better off, or an event could not, or should not, have unfolded differently, then the person will not feel a sense of injustice. Although discussions of fairness theory commonly focus on accountability for unfair events, the same cognitive processes are used to extend credit for fair events (Folger & Cropanzano, 2001). If a person believes his or her positive wellbeing resulted from an entity's taking discretionary and ethical actions, then the entity will be credited as acting in a fair manner.

Folger and Cropanzano (2001) described that the counterfactual processes detailed in fairness theory are grounded in the simulation heuristic (Kahneman & Tversky, 1982) and norms theory (Kahneman & Miller, 1986). These frameworks indicate that people will automatically

search their recent memories for conceivable causes to help make sense of unanticipated events (Kahneman, 1995). More specifically, people mentally alter antecedents of an event in a manner that allows them to interpret the event while retaining prior beliefs and expectations (Kahneman & Miller, 1986). As a simple example, after receiving a poor exam grade, a student who believes himself or herself to be very intelligent might imagine that he or she could have earned a high score if the exam had only been delivered in a different format. Imagining a better grade resulting from a different exam format would allow the student's competence belief to remain untarnished. Such counterfactual cognitions are often generated automatically without motivation or conscious effort (e.g., Folger & Cropanzano, 2001; Folger, Cropanzano, & Goodman, 2005; Kahneman, 1995; Kahneman & Miller, 1986).

Research confirms that beliefs and expectations play an integral role in shaping counterfactual processing. For example, research by Tetlock (1998) found that the world views held by professional historians influenced their willingness to entertain counterfactual statements regarding historical events. More specifically, historians tended to reject the possibility of counterfactuals if the statements reframed history in a manner that was inconsistent with their personal beliefs but endorsed counterfactuals that buttressed their personal beliefs. Similarly, Tetlock and Visser (2000) found that experts judged counterfactuals about Soviet history to be more plausible if the counterfactual buttressed their political beliefs and less plausible if the counterfactual countered their beliefs. More recently, Crawford and McCrea (2004) extended this line of research by demonstrating that, when people interpret events, their prior beliefs generally influence the spontaneous generation of counterfactuals in a manner that reinforces those prior beliefs. In a review of the counterfactual literature, Roese and Olson (1995) concluded that counterfactuals are derived from prior beliefs and effectively function to "recapitulate expectancies" (p. 43).

It is interesting to note that the influence of expectations on counterfactual processing parallels the literature on confirmation bias. Namely, confirmation bias reflects the tendency for people to interpret the world in a manner that validates their prior expectations (Kramer, 2009; Snyder & Swann, 1978a, 1978b). Extensive psychological research has demonstrated that people generally attend to and interpret information in a manner that reinforces their prior expectations and ignore or discount information that contradicts their expectations (e.g., Darley & Gross, 1983; Duncan, 1976; Eagly & Chaiken, 1993; Fiske & Taylor, 1991; Higgins & Bargh, 1987; Howard & Rothbart, 1980; Markus, 1977; Mitroff, 1974; Nisbett & Ross, 1980; Robinson, 1996; Ross & Anderson, 1982). Organizational scholars have previously noted that trust should generally affect cognition in a manner consistent with confirmation bias (e.g., Dirks & Ferrin, 2001; Kramer, 2009; McKnight et al., 1998). However, fairness theory, with its emphasis on counterfactual processing, provides a more detailed framework for understanding the cognitive mechanisms underlying the influence of trust on employee perceptions of justice, in particular.

To reiterate, counterfactual cognitions are inherently subjective and influenced by prior beliefs and expectations (e.g., Kahneman, 1995; Kahneman & Miller, 1986; Roese & Olson, 1995; Tetlock, 1998). A person with high trust expects favorable treatment, and a person with low trust expects unfavorable treatment. Accordingly, low trust should influence cognitive processing towards the generation and acceptance of counterfactuals suggesting one *would* be better off under different circumstances or that an exchange partner *could* or *should* have behaved differently to effect a better result. Conversely, high trust is likely to lead

individuals to focus on the positives and assume their exchange partner could not, or should not, have handled an event differently. Taken together, trust should influence the generation of counterfactuals and ultimately shape perceptions of fairness.

While the bulk of extant theory and research in the management literature has focused on trust as a consequence of justice (see Table 1), there is some evidence to suggest that trust is a significant antecedent of justice perceptions. For example, Brashear, Manolis, and Brooks (2005) found that trust in one's supervisor was positively related to distributive and procedural justice perceptions, in a field sample of sales employees. Holtz and Harold (2008) found trust in one's manager directly influenced employee perceptions of procedural and interactional justice following negative outcomes and indirectly affected justice perceptions through fostering greater acceptance of managerial explanations for the negative outcomes. Similarly, in the context of organizational restructuring, Rousseau and Tijoriwala (1999) found employees with low trust in management tended to make attributions counter to the official explanations provided for the restructuring, whereas employees with high trust tended to accept that the official explanations were legitimate. Further, a longitudinal study by Robinson (1996) found newly hired employees' initial trust significantly influenced perceptions of psychological contract breach (a construct conceptually related to justice) 18 months after trust was initially assessed. Taken together, there is compelling reason to suggest that individuals with low trust are likely to perceive events in a negative light while individuals with high trust are likely to view events more positively. As Rousseau and Tijoriwala (1999) described, high trust can reduce suspicion, limit the search for disconfirming information, and promote a "broad zone of acceptance" among employees.

*Proposition 4a:* The psychological state of trust influences cognitive processing such that individuals will tend to generate counterfactual cognitions that recapitulate their trust-related expectations.

*Proposition 4b:* Through its influence on counterfactual processing, the psychological state of trust is positively related to event justice perceptions.

## *Entity Justice Perceptions*

To fully capture the complex relationships between trust and justice constructs, it is useful to distinguish between event and entity fairness perceptions. The integrative model of organizational justice indicates that people aggregate event-related experiences into summary, trait-like evaluations of entities (Cropanzano, Byrne, Bobocel, & Rupp, 2001). Similarly, fairness heuristics theory describes that global fairness impressions develop from specific justice experiences (Lind, 2001; Van den Bos et al., 2001). By definition, event justice perceptions focus on the actions of an entity on a particular occasion (e.g., her allocation decision was unfair) while entity perceptions represent perceptions of an entity generalized across events and contexts (she is an unfair person; Cropanzano et al., 2001). Building upon the previous propositions, the inherent connection between event and entity fairness perceptions suggests a mediated sequence in which the influence of trust on event perceptions will ultimately affect perceptions of the entity associated with the event in question.

*Proposition 5:* The psychological state of trust positively influences entity justice perceptions through its impact on counterfactual processing and event justice perceptions. Stated differently, event cognitions mediate the effect of trust on entity justice perceptions.

The integration of entity justice perceptions is particularly important because these perceptions provide the necessary vehicle to connect event justice perceptions back to subsequent (post-event) evaluations of trustworthiness. Specifically, extant theory suggests that entity justice perceptions, rather than perceptions of discrete events, are the primary consideration in navigating ongoing exchange relationships (e.g., Cropanzano & Byrne, 2000; Cropanzano et al., 2001; Lind, 2001). In particular, the integrative model of organizational justice and fairness heuristics theory converge on the notion that global entity justice perceptions, rather than particular justice experiences, will guide subsequent social cognitions related to the entity in question. For instance, fairness heuristics theory describes that events with fairness implications are so common in organizational settings that attempting to recall all possible event perceptions in order to navigate exchange relationships would be unrealistically burdensome for a person's cognitive resources. Accordingly, once formed, entity justice perceptions function as heuristic guides, exerting halo effects on subsequent social judgments including evaluations of trustworthiness (Lind, 2001).

It is also important to consider that the relationships involving entity justice perceptions and other social cognitions are likely reciprocal. For instance, extensive research on the halo effect has demonstrated that evaluations regarding an entity on one dimension will generally influence how a person views the entity on other attributes or qualities (e.g., Lance, LaPointe, & Stewart, 1994; Nisbett & Wilson, 1977; Thorndike, 1920). Solomonson and Lance (1997) clarified that halo effects may reflect actual relationships between entity characteristics (i.e., true halo) and/or also reflect the biasing effect of a general impression (i.e., halo error). For instance, it is possible that one's general impression that his or her supervisor is trustworthy might artificially inflate assessments that the supervisor is also fair (or visa versa). In this case, a portion of the positive relationship between entity justice and trustworthiness could be attributed to halo error. On the other hand, when a supervisor possesses sufficient ability to manage others (e.g., makes effective decisions), has benevolent intentions towards subordinates (e.g., considers employees' wellbeing), and has a high degree of integrity (e.g., follows through with promises) it is very likely that the supervisor will actually treat employees in a fair manner. That is, the characteristics associated with being trustworthy (e.g., ability, benevolence, integrity) will generally lead an entity to consistently treat others in a fair manner, while lacking these attributes may lead an entity to treat others unfairly. As such, a positive relationship between employees' trustworthiness evaluations and entity justice perceptions would constitute a "true halo" effect. Related to the proposed model, halo effects (true and error) suggest that after initial evaluations of trustworthiness have been formed, assessments of an entity's trustworthiness and justice should be positively and reciprocally related.

Empirical findings have confirmed positive associations between trustworthiness and entity justice perceptions. For instance, a recent longitudinal study found employee evaluations of trustworthiness were robust predictors of employees' overall entity justice perceptions (Holtz & Harold, 2009).[3] Further, their study suggested that trustworthiness accounted for significant within-person variance in overall entity justice perceptions across time.

Similarly, Jones and Martens (2009) found that overall entity justice perceptions and entity trustworthiness evaluations (measured concurrently) were strongly correlated ($r$ = .68). Taken together, there is theoretical and empirical reason to expect positive and reciprocal relationships between trustworthiness evaluations and entity justice perceptions.

*Proposition 6:* Evaluations of trustworthiness exert positive influence on subsequent entity justice perceptions. Similarly, once formed, entity justice perceptions exert positive influence on subsequent evaluations of trustworthiness.

As a point of clarification, the propositions proffered to this point suggest that trustworthiness evaluations will exert significant *direct effects* on entity justice perceptions (Proposition 6) and will exert significant *indirect effects* on entity justice perceptions through influencing one's psychological state of trust (Proposition 1), which ultimately helps to shape event and entity cognitions (Propositions 4–5). In other words, the model delineates two avenues through which trustworthiness evaluations may affect subsequent perceptions regarding the fairness of an entity. First, given that evaluations of trustworthiness and entity justice perceptions both capture trait-like judgments regarding the general nature of an exchange partner, prior evaluations of trustworthiness will be positively associated with subsequent entity justice perceptions, aside from perceptions of any particular event. Second, evaluations of trustworthiness will exert a more distal, indirect influence on subsequent entity justice perceptions by shaping the level of trust one feels towards an entity and how one interprets subsequent events associated with that entity. Taken together, these relations are formally explicated in the following proposition.

*Proposition 7:* The positive relationship between trustworthiness and entity justice perceptions is partially mediated by the psychological state of trust and event justice perceptions.

## Evaluation Certainty

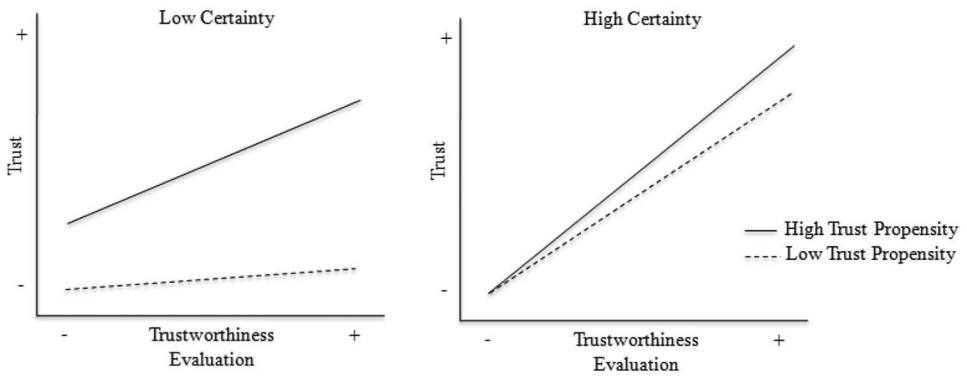
This article has argued that the degree to which a person believes an entity is trustworthy will influence his or her trust and subsequent perceptions of justice. However, considering the degree of perceived trustworthiness alone is insufficient to accurately depict trust development. To be complete, models of trust development should also consider the certainty of trustworthiness evaluations (e.g., Bhattacharya et al., 1998). Namely, it is important to recognize that people can maintain identical evaluations of an entity (e.g., a 2 on a 7-point scale) yet vary significantly in how certain they feel about their evaluations (Petrocelli, Tormala, & Rucker, 2007; Tormala, Clarkson, & Henderson, 2011; Tormala & Ruker, 2007). *Certainty* can be defined as a subjective sense of confidence or conviction regarding one's evaluation (Abelson, 1988; Gross, Holtz, & Miller, 1995; Tormala & Ruker, 2007). The level and certainty of evaluations are distinct. For example, research illustrates that people can become more, or less, certain about their evaluation without any change in the level of that evaluation (Rucker & Petty, 2004; Tormala & Petty, 2002; Tormala, Clarkson, & Petty, 2006). The literature on evaluation certainty has several implications for relationships proposed in the current model.

First, research suggests that certainty increases the effect of a given evaluation on future cognitions and behaviors (for reviews see Eagly & Chaiken, 1993; Krosnick & Petty, 1995; Tormala & Ruker, 2007). Related to the current model, this line of research suggests that trustworthiness evaluations held with greater certainty should exert stronger effects on trust, whereas trustworthiness evaluations held with less certainty should exert weaker effects on the psychological state of trust. For instance, two people might hold identical judgments regarding the trustworthiness of an entity (e.g., 5 on a 7-point scale), but one person may feel very confident that his or her evaluation is correct while the other person may doubt the veracity of his or her evaluation. As a result, the individuals' willingness to accept vulnerability (trust) might be very different. All things being equal, greater certainty regarding a positively valenced evaluation of trustworthiness should enhance trust. In contrast, greater certainty regarding a negatively valenced trustworthiness evaluation should result in weaker trust. In other words, evaluation certainty should moderate the effect of trustworthiness judgments on the psychological state of trust.

Research also suggests that evaluation certainty will moderate the effects of trust propensity on the psychological state of trust. For instance, Gill, Boies, Finegan, and McNally (2005) hypothesized that trust propensity would have the strongest effects on trust when information about an entity's trustworthiness was unclear or ambiguous (see also Rotter, 1971). Their reasoning was guided by Mischel's (1977) work on situational strength. Specifically, the idea that dispositional variables are *less* impactful in situations with clear signals to guide reactions (i.e., strong situations) and more impactful in situations devoid of clear signals (i.e., weak situations). Consistent with predictions, Gill et al. found that trust propensity did not have a significant effect on trust when participants were given clear and convincing information about the trustworthiness of an entity. But when trustworthiness information was ambiguous, the positive effect of trust propensity on trust was significant. Extrapolating from their findings, *uncertainty* regarding one's evaluation of trustworthiness should *strengthen* the effect of trust propensity on the psychological state of trust.

At this point it is also important to recall that trust propensity and trustworthiness evaluations are known to exert interactive effects on the psychological state of trust and these factors should not be considered in isolation (e.g., Mayer et al., 1995). Specifically, the relationship between trustworthiness evaluations and subsequent trust is stronger for individuals with higher levels of trust propensity. Given that evaluation certainty is expected to moderate the effects of trustworthiness and trust propensity, it is reasonable to expect that certainty may also moderate the two-way interaction between trustworthiness judgments and trust propensity. In other words, a three-way interaction between trustworthiness, evaluation certainty, and trust propensity on the psychological state of trust is likely. Specifically, the interactive effect of trust propensity and trustworthiness evaluations should be amplified when trustworthiness evaluations are held with less certainty and mollified when evolutions are held with greater certainty. On one hand, people with high trust propensity are inclined to trust provided that they infer an entity is trustworthy, even if they are uncertain regarding the veracity of their trustworthiness evaluation (Yamagishi, 2001). Simply stated, people with high trust propensity are willing to give others the benefit of the doubt. On the other hand, people with low trust propensity are loath to give others the benefit of the doubt. A person with a low trust propensity might have a hunch that a person is trustworthy, but a hunch is not enough to override his or her predisposition towards withholding trust. That is,

**Figure 2**
**General Form of the Expected Three-Way Interaction**




people with low trust propensity are inclined to trust only if they perceive an entity is trustworthy *and* they feel highly certain in the veracity of their evaluation (see Figure 2 for a graphical depiction of the proposed effect).

Stated in different terms, low certainty constitutes a "weak situation" in which a person's disposition (trust propensity) should exert greater influence on the relationship between trustworthiness evaluations and trust. Specifically, when evaluations are held with a low degree of certainty, the positive effect of trustworthiness evaluations on the psychological state of trust should be stronger for individuals with high (rather than low) trust propensity. In contrast, high certainty reflects a "strong situation" in which disposition (trust propensity) should exert relatively little influence on the relationship between trustworthiness evaluation and trust. When evaluations are held with a high degree of certainty, the positive effect of trustworthiness evaluations on the psychological state of trust should be relatively similar whether a person has a high or low trust propensity.

*Proposition 8:* Evaluation certainty will moderate the two-way interaction between trust propensity and trustworthiness evaluations on the psychological state of trust. The form of the three-way interaction is such that, under high certainty, trustworthiness evaluations will have a similar effect on trust, regardless of a person's trust propensity. Under low certainty, perceived trustworthiness will have a stronger positive effect on trust for individuals with high trust propensity, compared to individuals with low trust propensity.

Additionally, the view that certainty increases the impact of evaluations on subsequent cognitions suggests that the effect of trustworthiness on entity justice perceptions will be stronger when trustworthiness evaluations are held with greater certainty. Interestingly, research also suggests that evaluations held with greater certainty are more resistant to change over time (for reviews see Eagly & Chaiken, 1993; Krosnick & Petty, 1995; Tormala & Ruker, 2007). Applied to the current model, greater certainty in one's trustworthiness evaluation

at one point in time should attenuate the effects of entity justice perceptions on evaluations of trustworthiness made at a later point in time. Research by Jones and Martens (2009) provides evidence of this effect. Specifically, the results of their second study illustrated that the positive effect of overall justice perceptions on evaluations of trustworthiness was stronger when employees were less certain that they could trust the senior management team. It should be noted that there is a slight operational difference between their findings and the perspective advanced here. Specifically, Jones and Martens focused on employees' certainty regarding whether or not they could *trust*. The focus here is explicitly on certainty regarding one's evaluation of *trustworthiness*. Despite this difference, their research lends preliminary support to the view that certainty will reduce the effects of entity justice on subsequent trustworthiness evaluations. Moreover, outside of the justice literature, extensive research demonstrates that evaluations held with greater certainty tend to be more durable and resistant to change compared to evaluations held with less certainty (Eagly & Chaiken, 1993; Krosnick & Petty, 1995; Tormala & Ruker, 2007).

*Proposition 9:* Evaluation certainty will moderate the reciprocal relationship between trustworthiness and entity justice perceptions. More specifically, high certainty will strengthen the positive effect of trustworthiness on subsequent entity justice perceptions and weaken the effect of entity justice perceptions on subsequent trustworthiness evaluations.

Finally, people's level of certainty changes as they accumulate information that reinforces or calls into question their evaluations (Fazio & Zanna, 1981; Tormala & Rucker, 2007; Wu & Shaffer, 1987). Such changes occur largely because additional information influences the structural consistency of an evaluation. Structural consistency represents the extent to which information underlying an evaluation has similar or dissimilar implications for the overall valence (positivity or negativity) of that evaluation (Smith, Fabrigar, MacDougall, & Wiesenthal, 2008). The more structurally consistent an evaluation, the greater certainty one generally feels regarding his or her evaluation (Smith et al., 2008; Tormala & Ruker, 2007). To the extent that one can recall information that is congruent (or incongruent) with his or her previous trustworthiness evaluation, the structural consistency of that evaluation will be enhanced (or reduced). For example, recalling that an entity consistently demonstrates a high degree of fairness should increase the structural consistency of a trustworthiness evaluation if the employee previously believed the entity to be trustworthy. Again, increased structural consistency results in greater evaluation certainty. On the other hand, the same favorable entity justice perception should decrease the structural consistency of a trustworthiness evaluation if the employee previously believed the entity in question was untrustworthy. In this case the structural inconsistency of the information underlying the evaluation of trustworthiness would reduce the employee's evaluation certainty.

*Proposition 10:* Previous evaluations of trustworthiness moderate the effect of entity justice perceptions on subsequent certainty of trustworthiness evaluations. Specifically, the effect of perceived justice on certainty will be negative if the justice perception is inconsistent with a previous trustworthiness evaluation and positive if the justice perception is consistent with a previous trustworthiness evaluation.

## Discussion of the Theoretical Framework

Prominent scholars have suggested that over the course of our evolutionary history the human brain adapted mechanisms that facilitate rapid judgments regarding the trustworthiness of others (e.g., Tooby & Cosmides, 2005; Dunbar, 2007; Hoffman et al., 1998; Tooby et al., 2006). Contemporary neuroscientific research provides strong empirical support for this perspective (Todorov, 2011). Further, we know that trust influences how people process and evaluate events (Dirks & Ferrin, 2001; Gambetta, 1988; Kramer, 2009; McKnight et al., 1998; Rousseau & Tijoriwala, 1999). This article integrates research from these literatures to underscore the temporal primacy of trust in the reciprocal relations between trust and perceived justice. The proposed model has important implications for research and practice.

### *Comparisons With Previous Models*

Before discussing the implications of this article, it is important to compare the proposed model with extant models involving trust and justice constructs. The trust primacy model extends prior theoretical models in several ways. First, previous work has maintained that trust is grounded in direct experience with an entity. For instance, fairness heuristics theory (Lind, 2001; Van den Bos et al., 2001) emphasizes that people often lack sufficient information to evaluate the trustworthiness of an entity. Therefore, fairness heuristics theory predicts that early fairness-related experiences (e.g., exposure to fair procedures) occur prior to, and provide the basis for, evaluations of trustworthiness. Similarly, Shapiro and Kirkman's (2001) model of anticipatory injustice recognizes the influence of anticipated justice (a justice-centric conceptualization of trust) on perceived justice but argues that these relations *begin* with perceptions of justice. Likewise, the relational model of procedural justice argues that trust in an authority figure (as a component of perceived legitimacy) influences perceptions of procedural justice; but the relational model generally assumes that trust is judged by prior experiences with the authority figure (e.g., Tyler, 1997). In contrast, the trust primacy model maintains that trust inevitably precedes direct fairness experiences in employment relationships.

Specifically, this article offers three main arguments to suggest that a level of trust is formed prior to direct justice experiences involving an exchange partner. First, research suggests that expectations of trustworthiness influence willingness to accept vulnerability and guide decisions of whether or not to enter into exchange relationships (Burnham et al., 2000; Schoorman et al., 2007; Tooby et al., 2006; Yamagishi, 2001). In other words, trust is formed before one has the opportunity to directly experience the actions of an exchange partner (Gambetta, 1988). Second, a growing body of neuroscientific evidence suggests that the human brain automatically categorizes the trustworthiness of others without conscious deliberation (e.g., Todorov et al., 2009; Willis & Todorov, 2006). In essence, by the time a person has consciously perceived a potential exchange partner; he or she has unconsciously judged the partner's trustworthiness. Third, in a hypothetical vacuum devoid of any signals to guide inferences of trustworthiness, a person's psychological willingness to be vulnerable (i.e., trust) would be shaped by his or her trust propensity (e.g., Mayer et al., 1995). Taken

together, there is compelling evidence to suggest a degree of trust is inevitably present *prior* to the direct experience of justice-laden events in employment relationships.

Second, the proposed model extends extant frameworks by offering a richer, more complete integration of the trust and justice literatures. In particular, fairness heuristics theory and the relational model of procedural justice have been criticized for unclear and "primitive" conceptualizations of trust constructs (Lewicki, Wiethoff, & Tomlinson, 2005). For instance, research involving the relational model has operationalized trust as the degree of effort an authority figure has made to be fair or the level of consideration an authority figure has given to the views of others in decision-making processes (e.g., Lind, Tyler, & Huo, 1997; MacCoun, Lind, Hensler, Bryant, & Ebener, 1988; Tyler, 1989, 1990, 1994, 1997; Tyler & Schuller, 1990). Equating trust with an individual's perceptions of an entity's fairness or consideration is not consistent with accepted definitions of trust (e.g., Dirks & Ferrin, 2001; Mayer et al., 1995; McKnight et al., 1998; Meyerson et al., 1996; Rousseau et al., 1998). Similarly, Lewicki et al. (2005) argued that the perspective advanced by fairness heuristics theory that fairness can simply substitute for trust fails to adequately capture the complex nature of the trust literature. The proposed model helps to integrate contemporary perspectives on trust easily overlooked by justice scholars. For instance, the trust literature suggests the psychological state of trust is a result of several factors (e.g., trustworthiness, certainty, trust propensity) that have not been adequately delineated in prior models involving trust and justice. Further, fascinating lines of research in cognitive neuroscience are uncovering the neurological underpinnings of trust (e.g., Todorov, 2011; Zak, 2008), but this research has not been integrated into the justice literature prior to this article.

Third, this is the first theoretical framework to propose specific cognitive processes underlying the effect of trust on perceptions of justice events. Specifically, integrating principles of fairness theory (Folger & Cropanzano, 2001), it is argued that trust influences counterfactual processing which, in turn, influences perceptions of justice. As Folger and Cropanzano (2001) describe, events are not inherently fair or unfair; rather, they must be interpreted to assign meaning. Counterfactuals provide the evaluative standards used to determine the meaning of events. However, counterfactual cognitions do not provide uniform and unbiased standards; they are mental constructions limited only by one's imagination. Extensive research indicates that imagined counterfactuals tend to recapitulate prior beliefs and expectations (Roese & Olson, 1995). For example, in response to an onerous new work assignment, the subconscious inclination to confirm one's negative expectations may lead an employee with low trust to imagine ways that he/she *would* have been better off had he/she not been assigned the work, or conceive evidence that his/her boss *could* have given the work to another employee, or imagine reasons why the work *should* have been assigned to another employee. Alternatively, an employee high in trust might imagine why the assignment is beneficial (e.g., I can demonstrate my skill), or assume his/her boss had no choice in the matter (e.g., nobody else was available), or think of reasons why the decision was consistent with accepted standards (e.g., assignments are rotated). The integration of counterfactual cognitions provides clarification regarding the process through which trust can shape perceptions of fairness. Importantly, the counterfactual processing described in fairness theory is equally applicable to the determination of any particular justice dimension (e.g., distributive, procedural, informational, interpersonal, overall; Folger & Cropanzano,

2001). Thus, the trust primacy model may be used to generate predictions for any of the specific event justice facets and for entity justice perceptions at any stage of an employment relationship.

Despite these important differences, the proposed model does not take away from the valuable contributions of previous models. In fact, many of the core propositions from these frameworks are integrated into the current model. For instance, this article draws directly from fairness heuristics theory in proposing that the effects of event justice perceptions on subsequent judgments of trustworthiness are mediated by overall entity fairness perceptions. Thus, the trust primacy model builds off core components of fairness heuristics theory while also addressing calls to reconsider the causal ordering of justice-trust relations proposed in that theoretical framework (e.g., Lewicki et al., 2005). Also, similar to the anticipatory injustice and relational models, this article incorporates the idea that employees' trust helps to shape subsequent justice perceptions. However, the trust primacy model extends these perspectives by integrating cross-disciplinary conceptualizations of trust, illuminating cognitive mechanisms through which trust affects perceptions of justice, and arguing that trust inevitably comes before (rather than after) justice experiences.

### *Model Implications*

The trust primacy model suggests greater consideration should be given to issues of timing in empirical studies involving trust and justice constructs. Specifically, it is important to recognize that trust develops rapidly and plays an important role in shaping perception. Whether an employee is brand new on the job or a seasoned veteran, the employee will inevitably experience a level of trust (or distrust) that will affect his or her subsequent cognitions. An illustration of this point comes from Robinson's (1996) exceptional study in which she found that trust, measured shortly after individuals accepted job offers, predicted perceptions of psychological contract breach (a construct conceptually related to justice) 18 months after initial trust was assessed. Moreover, she found psychological contract breach had no effect on subsequent trust (measured 30 months after the initial trust measurement) for employees who reported high levels of initial trust. In contrast, the typical study involving justice and trust has measured the constructs concurrently and interpreted a significant bivariate correlation as evidence that perceived justice exerts a robust effect on trust. Although justice can surely influence trust, the nature of justice effects cannot be adequately represented using concurrent measurement designs. To draw a comparison, it is widely accepted that training can lead to knowledge acquisition, but the effectiveness of any training intervention cannot be adequately demonstrated without a baseline measure of content knowledge. In a similar manner, this article suggests that the effects of workplace fairness on trust cannot be properly estimated without accounting for prior trust cognitions.

Again, the trust primacy model suggests that relationships between trust and justice *begin* with trust. Whether or not one accepts this view, it is important to recognize that concurrent measurement will generally inflate results and may lead to spurious conclusions that impede the progress of our field. Thus, this article echoes the platitude that more longitudinal research is needed. In particular, research following applicants from *initial* contact through

later stages of the employment relationships would be instrumental for testing the core propositions of the trust primacy model. Interestingly, recent fMRI research suggests that peoples' initial judgments of others, based only on a few seconds of exposure, may be stored in memory and affect future social cognition (Todorov, Gobbini, Evans, & Haxby, 2007). While examining relations between trust and justice constructs would be particularly informative in samples of new employees, it is important to underscore that the propositions detailed in the proposed model are not limited to initial employment relationships. In fact, the need to account for prior trust cognitions in studies investigating the effects of justice on trust is, perhaps, even more critical in well-established employment relationships. For instance, long-tenured employees may often feel more certain about their trustworthiness evaluations, which should increase the stability of trust and reduce the potential impact of justice interventions on subsequent trust. Neglecting employees' prior trust in such cases would tend to overestimate justice effects. Ultimately, scholars investigating the impact of justice on trust at any stage of an employment relationship can draw more accurate conclusions by integrating measures of employees' prior trust into their research designs.

The proposed model argues that trust is a dynamic construct that changes quantitatively, but not qualitatively, as one gains direct experience with an entity. Again, the definition of trust adopted in this article suggests that trust is a psychological state involving a willingness to accept risk based on expectations regarding the future behavior of an entity (Rousseau et al., 1998). Over time, people may become more or less willing to accept vulnerability as they are able to draw from direct experience, rather than surface cues, to inform their expectations regarding the future behavior of an entity. However, the psychological state of accepting (or rejecting) vulnerability is qualitatively the same whether the mental state is based on expectations derived from surface cues or years of direct experience. Further, this article suggests that within-person variability in the psychological state of trust is strongly influenced by the level and certainty of one's trustworthiness evaluation. An expansive psychological literature illustrates that evaluations held with greater certainty tend to exert stronger effects and are more resistant to change. However, with the notable exception of Bhattacharya et al. (1998), models of trust in the management literature have not explicitly incorporated the idea that individuals can maintain identical evaluations of trustworthiness but vary considerably in how certain they feel about their evaluations. In recognition of this deficit, the trust primacy model proposes that the certainty of trustworthiness evaluations will have significant effects on trust. Moreover, through the incorporation of feedback loops the model explicitly recognizes that as individuals gain more experience with an exchange partner they will revise their evaluations of trustworthiness and can also grow more or less certain regarding the veracity of their evaluations. Again, changes in either the level or certainty of one's trustworthiness evaluation will influence one's psychological state of trust. Thus, the model explicitly recognizes the dynamic nature of trust-justice relations and suggests that trust will be more or less malleable depending on how certain one feels regarding the trustworthiness of an entity.

The inclusion of certainty extends extant trust models and provides fruitful grounds for future research. For instance, research suggests that first impressions of attributes including competence, likeability, and general trustworthiness are made with similar degrees of certainty and that the certainty that people place in their initial impressions generally increases

when given a little extra time (e.g., half a second) to observe the entity in question (Willis & Todorov, 2006). However, context matters in perception research (Todorov, 2011), and the dynamics regarding certainty in evaluations tied to trustworthiness (ability, benevolence, and integrity) are not well understood in organizational settings. It would be particularly informative to study applicants through the early employment stages and examine how the relative certainty of trustworthiness evaluations develops and changes over time. As another avenue for future research, considering employees' certainty of trustworthiness evaluations may also allow for novel predictions regarding change in trust over time. For instance, the trust primacy model would suggest that trust repair should be more, or less, difficult depending on how certain an employee feels regarding the trustworthiness of the entity in question.

Interestingly, management scholars have theorized that it would take repeated social interactions to be able to infer the motives and intentions (e.g., benevolence vs. self-interest) of an exchange partner (e.g., Mayer et al., 1995; McAllister, 1995). As a result, it was generally assumed that the ability and integrity aspects of trustworthiness (or cognitive-trust foundations) could be judged prior to the benevolence component of trustworthiness (or affective-trust foundations) and would, therefore, exert greater influence on trust early in employment relationships (Mayer et al., 1995; McAllister, 1995). However, these assumptions have never been empirically investigated and run counter to contemporary perspectives on human perception. Again, extensive research indicates that the human brain evolved sophisticated cognitive mechanisms for the distinct purpose of facilitating *automatic* inferences regarding the intentions of others (e.g., Baron-Cohen, 1997; Dunbar, 1998, 2007; Jellema & Perrett, 2009; Tooby et al., 2006). Simply put, our early ancestors would not have fared so well if they required a series of repeated interactions to infer whether an entity was benevolent or harbored malevolent intentions. In fact, social psychological research suggests that warmth-related cognitions (e.g., benevolence) may actually form more quickly (by a matter of milliseconds) than competence-related judgments (for a review see Fiske, Cuddy, & Glick, 2007). It is important to emphasize that neuroscientific evidence indicates that a single glance (less than a second) is all that is required to assess an entity on a wide variety of attributes (Todorov, 2011). Ultimately, this line of research implies that any difference in the speed at which the underlying dimensions (ability, benevolence, integrity) of trustworthiness are inferred is likely too small (measured in milliseconds) to be practically significant in the context of an employment relationship and contradicts prior assumptions that benevolence judgments will be less important than competence or integrity judgments early in employment relationships.

Although this article emphasized research suggesting that evaluations of trustworthiness are automatically inferred from environmental cues, it is also important to underscore that the propositions of the trust primacy model are *not* dependent upon the presence of physical cues. Specifically, the model suggests that in the absence of trustworthiness signals the psychological state of trust is determined by a person's trust propensity. As Mayer et al. (1995: 75) described, "propensity will influence how much trust one has for a trustee prior to data on that particular party being available" (see also McKnight et al., 1998; Meyerson et al., 1996). That being said, a complete absence of trustworthiness cues should be very rare in organizational contexts. As an example, dispersed (virtual) teams might seem to be a context devoid of trustworthiness cues. However, research suggests that there are actually many

signals of trustworthiness available in such contexts. For instance, team members might initially infer benevolence, integrity, and ability (i.e., trustworthiness) using occupational or role stereotypes rather than personal characteristics (Meyerson et al., 1996). Individuals may also rely on the judgment of the authority figure responsible for bringing together the team to infer the trustworthiness of teammates. That is, individuals might assume that the person in charge of forming the team did his/her "due diligence" on each team member and use the leader's judgment as a proxy for their own evaluations of trustworthiness (Meyerson et al., 1996). Thus, even in situations where face-to-face encounters are not possible, inferences regarding the trustworthiness of an exchange partner are still made. To reiterate, the complete absence of trustworthiness cues is uncommon in organizational contexts; but in a situation devoid of cues an individual's trust would be driven by his or her trust propensity.

The proposed model draws upon contemporary justice perspectives suggesting that entity perceptions mediate the effects of event fairness perceptions (for detailed reviews see Cropanzano et al., 2001; Lind, 2001). That is, the perceived fairness of an event (e.g., my last performance appraisal was unfair) is suggested to affect perceptions of the entity associated with the event (e.g., my boss is an unfair person), which, in turn, exerts a more proximal influence on subsequent social cognitions (e.g., my boss is untrustworthy). In other words, this model suggests that for event fairness perceptions to significantly impact a person's evaluation of an entity's trustworthiness, the event must influence perceptions of the entity associated with the event. While event perceptions are narrowly focused on what an entity does on a particular occasion, entity perceptions reflect trait-like appraisals (Cropanazano et al., 2001). As such, entity perceptions are thought to be more stable and informative for guiding other social judgments than perceptions of discrete events (e.g., Cropanzano et al., 2001; Lind, 2001). Ultimately, research seeking to understand the impact of justice interventions on trust-related cognitions would benefit from integrating event and entity justice paradigms.

It is also important to clarify that the fairness of events and entities may be assessed globally or across specific facets of justice (i.e., distributive, procedural, informational, interpersonal; Cropanzano et al., 2001). For instance, consistent with the event paradigm, an employee might evaluate the distributive justice of a recent allocation decision or the fairness of the procedures his or her boss used to arrive at the allocation decision. From an entity perspective, an employee might similarly evaluate the general tendency of his or her boss to allocate fair outcomes or use fair procedures. Although people clearly *can* distinguish between justice facets when asked to do so, scholars have increasingly argued that it is more natural to think about fairness in a global, or overall, sense (e.g., Ambrose & Arnaud, 2005; Ambrose & Schminke, 2009; Cropanzano & Byrne, 2000; Cropanzano et al., 2001; Hauenstein, McGonigle, & Flinder, 2001; Lind, 2001; Shapiro, 2001; Tornblom & Vermunt, 1999). In other words, people generally process fairness broadly (e.g., "that event was unfair" or "she is an unfair person") rather than compartmentalizing their perceptions into nuanced dimensions. In recognition of this point, Ambrose and Schminke (2009) advised that "unless a clear theoretical basis exists for making differential predictions across different subtypes of justice, researchers should assess overall justice instead" (p. 8). Currently there is no theoretical basis to expect differential relationships between specific facets of justice and trust constructs. Accordingly, it is recommended that research involving trust and

justice constructs should generally focus on overall event fairness and overall entity fairness perceptions. That being said, the propositions of this model can be applied to the examination of any specific facet of justice.

Finally, this article suggests that adopting the common view that trust is slow developing and assuming there is ample time to earn the trust of employees may be detrimental to organizational functioning. Kramer (1999: 594) described that "presumptive distrust tends to become perpetual distrust." Similarly, Gambetta (1988: 234) warned that "distrust may become the source of its own evidence." The absence of early and clear signals of trustworthiness may plant the seeds from which distrust and perceptions of injustice can flourish. It is, therefore, important for organizations to focus on developing trust from the outset of employment relationships. For instance, organizations can implement human resource systems (e.g., selection, training, performance management) to help ensure organizational representatives are competent and genuinely friendly (Whitener, Brodt, Korsgaard, & Werner, 1998). As another example, maintaining a physical environment that is safe, professional, and welcoming can also signal trustworthiness (McKnight et al., 1998). Research also suggests that prospective employees learn a great deal about a company's policies, and form impressions of organizations, through information garnered from company websites (e.g., Cober, Brown, Levy, Cober, & Keeping, 2003; Dineen, Ling, Ash, & DelVecchio, 2007). Interestingly, even seemingly trivial characteristics such as the URL address of a company website have been shown to influence perceptions of trustworthiness (Wogalter & Mayhorn, 2008). Thus, company websites may provide a useful mode of communicating an organization's ability, benevolence, and integrity (i.e., trustworthiness) and help foster applicants' trust prior to joining an organization.

### *Limitations and Recommendations for Future Research*

It is important to consider several limitations of this article. First, the trust primacy model does not attempt to provide a comprehensive integration of all the factors known to influence trust and justice constructs. Given the extensive trust and justice literatures, there are myriad antecedents that are beyond the scope of the current article that could be integrated into the current model. For instance, theories of affect including Affective Event Theory (Weiss & Cropanzano, 1996) and the Affect Infusion Model (Forgas, 1995; Forgas & George, 2001) suggest that affective states influence people's attention, recall, interpretation, and processing of information in a mood-congruent fashion. These frameworks suggest that all of the cognitions involved in the current model may be influenced by one's affective state. Indeed, empirical research has demonstrated that affect exerts significant influence on trustworthiness judgments, trust (e.g., Lount, 2010), counterfactual processing (e.g., Sanna, Turley-Ames, & Meier, 1999), and perceptions of justice (e.g., Barsky & Kaplan, 2007; Barsky, Kaplan, & Beal, 2011). Given the impact of affect on cognition, studies involving trust and justice would particularly benefit from integrating affect alongside the constructs presented in the current model. More broadly, future research should supplement the trust primacy model with additional antecedents depending on the particular research questions at hand.

Second, the proposed model is specifically focused on the reciprocal relations between trust and justice constructs. However, trust clearly has an important impact that extends beyond justice perceptions, and the evidence for rapid trust formation may have implications across a wide variety of management domains. For example, among numerous other outcomes, meta-analytic studies have demonstrated that trust is positively associated with employee task performance, organizational citizenship behavior (Colquitt et al., 2007; Dirks & Ferrin, 2002), organizational commitment, job satisfaction, acceptance of information, decision commitment (Dirks & Ferrin, 2002), and risk-taking behavior (Colquitt et al., 2007). Meta-analytic evidence also suggests trust is negatively associated with employee perceptions of organizational politics (Atinc, Darrat, Fuller, & Parker, 2010), counterproductive work behavior (Colquitt et al., 2007), and turnover intentions (Dirks & Ferrin, 2001). Future research may benefit from building upon the views of rapid trust development presented in this article to better delineate the dynamic interplay between trust and other outcomes of interest to management scholars and practitioners.

Finally, trust research in the neurosciences has largely focused on biological signals of trustworthiness (particularly human facial characteristics). There is a need for more research on neurological responses to other potential signals of trustworthiness, from both an individual and an organizational perspective. Of course, there are myriad signals that could be explored. For instance, it is well established that people anthropomorphize organizations (Cropanzano et al., 2001; Levinson, 1965), and studies of organizational trust are common in the management literature. But, to date, there is no available research on organizational signals of trustworthiness from a neuroscientific perspective. It would be interesting, for example, to examine whether organizational cues (e.g., dilapidated versus well-appointed office space; McKnight et al., 1998) trigger similar neural activity as trustworthy and untrustworthy faces. Such research would greatly enhance our understanding and help delineate steps that could be taken to help facilitate initial trust in employment relationships.

## Conclusion

Within the management literature there has been a surprisingly uniform view that trust is a slow-developing consequence of perceived justice. While there is no doubt that justice can influence subsequent levels of trust, recent advances outside of the management literature have cast serious doubts on the view that trust is a slow-developing response to justice experiences. Integrating contemporary research and theory from a variety of disciplines including evolutionary psychology and cognitive neuroscience, this article extends extant theoretical perspectives to suggest that a level of trust is inevitably present prior to direct experience of justice in employment relationships and ultimately influences individuals' perceptions of justice at any stage of an employment relationship. Further, the proposed model helps to better explain the dynamic interplay between perceived justice and subsequent trust. It is hoped that this article may provide both trust and justice scholars a useful framework for developing more precise predictions involving these important constructs.

## Notes

1. Articles included in Table 1 were located using the PsychInfo database with the search terms "trust* and (fair* or just*)." Then the search results were limited to journals identified as primary research outlets for researchers in management (i.e., Podsakoff, MacKenzie, Bachrach, & Podsakoff, 2005) and industrial-organizational psychology (i.e., Zickar & Highhouse, 2001). Specifically, the following journals were included in the search: *Academy of Management Journal, Academy of Management Review, Administrative Science Quarterly, Applied Psychological Measurement, Applied Psychology: An International Review, Basic and Applied Social Psychology, Business Ethics Quarterly, California Management Review, Decision Sciences, Educational and Psychological Measurement, European Journal of Work and Organizational Psychology, Group and Organization Management, Harvard Business Review, Human Performance, Human Relations, Human Resource and Management Review, Human Resource Management, Industrial and Labor Relations Review, Industrial Relations, International Journal of Conflict Management, International Journal of Selection and Assessment, Journal of Applied Psychology, Journal of Applied Social Psychology, Journal of Business and Psychology, Journal of Business Research, Journal of Business Venturing, Journal of Human Resources, Journal of International Business Studies, Journal of Management, Journal of Management Studies, Journal of Managerial Issues, Journal of Occupational and Organizational Psychology, Journal of Occupational Health Psychology, Journal of Organizational Behavior, Journal of Personality and Social Psychology, Journal of Vocational Behavior, Leadership Quarterly, Management Science Monthly Labor Review, Organizational Behavior and Human Decision Processes, Organizational Dynamics, Organizational Psychology Review, Organizational Research Methods, Organization Science, Personnel Psychology, Research in Personnel and Human Resource Management, Research in Social Issues in Management, Research on Managing Groups and Teams, Sloan Management Review, Social Justice Research*, and *Strategic Management Journal.* A total of 122 articles was identified. Articles were included in Table 1 if they focused on justice and trust in employment contexts and described original empirical investigations. Articles were excluded if they did not propose directional relationships between justice and trust. For instance, studies using trust and justice as simultaneous predictors of other constructs were excluded from consideration.

2. Event justice perceptions include *distributive justice* (i.e., fairness of outcomes received), *procedural justice* (i.e., fairness of decision-making procedures), *informational justice* (i.e., fairness of explanations of procedures), and *interpersonal justice* (i.e., fairness of interpersonal interactions; Colquitt & Shaw, 2005). Informational and interpersonal justice can be thought of as subdimensions of interactional justice. Fairness theory provides a robust and generalizable framework in that the same counterfactual processes are used to judge the distributive, procedural, or interactional justice of events (Folger & Cropanzano, 2001).

3. Although the authors were focused on trust, their operationalization of trust focused on expectations regarding the behavior of an entity but did not tap into the psychological state of vulnerability central to the definitions of trust adopted in this article (i.e., Rousseau et al., 1998). As such, for the purpose of this article, their operationalization is more consistent with the trustworthiness construct.

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