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## **On the Relation Between Felt Trust and Actual Trust: Examining Pathways to and Implications of Leader Trust Meta-Accuracy**

Rachel L. Campagna, Kurt T. Dirks, Andrew P. Knight, Craig Crossley, and Sandra L. Robinson  
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# On the Relation Between Felt Trust and Actual Trust: Examining Pathways to and Implications of Leader Trust Meta-Accuracy

Rachel L. Campagna  
University of New Hampshire

Kurt T. Dirks and Andrew P. Knight  
Washington University in St. Louis

Craig Crossley  
University of Central Florida

Sandra L. Robinson  
University of British Columbia

Research has long emphasized that being trusted is a central concern for leaders (Dirks & Ferrin, 2002), but an interesting and important question left unexplored is whether leaders *feel* trusted by each employee, and whether their felt trust is accurate. Across 2 field studies, we examined the factors that shape the accuracy of leaders' felt trust—or, their trust meta-accuracy—and the implications of trust meta-accuracy for the degree of relationship conflict between leaders and their employees. By integrating research on trust and interpersonal perception, we developed and tested hypotheses based on 2 theoretical mechanisms—an external signaling mechanism and an internal presumed reciprocity mechanism—that theory suggests shape leaders' trust meta-accuracy. In contrast to the existing literature on felt trust, our results reveal that leader trust meta-accuracy is shaped by an internal mechanism and the presumed reciprocity of trust relationships. We further find that whether trust meta-accuracy is associated with positive relational outcomes for leaders depends upon the level of an employee's actual trust in the leader. Our research contributes to burgeoning interest in felt trust by elucidating the mechanisms underlying trust meta-accuracy and suggesting practical directions for leaders who seek to accurately understand how much their employees trust them.

*Keywords:* trust, felt trust, meta-accuracy, metaperception, leader

“One of the hardest things for leaders to do is to understand how other people see them . . .” Bill George, Former CEO of Medtronic (George, 2016).


Trust has become a central concept in organizational research and, across time, researchers' efforts have progressed through a logical series of questions regarding trust. After defining the construct and delineating its theoretical bases, researchers focused on assessing the importance of trust in the workplace, finding that trust is associated with a range of important outcomes, including teamwork and leadership effectiveness (e.g., Colquitt, Scott, & LePine, 2007; Dirks & Ferrin, 2002; Mayer, Davis, & Schoorman, 1995; McAllister, 1995). Recognizing its significance, researchers then turned attention to understanding how trust is established

within relationships, identifying key drivers of trust formation and the psychological processes that underlie it (e.g., Lewicki, Tomlinson, & Gillespie, 2006).

Having established that *being* trusted by others is valuable for employees and leaders, and with an improved understanding of its antecedents, researchers have recently begun to explore the phenomenon of *feeling* trusted by others (e.g., Baer et al., 2015; Lau, Lam, & Wen, 2014; Salamon & Robinson, 2008). Feeling trusted, or *felt trust*, reflects the degree to which one person believes that another person trusts them. Existing research suggests that felt trust can motivate organizational members to perform at a high level (Baer et al., 2015; Lau et al., 2014; Salamon & Robinson, 2008) and be more likely to incur personal costs to maintain that felt trust (Campagna, Mislin, & Bottom, 2019). Thus, evidence suggests that individuals act upon and respond to felt trust.

An interesting and important question, however, is whether felt trust reflects the actual trust that exists in the relationship. Are organizational members able to accurately assess whether they are trusted? An untested assumption underlying research on felt trust is that one person's felt trust is shaped by the actual trust held by a counterpart and expressed through the counterpart's behavior. For example, Baer et al. (2015) suggested that an employee's felt trust develops in response to behavioral manifestations of a supervisors' actual trust, such as the delegation of critical tasks or disclosure of sensitive information. Lau et al. (2014, p. 112) asserted that, although they are different concepts, “trust and felt

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 Rachel L. Campagna, Peter T. Paul College of Business and Economics, University of New Hampshire; Kurt T. Dirks and Andrew P. Knight, Olin Business School, Washington University in St. Louis; Craig Crossley, Department of Management, University of Central Florida; Sandra L. Robinson, Sauder School of Business, University of British Columbia.

Correspondence concerning this article should be addressed to Rachel L. Campagna, Peter T. Paul College of Business and Economics, University of New Hampshire, 10 Garrison Road, Durham, NH 03824. E-mail: [rachel.campagna@unh.edu](mailto:rachel.campagna@unh.edu)

trust are very often related” and are “two sides of the same coin” (p. 114). As a result, employees and leaders would presumably want their felt trust to be accurate—to know who trusts them and who does not—so that they can act appropriately. Likewise, while leaders are advised to demonstrate their trust so that employees will know they are trusted, this advice is only useful if employees assess those signals accurately (e.g., Baer et al., 2015; Nerstad et al., 2018; Salamon & Robinson, 2008). Recognizing this issue, researchers have suggested that a logical next step in investigations of felt trust is to examine the relationship between actual trust and felt trust (Lau et al., 2014; Salamon & Robinson, 2008).

The current article addresses this issue by integrating theoretical insights from literatures on trust and interpersonal perception to critically examine the degree to which a leader’s felt trust corresponds to actual employee trust and why the two may diverge. To do so, we offer a conceptualization of the relation between felt and actual trust that is rooted in the more general social psychology literature on interpersonal perception (e.g., Carlson & Kenny, 2012; Kenny & DePaulo, 1993). Viewed from this perspective, felt trust is the outcome of one person’s error-prone attempt to accurately understand the perception held by another person (i.e., the other person’s actual trust). Drawing from this literature, we develop and test predictions about factors that may increase or decrease the accuracy with which one person (i.e., a leader) understands another person’s (i.e., an employee’s) trust and examine why this matters for the relationship between the two.

This article makes several contributions to the literature on trust. First, our findings challenge two presumptions of existing work on felt trust—that felt trust is inherently linked to a counterpart’s actual trust and that observed interpersonal behavior creates a linkage between the two. Grounded in the more general literature on interpersonal perception (e.g., Carlson & Kenny, 2012; Kenny & DePaulo, 1993), we consider how two different psychological mechanisms might shape how accurate people are in understanding how much others trust them. Rather than accurately interpreting another person’s observable behavior as signals of their true underlying trust—the presumed mechanism in existing theory and research on felt trust (e.g., Baer et al., 2015; Lau et al., 2014; Nerstad et al., 2018; Salamon & Robinson, 2008)—our findings suggest that an accurate sense of felt trust instead emerges when someone uses their own trust as the basis for assessing how much another person trusts them by presuming that trust relationships are reciprocal. Thus, the findings underscore an important point regarding how leaders develop an accurate assessment of trust and the limitations of relying on the behavioral signals they observe.

Second, our findings extend existing research on felt trust within organizations in two ways. In contrast to existing research that has focused on employees feeling trusted by leaders, we consider the implications of leaders feeling trusted by employees. Felt trust should be important to leaders, and we argue that the accuracy of their felt trust may be particularly valuable. Whereas prior research on felt trust has considered its implications for individual outcomes like job performance and emotional exhaustion (e.g., Baer et al., 2015), our theoretical development and empirical findings suggest that felt trust also has important implications for interpersonal outcomes, such as the degree of relationship conflict between two people. Understanding how felt trust accuracy relates to conflict is important, given the adverse effects of conflict with employees for leaders (de Dreu, Van Dierendonck, & Dijkstra, 2004;

Thomas, 1992). By relaxing the assumption that felt trust is necessarily an accurate reflection of actual trust, we suggest that the interpersonal implications of felt trust depend upon the degree to which felt trust and actual trust are aligned (Brion, Lount, & Doyle, 2015). In addition to cultivating and managing the level of felt trust that someone feels in an organization, our findings point to the importance of cultivating and managing the accuracy of someone’s felt trust.

We begin by integrating the general literature on interpersonal perception with the literature on felt trust to outline two theoretical mechanisms that might underlie the accuracy of a leader’s felt trust. We develop and test predictions that logically flow from these mechanisms in Study 1—an investigation of leaders and employees working within a state corrections department who are entrusted with supervising convicted felons. We conceptually replicate and extend the findings of Study 1 in Study 2—an examination of leaders and employees working in a nonprofit caregiving organization who are charged with supporting individuals with neurological and cognitive impairments. In addition, Study 2 tests predictions about the implications of accuracy for relationship conflict.

## Theoretical Framework

Trust—“a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395)—has a long history in the organizational literature. The concept of felt trust is, however, newer. Felt trust refers to the degree to which a person believes he or she is trusted by another person (Baer et al., 2015; Salamon & Robinson, 2008). Just as the concept of trust is relational, such that trust inherently requires a target (e.g., John trusts Mary), so too is the concept of felt trust relational (e.g., Mary feels trusted by John). The target for felt trust can be a group (e.g., Salamon & Robinson, 2008) or an individual employee (e.g., Lau et al., 2014). In this article, we focus specifically on a leader’s felt trust at the dyad-level, such that felt trust is a leader’s belief that a given employee is willing to make herself vulnerable to the leader.

To advance our understanding of felt trust, we draw from the general literature on interpersonal perception (e.g., Carlson & Kenny, 2012; DePaulo, Kenny, Hoover, Webb, & Oliver, 1987; Kenny, 1994; Kenny & DePaulo, 1993). This literature has long sought to understand how accurately people understand others’ perceptions of them. The concept of felt trust reflects what the more general interpersonal perception literature refers to as a dyadic metaperception—one person’s belief about the thought, attitude, or perception held by another person (Kenny, 1994). Importantly, and unlike existing theory and research on felt trust, the more general literature on interpersonal perception does not presume that a metaperception is an accurate reflection of the other person’s true thought, attitude, or perception. Instead, a derivative concept that is the focus of significant research in the literature on interpersonal perception is the concept of dyadic meta-accuracy—the degree of alignment between one person’s metaperception and the actual thought, attitude, or perception held by another person (Kenny & DePaulo, 1993).

Grounded in the literature on interpersonal perception, the degree of alignment between one person’s felt trust and a counter-

part's actual trust is *dyadic trust meta-accuracy* (i.e., How much does Mary's felt trust match John's actual trust of Mary?; Brion et al., 2015). Like any form of accuracy, the degree of trust meta-accuracy can be described in either absolute or directional terms. In absolute terms, accuracy reflects the separation, or distance, between one person's felt trust and another person's actual trust. In directional terms, accuracy reflects the degree to which one person's felt trust over- or underestimates another person's actual trust. Theoretically, when leaders accurately understand an employee's trust in them—that is, when there is a minimal gap between felt trust and actual trust—they are equipped to behave in ways that build or restore weak or broken trust, as well as meet the employee's expectations and ensure smooth interpersonal interactions (Brion et al., 2015). But what might enable a leader to develop an accurate understanding of an employee's trust? Answering this question—and developing predictions about the antecedents of trust meta-accuracy—requires an account of how leaders' felt trust forms in the first place.

Theory and research (e.g., DePaulo et al., 1987; Eisenkraft, Elfenbein, & Kopelman, 2017; Kenny & DePaulo, 1993) describe two different theoretical pathways through which people form metaperceptions. These pathways have historical roots in different literature streams and, consequently, provide different explanations for why leaders may be relatively accurate or inaccurate in their understanding of how much an employee trusts them. In particular, these two pathways highlight different sources of information that people use when forming their understanding of what another person thinks. The first—an *external pathway*—has roots in an interpersonal relations tradition that describes people as looking outward, using others' observable behavior to understand their perceptions and attitudes (e.g., Funder, 1987; Kenny & Albright, 1987). The second—an *internal pathway*—has roots in a cognitive tradition that portrays people as turning inward, relying on their own perceptions and feelings, in conjunction with cognitive heuristics, to form their beliefs about other people's perceptions and attitudes (e.g., Carlson & Kenny, 2012; De Soto & Kueth, 1958, 1959; Heider, 1958). These pathways are not mutually exclusive; rather, each represents a different channel of information that people can use when forming a metaperception (Eisenkraft et al., 2017; Kenny & DePaulo, 1993); or, in the context of our article, a leader's felt trust.

### The External Pathway: Trust Meta-Accuracy Is Shaped by One's Interpretation of Another's Behavior

The external pathway for trust meta-accuracy suggests that leaders develop felt trust by directly observing and interpreting an employee's verbal and nonverbal behaviors as cues or signals of the employee's trust (Kenny & DePaulo, 1993). Longstanding theories of trust are steeped in observation and interpretation of others' behavior as a foundation of trust and vulnerability. For instance, Lewicki and Bunker (1996) suggested early stages of trust are formed as a "calculus" or expectation based on another's prior behavioral cues. To the extent that researchers studying felt trust have commented on its origins, they have also presumed it to form through this external mechanism. For example, Nerstad et al. (2018) stated that employee felt trust stems from cues and signals sent by one person that convey trust in another. This is consistent with Baer et al. (2015, p. 1639), who concluded from a series of

interviews that employees use observable behavior "... as signals of their supervisors' trust in them." Similarly, Lau, Liu, and Fu (2007) suggested that employees interpret a leader's delegation or monitoring behavior as signals of how much their leader trusts them.

Developing predictions for this external pathway to trust meta-accuracy requires considering attributes of both the person sending social information (i.e., in our case, the employee) and the person receiving and interpreting this social information (i.e., in our case, the leader). The logic underlying the external pathway implies that a leader's trust meta-accuracy is likely to be high when (a) the employee's observable behavior is a true representation of his or her actual trust in the leader, and/or (b) the leader is a skilled interpreter of the underlying meaning of the employee's behavior. Conversely, a leader is likely to develop an inaccurate understanding of an employee's trust when (a) the employee's observable behavior diverges from his or her actual trust, and/or (b) the leader misinterprets the meaning of the signals that an employee sends. We consider each of these two factors in postulating whether a leader's felt trust aligns with an employee's actual trust.

With respect to employees and the signal-sending component, any attribute that disconnects an employee's observable behavior from his or her true feelings of trust would curtail leader trust meta-accuracy. An attribute that likely distorts the veracity of social signals is *employee self-monitoring*—an individual tendency to monitor situations and to control or modify one's expressed behavior to be socially appropriate (Snyder, 1974). Self-monitoring is likely associated with an employee's tendency to express a false sense of trust for the leader (Caldwell & O'Reilly, 1982), which would reduce a leader's trust meta-accuracy. Those who are high in self-monitoring are often referred to as social chameleons because they alter their external self-presentation to match the norms and expectations of others in different situations in order to be viewed positively by others (DePaulo et al., 1987; Kilduff & Day, 1994). In contrast, the observable behaviors of those low in self-monitoring are driven more by their own internal feelings and attitudes (Snyder, 1979). Self-monitoring is thus akin to a filter through which an employee's true internal feelings and beliefs must pass before they are expressed as external signals to a leader. Within the context of a leader-employee relationship, self-monitoring likely filters out behavior that would signal a lack of trust in a leader, with employees high in self-monitoring behaving in ways that signal to their leader a sense of trust and withholding behaviors that would indicate feelings of distrust. This would upwardly bias the cues of trust available for the leader to interpret when forming a sense of felt trust and contribute to an overestimation of an employee's trust.

*Hypothesis 1a:* Employee self-monitoring is negatively related to dyadic leader trust meta-accuracy, such that higher employee self-monitoring results in a leader overestimating an employee's trust.

With respect to leaders and the signal-receiving component of the external pathway, any attribute that enhances a leader's effectiveness in interpreting the underlying intentions and feelings that drive others' behavior likely improves leader trust meta-accuracy. *Perspective taking*—a cognitive process in which one intentionally adopts and considers the view of another person to understand his

or her intentions, beliefs, and attitudes (Parker & Axtell, 2001)—is an attribute that may make some leaders more fine-tuned receivers and interpreters of the social signals that are diagnostic of an employee's trust. Leaders high in perspective taking may have superior decoding abilities, which may allow them to process interactions with, and behaviors of, a given employee and use them to discern the employee's true perceptions and feelings (Davis, 1983). Because they more frequently consider others' internal motives and beliefs when attempting to make sense of their external behavior, leaders high in perspective taking likely interpret an employee's behavior in ways that more closely align with the employee's actual trust. Thus, perspective taking should enhance a leader's ability to attain trust meta-accuracy.

*Hypothesis 1b:* Leader perspective taking is positively related to dyadic leader trust meta-accuracy, such that higher leader perspective taking results in a smaller discrepancy (i.e., absolute difference) between a leader's felt trust and employee's trust.

### The Internal Pathway: Trust Meta-Accuracy Is Shaped by One's Own Trust in Another and the Presumption of Reciprocity

In addition to using external information when seeking to understand another person's perception, leaders' meta-accuracy may also be shaped by an internal mechanism. This internal pathway reflects the lay theories people hold to help them make sense of ambiguous information in their social worlds (Bargh & Chartrand, 1999). Classic research in social psychology and interpersonal perception has highlighted that one cognitive heuristic that people use when assessing others' feelings is presumed reciprocity (sometimes called symmetry or balance; e.g., Burnstein, 1967; Heider, 1958; Kenny, 1994)—the assumption that one's own feelings are reciprocated by another (Carlson & Kenny, 2012; De Soto, 1960; De Soto & Kuethe, 1959; Eisenkraft et al., 2017; Kenny & DePaulo, 1993; Kenny & Nasby, 1980; Zajonc & Burnstein, 1965). Although research has found support for the presumption of reciprocity, in that it decreases accuracy by introducing bias into the perception process, other research on interpersonal perception has provided empirical support for this pathway in shaping the accuracy with which people understand how others view them generally (e.g., Carlson & Kenny, 2012; Eisenkraft et al., 2017; Elfenbein, Eisenkraft, & Ding, 2009; Kenny, Bond, Mohr, & Horn, 1996; Sheckman & Kenny, 1994). Yet, notwithstanding this evidence, trust scholars have not—to our knowledge—considered how this internal mechanism might shape felt trust and, thus, trust meta-accuracy.

An internal pathway to trust meta-accuracy would suggest that when trying to determine how much an employee trusts them, a leader would consider their own feeling of trust for an employee in conjunction with their cognitive representation of the nature of trust relationships or their implicit assumption of how trust-based relationships generally function between a leader and employee. To illustrate, in their classic research on how people cognitively represent interpersonal relations, De Soto and Kuethe (1959) prompted participants with a statement about a relationship, such as "Jane trusts John." Then, they asked participants whether John also trusts Jane, finding that participants expected, at a 73%

probability, a trust-based relationship to be reciprocated by the other party. This example demonstrates that individuals' cognitive representation of trust guides their expectation for reciprocity in interpersonal relationships. Thus, rather than only drawing from external observable signals, a leader's felt trust may be shaped by their assumption of reciprocity in the relationship with their employee. Whereas an employee's trust in a leader may not be immediately evident to the leader, a leader's own trust for the employee is readily accessible and can be used to infer how much the employee trusts him or her.

Using their own view of an employee and a cognitive heuristic that trust relationships are reciprocal can yield a relatively accurate sense of felt trust because trust relationships are, in general, truly reciprocated (Bacharach, Guerra, & Zizzo, 2007; Kenny, 1994; Kenny & Nasby, 1980; Pillutla, Malhotra, & Murnighan, 2003). When people turn inward, consulting their own feelings about a positive interpersonal relationship with another person, the presumption of reciprocity tends to be a useful heuristic for inferring the other person's trust in them. Thus, we posit that a leader may achieve trust meta-accuracy through the internal pathway involving a valid presumed reciprocity mechanism, where a leader's trust for his or her employee is positively related to the leader's felt trust, which is in actuality reciprocated by the employee.

*Hypothesis 2:* Dyadic leader trust meta-accuracy is a function of presumed reciprocity, such that an employee's trust in a leader is positively related to a leader's felt trust indirectly through a leader's trust in the employee.

## Study 1

### Method

**Procedure and sample.** We collected survey data from leaders and employees of a large state corrections department in the United States. Participants represented several common roles in the department, including corrections officers, caseworkers, and probation officers. These employees noted in informal interviews that accurately understanding their relationships with others is critical in this context. One leader's comments, for example, reflected the importance of having an accurate felt trust perception: "You realize the need to trust others and know they trust you on day one of the job. When the gates open and you are outnumbered by inmates, you have to *know* your people have your back."

The corrections department provided a roster of leaders and their employees. Needing to constrain the length of the leader survey—because leaders would be asked to respond to several items for each of their employees—we drew a sample from this roster of all leaders and a maximum of five (randomly selected) employees per leader. Our personalized e-mail invitations yielded a total participation of 147 leaders (98% response rate) and 373 employees (78% response rate). Because our hypotheses focused on the leader–employee pair, our final sample for conducting analyses comprised the 213 dyadic observations (213 employees nested within 90 unique leaders) for which we received matched leader and employee responses.

Leaders were 36% female, 92% White, with an average age of 47.57 years old ( $SD = 9.21$ ) and average department tenure of 11.57 years ( $SD = 8.01$ ). Employees were 43% female, 82%

White, with an average age of 42.59 years ( $SD = 11.82$ ) and department tenure of 5.72 years ( $SD = 5.45$ ).<sup>1</sup>

**Measures.** Interitem reliability (i.e., Cronbach's alpha) for multiitem survey measures is included along the diagonal in Table 1.

**Employee and leader trust.** We used three items from Kim, Ferrin, Cooper, and Dirks (2004), which was based on Mayer and Davis (1999), using a 5-point Likert-type scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Employees responded to these items for their sole leader; leaders completed the items for each of their employees, identified by name. A sample item is "I feel secure in having make decisions that critically affect me."

**Leader felt trust.** Leaders responded to the same root items that we used to measure trust, altered to solicit their beliefs about how much a given employee trusted them. A sample item that parallels the item given above is, "[Employee nam] feels secure in having me make decisions that critically affect him/her."

**Leader trust meta-accuracy.** As we explain in greater detail below, we assessed leader trust meta-accuracy using a multivariate approach (Edwards, 1995). This entailed considering (a) the algebraic difference between a leader's felt trust and the employee's trust (i.e., leader felt trust minus employee trust); (b) the absolute value of the algebraic difference; and, (c) each of the components of these difference scores (i.e., leader's felt trust, employee's trust). We explain this approach in greater detail below.

**Employee self-monitoring.** Employees completed Lennox and Wolfe's (1984) 13-item Revised Self-Monitoring scale using a 7-point Likert-type scale (1 = *certainly always false* to 7 = *certainly always true*). A sample item is "In social situations, I have the ability to alter my behavior if I feel that something else is called for."

**Leader perspective taking.** Leaders completed the 7-item perspective taking subscale from the Interpersonal Reactivity Index (Davis, 1983), responding with a 6-point Likert-type scale (1 = *does NOT describe me well* to 6 = *describes me well*). A sample item is "Before criticizing somebody, I try to imagine how I would feel if I were in his/her place."

**Analyses.** Predicting leader trust meta-accuracy—the congruence between a leader's felt trust and an employee's actual trust—presents several analytical challenges. Edwards (1995) detailed how using a difference score (either algebraic or absolute) as a criterion variable in regression analyses entails making several untested, and often invalid, assumptions about the relationship between a predictor variable and concepts like congruence, alignment, and accuracy. To appropriately test our hypotheses about leader trust meta-accuracy we thus used the multistep approach that Edwards (1995) developed for predicting congruence.

We made three different kinds of predictions regarding the antecedents of leader trust meta-accuracy. First, our prediction in Hypothesis 1b involves expectations about how a predictor variable—perspective taking—relates to trust meta-accuracy irrespective of direction, such that perspective taking is negatively related to the absolute discrepancy between a leader's felt trust and an employee's trust. To test this hypothesis, following Edwards (1995), we first computed the absolute difference between the leader's felt trust and the employee's trust for the leader (i.e., leader felt trust – employee trust) and then regressed this onto predictors of meta-accuracy. We included this analysis because this is a common way of thinking about accuracy; however, we did

not rely on it for testing our hypotheses because it suffers from serious disadvantages that can lead to misinterpretation. Specifically, the use of an absolute difference score for testing a pure accuracy effect—irrespective of the direction of the difference—requires making the untested assumption that (a) the relationship between the predictor and accuracy is positive when a leader's felt trust was below an employee's actual trust (i.e., underestimators); but, (b) negative when a leader's felt trust was above an employee's actual trust (i.e., overestimators). As Edwards (1995) noted, using the absolute difference score as an outcome variable would require assuming that a given predictor "exhibited equal but opposite relationships for managers who overestimated their ratings and managers who underestimated their ratings" (p. 315).

To test this hypothesis, we thus adopted the multistep approach that Edwards (1995) proposed. We first examined the results of a univariate model with the algebraic difference score (leader felt trust – employee trust) as the criterion variable. However, we created a dummy variable ( $w$ ) to indicate whether the algebraic difference score is positive or negative—that is, to indicate whether a leader has overestimated ( $w = 0$ ) or underestimated ( $w = 1$ ) an employee's trust.<sup>2</sup> We included this dummy variable and interaction terms between this dummy and each of the focal variables in our hypotheses as predictors in the model. As Edwards (1995) showed, regressing the algebraic difference score on the main effects and interactions is mathematically equivalent to using the absolute difference as the criterion variable; however, the use of the dummy variable and interaction terms results in an unconstrained equation that enables testing key assumptions underlying the absolute difference score as a measure of accuracy. In this equation, the main effect of a predictor indicates the simple slope of the relationship between the predictor and accuracy for overestimators, while the interaction term plus the main effect estimates the simple slope for underestimators. The strongest statistical evidence of a true and uniform relationship between a predictor variable and absolute accuracy is found when the two simple slopes are equal in magnitude, but opposite in sign.

Following up on this univariate analysis, we examined the results of a multivariate path analysis in which the two components of the difference score—the leader's felt trust and the employee's actual trust—were endogenous variables (i.e., Edwards, 1995; McKee, Lee, Atwater, & Antonakis, 2018). As with the univariate analysis, we included the dummy variable and interaction terms to separately model the effect of a given predictor for underestimators and overestimators. Examining the relations between a predictor and each of the components provides insight into whether a relation with one component or the other, or both, is responsible for an observed congruence effect.

<sup>1</sup> Study 1 was approved by Washington University in St. Louis's Institutional Review Board. Title: Workplace Relationships, Protocol number 201107015; Study 2 was approved by University of New Hampshire's Institutional Review Board. Title: Workplace Relationships, Protocol Number 6483.

<sup>2</sup> We followed Edwards' (1995) guidance for handling cases of perfect accuracy. Specifically, we examined the impact on parameter estimates of coding instances of perfect accuracy as either 0 or 1. Because our results were equivalent across these different coding approaches, we do not report results below using an additional indicator for instances where the leader's metaperception perfectly equals the employee's trust.

Table 1  
*Study 1: Descriptive Statistics and Correlations*

Variable name	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Same gender	.53	.50									
2. Same ethnicity	.86	.35	.01								
3. Employee–leader relationship tenure	2.55	2.71	.13	.13							
4. Employee self monitoring	4.14	.64	.03	-.15	.04	(.87)					
5. Leader perspective taking	3.64	.53	-.12	-.12	-.08	-.16	(.76)				
6. Employee trust in leader (ET)	3.56	.93	.05	.05	-.03	.01	.08	(.76)			
7. Leader trust in employee	3.50	.94	.01	-.01	.13	.02	.05	.37	(.84)		
8. Leader felt trust (FT)	3.73	.67	.08	.06	.05	.05	.03	.32	.49	(.73)	
9. Algebraic difference (FT – ET)	-.15	.94	.01	.02	-.07	-.02	.02	.74	-.01	-.40	
10. Absolute difference ( FT – ET )	.74	.61	-.09	.12	-.04	-.06	-.01	-.38	-.15	.13	-.46

*Note.*  $N = 213$  employees nested within 90 leaders. FT = leader's felt trust; ET = employee's trust in leader. Cronbach's alpha is provided for multi-item scales in parentheses along the diagonal. Denotations of statistical significance are excluded due to nested data structure.

We also made a second and slightly different type of prediction in Hypothesis 1a, regarding employee self-monitoring. Rather than predicting a relationship with the absolute discrepancy between leader felt trust and employee trust, here we argued that employee self-monitoring is related to a specific form of inaccuracy—overestimation of an employee's trust by a leader. Much like an absolute difference score is flawed for testing overall accuracy effects, so too is the algebraic difference score flawed for testing the specific form of an inaccuracy effect (i.e., overestimation or underestimation). As a simple example, consider an observed correlation between a predictor variable (e.g., self-monitoring) and an algebraic difference score (e.g., leader felt trust – employee trust). A significant positive correlation could indicate that self-monitoring is associated with increasing accuracy (i.e., moving from negative values toward zero) or with increasing overestimation (i.e., moving from zero to increasingly positive values). To test this hypothesis, we therefore used an extension of the approach described above (e.g., Cable, Aiman-Smith, Mulvey, & Edwards, 2000; Cable & Yu, 2006; Edwards, 1995). Specifically, we examined the coefficient of the path between a given predictor and a leader's felt trust in our multivariate path analysis. Then, we examined whether the estimated simple effects were above or below the sample values for an employee's actual trust (Cable et al., 2000). The strongest evidence that a given predictor is positively associated with overestimation is found when (a) there is a significant positive relationship between the predictor and the algebraic difference score and (b) the predicted values at high levels of the predictor variable in this second regression equation are significantly greater than the sample values of actual trust.

Finally, to test Hypothesis 2, regarding presumed reciprocity as a mechanism for dyadic trust meta-accuracy, we interpreted the coefficients from the multivariate path model used in prior research for assessing presumed reciprocity (i.e., Eisenkraft et al., 2017; Elfenbein et al., 2009). This model specifies that a leader's felt trust is linked to an employee's actual trust through the leader's trust in the employee. Empirical evidence for a presumed reciprocity effect is thus provided by a significant indirect relationship between an employee's actual trust and a leader's felt trust via a leader's trust for an employee.

Also important to consider in our analyses is the potential for nonindependence in our data. Our focus is dyadic meta-accuracy and, as such, our focal level of analysis is the leader–employee

dyad. Because some of the leaders in our dataset are matched to multiple employees, however, it is possible that analyses focusing on the dyadic level of analysis would violate the assumption of nonindependence intrinsic to the calculation of standard errors in Ordinary Least Squares regression. To address this concern and take into account any clustering of dyads within leaders, we used clustered robust standard errors, which adjusts standard errors for possible bias due to nonindependence (McNeish, Stapleton, & Silverman, 2017).

Following recent guidance regarding the use of control variables in organizational research (e.g., Carlson & Wu, 2012), we selected variables to include based on theory. First, we included as controls variables indicating whether leaders and employees were of the same gender and ethnicity. Theory and research (e.g., Elfenbein & Ambady, 2002) suggest that individuals may be better able to detect and interpret the social signals of those who are of a similar demographic group. Second, we included as a control variable the number of years that a leader and an employee had worked together. Research indicates that trust develops over time and, further, increasing tenure provides opportunities for leaders to observe and interpret employee signals of trust (Jones & Shah, 2016). Our results are substantively identical—in significance, direction, and approximate magnitude—if control variables are omitted from the models.

## Results

Table 1 presents the descriptive statistics for and intercorrelations among Study 1 variables. The negative mean value for the algebraic difference score ( $M = -0.15$ ,  $SD = 0.94$ ) indicates that there was a slight average tendency for leaders to underestimate how much an employee trusts them. However, note that the median value for this variable was zero, suggesting that—at least on average—this tendency was slight. More relevant for our focus on the potential for misalignment between felt trust and actual trust, we observed meaningful variability in accuracy (i.e.,  $SD = 0.94$ ). Further illustrating the fact that felt trust and actual trust are imperfectly aligned, the bivariate correlation between the two was 0.32.

Table 2 presents the results of regression models used to test our hypotheses regarding the predictors of leader trust meta-accuracy. Following Edwards (1995), we considered several parameters to

Table 2  
*Study 1: Results of Analyses Testing Predictors of Leader Trust Meta-Accuracy*

Variable name	Model 1	Model 2	Model 3: Multivariate path analysis	
	DV =  FT – ET	DV = FT – ET	DV = FT	DV = ET
	B SE	B SE	B SE	B SE
Intercept	.58 (.09)	.26 (.10)	3.46 (.22)	3.72 (.25)
W		–1.04 (.18)**	.31 (.33)	–.73 (.32)**
Same gender	–.12 (.11)	–.07 (.11)	.17 (.10)	.10 (.12)
Same ethnicity	.23 (.09)*	.31 (.08)**	–.01 (.22)	.30 (.26)
Employee–leader relationship tenure	.01 (.02)	–.02 (.01)	.00 (.02)	–.02 (.02)
Employee self-monitoring	–.05 (.07)	–.04 (.06)	.06 (.08)	.02 (.08)
Leader perspective taking	.03 (.08)	–.04 (.08)	.06 (.11)	.03 (.08)
Leader trust in employee	–.10 (.06)	–.05 (.06)	.41 (.07)**	.37 (.08)**
W × Same Gender		.14 (.20)	–.08 (.16)	.06 (.20)
W × Same Ethnicity		–.61 (.19)**	.26 (.33)	–.35 (.33)
W × Employee–Leader Relationship Tenure		–.01 (.03)	–.01 (.02)	–.01 (.03)
W × Employee Self-Monitoring		.09 (.12)	–.01 (.14)	.08 (.16)
W × Leader Perspective Taking		–.25 (.17)	.10 (.19)	–.15 (.21)
W × Leader Trust in Employee		.29 (.11)**	–.19 (.10)	.10 (.14)
R <sup>2</sup>	.06	.70	.39	.47
F	1.83	32.06**		

*Note.*  $N = 213$  employees nested within 90 leaders. Entries are unstandardized parameter estimates. All continuous predictors are grand mean centered. DV = dependent variable; FT = leader's felt trust; ET = employee's trust in leader; W = dummy variable to indicate whether an observation represented overestimation or underestimation (W = 0 when FT > E and W = 1 when FT < E). Standard errors are cluster robust standard errors.

\*  $p < .05$ . \*\*  $p < .01$  two-tailed.

determine the degree of support for Hypotheses 1 and 2. First, we examined the coefficient relating a given predictor to the absolute difference of leader and employee ratings (Model 1 of Table 2). Although this coefficient potentially masks the form of the true relationship—because it constrains the effect for overestimators and underestimators to be equal, thus ignoring the direction of inaccuracy—it provides an initial and coarse estimate of the relationship. Second, we examined the main effect and interaction of a given variable with the dummy variable (w) in predicting the algebraic difference of leader and employee ratings (Model 2 of Table 2). Third, we examined these same parameters for a given variable in predicting, separately, leader and employee ratings in a multivariate path analysis (Model 3 of Table 2). This final step allows us to break down the component parts (leader felt trust and employee trust) to provide additional insight into how each predictor relates to leader felt trust and employee trust in order to more clearly discern the drivers of congruence (Edwards, 1995). Fourth, for evaluating Hypothesis 2, we examined the indirect relationship between a leader's felt trust and an employee's actual trust through the leader's trust for the employee.

Hypothesis 1, examining the external pathway, predicted that (a) employee self-monitoring would be negatively related (i.e., overestimated); and (b) leader perspective taking would be positively related to leader trust meta-accuracy (i.e., greater accuracy). As Table 2 shows, neither employee self-monitoring nor leader perspective taking was significantly related to the absolute difference score (Model 1), the algebraic difference score with interaction terms (Model 2), or either of the components of these difference scores (Model 3). Accordingly, Hypotheses 1a and 1b were not supported.

Hypothesis 2, examining the internal pathway, predicted that a leader's meta-accuracy would be a function of presumed reciprocity, such that the employee's actual trust and the leader's felt trust would be influenced by the leader's own trust in the employee. The pattern of coefficients in Table 2 suggests support for Hypothesis 2. In Model 2, there was a significant interaction between a leader's trust in an employee and the dummy variable marking over- and underestimators ( $B = 0.29, p < .01$ ). Simple slopes analysis indicated that the interactive relationship was such that leader trust was significantly related to meta-accuracy particularly for leaders who underestimated how much an employee trusted them ( $B = 0.24, SE = 0.06, p < .01$ ). For those who overestimated how much an employee trusted them, the relationship was not significant ( $B = -0.05, p = .42$ ). As Model 3 shows, a leader's trust in an employee was significantly and positively related both to the leader's felt trust ( $B = 0.41, p < .01$ ) and to an employee's actual trust ( $B = 0.37, p < .01$ ) and there were no significant differences between over- and underestimators. Accordingly, we examined the presumed reciprocity path model delineated by Eisenkraft et al. (2017) without these interaction terms to directly test this mechanism. The indirect effect of the relation between a leader's felt trust and an employee's actual trust through the leader's trust in the employee was positive and significant ( $B = 0.12, SE = 0.03, p < .01$ ). Hypothesis 2 was thus supported.

## Discussion

The findings of Study 1 did not provide evidence in support of an external pathway to leader trust meta-accuracy. According to an external model, a leader's felt trust is shaped by (a) the verbal and



nonverbal signals of trust that an employee sends and (b) a leader's perception and interpretation of those signals. Our results suggested that employee self-monitoring, which was posited to obscure an employee's true feelings of trust and result in the leader overestimating trust, was not significantly related to leader trust meta-accuracy. Our findings also indicated that leader perspective taking, which we posited would enhance a leader's ability to accurately interpret subtle interpersonal signals of trust and thus yield higher accuracy, was unrelated to meta-accuracy.

The results of Study 1 did provide support, however, for an internal pathway to leader trust meta-accuracy. According to this model, a leader's beliefs about whether an employee trusts them is shaped by their own feelings about an employee and a cognitive heuristic of presumed reciprocity in trust relationships. This explanation suggests that a leader's felt trust is informed by how much they trust a given employee because a leader's own view of the relationship is readily accessible and most proximal. Because humans' cognitive representation of trust comprises reciprocity between two people (De Soto, 1960; Kenny & DePaulo, 1993), this internal information informs a leader's assessment of an employee's actual trust because they presume that their own feelings of trust for an employee are likely reciprocated. When reciprocity does exist and employees trust those leaders who trust them, the presumption of reciprocity increases trust meta-accuracy. In line with this perspective, we found that (a) a leader's trust in an employee was positively related to that leader's felt trust, (b) a leader's trust in an employee was positively related to the employee's actual trust, and, consequently, (c) a leader's trust in an employee served as a mechanism aligning a leader's felt trust with an employee's actual trust.

## Study 2

We sought to accomplish two objectives in Study 2. The first objective was to conceptually replicate Study 1 to increase confidence in our results. The purpose of a conceptual replication, also called a systematic replication (e.g., Aronson, Carlsmith, Ellsworth, & Gonzales, 1990), is to test the robustness of empirical findings by varying the context, participants, and specific operationalizations of a set of underlying theoretical variables (Lynch, Bradlow, Huber, & Lehmann, 2015). Before drawing conclusive interpretations from Study 1 findings, we sought to examine the two pathways a second time using a broader set of theoretically relevant constructs for the external pathway. We also sought to replicate our findings for Hypothesis 2, regarding the internal pathway, in a new context to determine if these findings generalize. The second objective was to examine an important implication of leader trust meta-accuracy; namely, its association with subsequent relationship conflict between leaders and employees, which most readily represents the consequence of inaccurate perceptions.

### Further Examining the Mechanisms Underlying Leader Trust Meta-Accuracy

In replicating and extending the findings from Study 1 regarding the external pathway, we considered whether conceptually similar variables might drive leader trust meta-accuracy. As with Study 1, we identified and considered factors that would logically enhance or mitigate (a) a leader's ability to accurately receive and interpret

any interpersonal signals that an employee sends regarding trust and (b) the extent to which an employee sends veridical signals of trust.

We first considered the opportunity that a leader has to observe and interpret an employee's behavioral signals of trust. Research suggests that increasing the frequency of available social signals might decrease the degree to which leaders rely on cognitive heuristics to judge their interpersonal relationship with an employee (e.g., Freeman, 1992). As such, more *frequent interactions* between a leader and an employee should provide the leader with a larger set of social cues on how much an employee trusts him or her. If a leader and an employee rarely interact, the leader has few signals to interpret in forming a sense of felt trust. A basic prediction in line with the external model is thus that more frequent interactions between a leader and an employee—because they increase the availability of interpersonal information—engender greater trust meta-accuracy.

*Hypothesis 1c:* The frequency of leader-employee interaction is positively related to dyadic leader trust meta-accuracy, such that a greater frequency of interaction results in a smaller discrepancy (i.e., absolute difference) between a leader's felt trust and employee's trust.

In Study 1 we considered leader perspective taking as an individual attribute that would enhance a leader's ability to interpret the social signals of an employee's trust. Within a workplace context, a conceptually related characteristic is *social astuteness*—a dimension of political skill that reflects the ability to understand social interactions and accurately interpret the meaning of others' behavior (Ferris et al., 2007). Much like perspective taking, leaders higher in social astuteness should be more skilled in ascertaining the true, underlying perceptions of others in the workplace, due to their ability to read people and situations (Ferris et al., 2007). Thus, social astuteness should enhance a leader's ability to attain trust meta-accuracy.

*Hypothesis 1d:* Leader social astuteness is positively related to dyadic leader trust meta-accuracy, such that greater leader social astuteness results in a smaller discrepancy (i.e., absolute difference) between a leader's felt trust and employee's trust.

In addition to characteristics that could enhance their ability to interpret social signals, leaders also could possess attributes that prompt them to systematically misinterpret an employee's behavior. One such attribute is *narcissism*—an individual characteristic that comprises a grandiose and inflated view of the self (Farwell & Wohlwend-Lloyd, 1998). Those high in narcissism perceive themselves more positively than others actually perceive them (e.g., Gabriel, Critelli, & Ee, 1994; John & Robins, 1994; Robins & John, 1997). Highly narcissistic leaders may be more likely to systematically misread social signals in a way that is self-enhancing, by discounting negative feedback and augmenting positive feedback. By compromising their ability to interpret social signals, leader narcissism may thus detract from trust meta-accuracy, contributing to an overestimation of an employee's actual trust.

*Hypothesis 1e:* Leader narcissism is negatively related to dyadic leader trust meta-accuracy, such that higher leader

narcissism results in a leader overestimating an employee's trust.

In Study 1 we considered employee self-monitoring as an individual attribute that could influence the veracity of the behavioral signals that an employee sends regarding trust and, in particular, upwardly bias those signals. A conceptually related characteristic is the use of *impression management* tactics by an employee. Impression management tactics are behaviors used to induce a favorable reaction or perception from another person (Bolino, 1999). Research suggests that employees often direct these behaviors specifically toward leaders in the workplace because leaders control resources (e.g., promotions, performance evaluations) that employees value (Wayne & Ferris, 1990). Rather than communicating their true feelings of trust to a leader, employees may instead carefully use impression management tactics, such as ingratiation or other-enhancement, to mislead their leader and imply that their trust is higher than it actually is. Similar to the logic of employee self-monitoring, the use of these tactics would distort the signals sent by an employee to a leader, upwardly biasing them, and inhibit the leader from forming an accurate perception of the employee's trust for him or her.

*Hypothesis 1f:* Employee impression management is negatively related to dyadic leader trust meta-accuracy, such that higher employee impression management results in a leader overestimating an employee's trust.

In addition to examining these alternative conceptualizations reflecting the external pathway, we replicate our test of Hypothesis 2 and the internal pathway. Recall that this pathway specified that a leader's trust in an employee influences dyadic leader trust meta-accuracy through the use of a presumed reciprocity heuristic. As with Study 1, we test the association between a leader's trust in an employee and trust meta-accuracy by considering the components of a presumed reciprocity heuristic—a positive relation between a leader's felt trust and a leader's trust in an employee, a positive relation between a leader's trust in an employee and an employee's actual trust, and the indirect relationship between a leader's felt trust and an employee's actual trust via the leader's trust in the employee.

### Implications of Leader Trust Meta-Accuracy

Existing research on felt trust has, to date, largely focused on the implications of employees feeling that they are trusted by their managers. Studies have shown, for example, that employees perform at a higher level and engage in greater citizenship behavior when they believe that management or their supervisors trust them (Lau et al., 2014; Salamon & Robinson, 2008). Moreover, when employees feel trusted by their supervisors, they are prone to engage in knowledge sharing behavior toward their supervisor (Nerstad et al., 2018) and incur personal costs to maintain felt trust (Baer et al., 2015).

We build upon and extend these findings in three ways. First, in contrast to existing research that has focused on employees' feeling trusted by leaders, we consider the implications of leaders feeling trusted by employees. Felt trust should be important to leaders, and as we describe below, the accuracy of their felt trust may be particularly valuable. Second, whereas prior research on

the implications of felt trust has focused on individual-level outcomes, we consider an important relational outcome—the degree of relationship conflict between leaders and employees. Relationship conflict, the presence of personal tension and incompatibility between individuals, typically has a negative impact on individuals by adversely impacting their well-being (Jehn & Bendersky, 2003), performance, and interpersonal relationships due to the increase in hostility and tension (Janssen, Van de Vliert, & Veenstra, 1999; Peterson, 1999; Spector & Jex, 1998). As a result, individuals spend more time and energy on each other (Jehn & Mannix, 2001) instead of work tasks, which can lead to lower decision quality (Simons & Peterson, 2000) and performance (de Dreu & Weingart, 2003). Leaders are particularly vulnerable because they spend a significant amount of time managing personal conflicts (de Dreu et al., 2004; Thomas, 1992). By decreasing relationship conflict, the leader could improve the relationship with their employees (Römer, Rispens, Giebels, & Euwema, 2012) and with their work unit more broadly (Gelfand, Leslie, Keller, & de Dreu, 2012). Third, we consider how the implications of felt trust might depend on how accurately leaders understand the degree to which an employee trusts them, given that theory and research on interpersonal perception suggest that the working relationship between two people might inherently depend on how much it aligns with the other person's belief (e.g., Carlson, 2016; Elfenbein et al., 2009). Underlying this general prediction that accuracy improves relational outcomes is the idea that when one person accurately understands another person's perspective, there are fewer expectation violations between the two, resulting in smoother interpersonal interactions (Heider, 1958; Malinowski, 1932). Conversely, when someone has an inaccurate understanding of another person's perspective, they may act on that inaccurate understanding in ways that violate expectations and produce frustrating interpersonal interactions.

Notwithstanding the intuitive appeal of this prediction that greater meta-accuracy is beneficial within relationships, research on trust meta-accuracy in teams suggests that it is important to consider both meta-accuracy and the level of an employee's actual trust (Brion et al., 2015). To illustrate the importance of both, consider two cases in which a leader's felt trust accurately aligns with an employee's actual trust—one in which an employee's actual trust is high and a second in which an employee's actual trust is low. In the first case, if the employee has high trust for the leader and the leader accurately perceives this trust, both parties would behave in ways that correctly reflect a strong and positive relationship, with open communication and support that should yield benefits for the leader and the employee. In particular, the leader will likely be more effective in understanding and fulfilling the employee's needs and expectations, leading to lower relationship conflict. In the second case, if the employee has low trust for the leader and the leader accurately perceives this low trust, the result is likely quite different. When a leader accurately understands that an employee does not trust her, both parties may behave in ways that correctly substantiate a negative relationship, resulting in guarded communication and decreased support. Whereas accuracy about a high level of employee trust is likely associated with lower relationship conflict, accuracy about a low level of employee trust is likely associated with higher relationship conflict.

*Hypothesis 3:* Dyadic leader trust meta-accuracy is negatively related to relationship conflict when employee trust is high, but positively related to relationship conflict when employee trust is low.

In addition to considering aligned cases, in which leaders are accurate in their felt trust perceptions, our arguments above suggest that it is important to consider the directionality of potential misalignment (Brion et al., 2015). That is, whether a leader overestimates or underestimates an employee's trust may be consequential for relationship conflict. When a leader overestimates an employee's trust, believing that the employee trusts him or her more than the employee actually does, the leader may behave in ways that the employee perceives as presumptuous and as overstepping the boundaries that the employee sees in their relationship. For example, thinking that an employee trusts them at a high level, a leader might ask the employee to disclose private or sensitive information that the employee, who actually does not trust the leader at a high level, is reticent to share. In contrast, when a leader underestimates an employee's trust, believing that the employee trusts him or her less than the employee actually does, the leader likely behaves with greater caution. Although this leader might be reluctant to share information with the employee, the employee would not be privy to the leader's inaction. Whereas overestimating trust likely results in errors of commission on the part of the leader, underestimating trust likely results in errors of omission on the part of the leader. Errors of commission, which are evident to the employee, likely contribute to the kinds of frustrating interactions that engender relationship conflict with the leader and the employee.

*Hypothesis 4:* A leader's overestimation of an employee's trust produces increased relationship conflict compared to a leader's underestimation of an employee's trust.

## Method

**Procedure and sample.** We collected survey data at two points in time, 6 weeks apart, from leaders and employees of a not-for-profit caregiving organization based in the southeastern United States. The organization provides a range of services (e.g., residential, vocational, and educational programs) for people with mild to severe cognitive impairments. This setting complemented the corrections department setting used in Study 1. The caregiving organization was located in a different region of the United States, involved a different type of work, and comprised a different set of professional roles and norms regarding the leader-employee relationship. Nevertheless, accurately predicting trust was important given the vulnerability and at times unpredictable nature of the clients. For instance, one worker remarked about how an adult client physically assaulted her and another employee stepped in to help without hesitation.

The Time 1 survey for leaders, sent via work e-mails, assessed demographic characteristics, social astuteness, and narcissism. The Time 1 employee survey assessed demographic characteristics, impression management, interaction frequency, and trust in the leader. We received 108 leader responses (67% response rate) and 334 employee responses (72% response rate) to the Time 1 survey.

We distributed the Time 2 survey 6 weeks following the Time 1 survey. The Time 2 survey for leaders assessed their perceptions

of specific employees, including their felt trust with respect to each employee, their trust in each employee, how frequently they interacted with each employee, and their perception of relationship conflict with each employee. To reduce survey fatigue, given that leaders would have to complete several measures for each of their employees, we randomly sampled up to five of a leader's employees from the pool of completed responses to the Time 1 survey. The Time 2 survey for employees assessed their perceptions of relationship conflict with their leader. We received 91 leader responses (56% response rate) and 280 employee responses (60% response rate) to the Time 2 survey. We conducted our analyses on 142 matched leader-employee pairs (51 unique leaders) for which we received a response from the leader at Times 1 and 2 and a response from the employee at least at Time 1.<sup>3</sup>

Leaders were on average 26.30 years old ( $SD = 10.68$ ) and had worked at the nonprofit organization for 6.62 years ( $SD = 6.02$ ) on average. They were 85% female and ethnically diverse (46% White, 32% Black or African American, 6% Hispanic). Employees were on average 24.18 years old ( $SD = 13.38$ ), 76% female, and ethnically diverse (57% Black or African American, 20% White, 10% Hispanic).

**Measures.** Unless otherwise indicated below, participants responded to survey measures using a Likert-type scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. Interitem reliability values for multiitem survey measures are included along the diagonal in Table 3.

**Employee trust in the leader.** We used the same three items in Study 1, adapted from Kim et al. (2004) to assess employees' trust in their leader. Employees responded to the items at Time 1 using a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*).

**Leader felt trust.** As with Study 1, at Time 2 leaders responded to the root items that we used to measure employee trust, but adapted to target the leader's perceptions of how much each of their employees trust in them.

**Leader trust meta-accuracy.** As with Study 1, we used Edwards' (1995) multivariate approach to assess meta-accuracy. The inputs into this procedure were again the absolute and algebraic differences of leader felt trust minus employee trust, as well as these individual components of the difference scores.

**Employee impression management.** At Time 1, employees completed a six-item measure (Bolino, Varela, Bande, & Turnley, 2006), adapted to focus specifically on their behavior toward their leader. Using a 7-point Likert scale (1 = *never* to 7 = *always*), employees responded to items such as "How often do you do and say things that make [leader name] believe you think highly of him/her?"

**Employee-leader interaction frequency.** We adapted three items from McAllister (1995). A sample item is "[Leader/employee name] and I interact often in the course of our work." Employees completed this measure at Time 1, while leaders completed this measure at Time 2. We included the interaction frequency measure in the Time 2 leader survey, rather than at Time

<sup>3</sup> We conducted a sensitivity power analysis using G\*Power (Faul, Erdfelder, Lang, & Buchner, 2007) with  $\beta = .80$  and  $\alpha = .05$  (two-tailed) with four predictors for a linear regression model. Our analysis revealed a sample of 85 is needed to detect a small effect size of .15. With our current sample size of 142, our expected effect size is .09.

Table 3  
Study 2: Descriptive Statistics and Correlations

Variable name	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Same gender	.69	.46														
2. Same ethnicity	.43	.50	.18													
3. Employee–leader relationship tenure	1.67	2.81	-.01	.05												
4. Employee impression management	2.99	1.34	-.01	.00	.27	(.78)										
5. Employee–leader interaction frequency	5.69	.63	-.07	.06	-.05	-.10	(.82)									
6. Leader social astuteness	5.44	1.05	.25	.16	.05	.41	-.11	(.88)								
7. Leader narcissism	3.68	.94	.05	.05	-.02	-.05	.14	.02	(.70)							
8. Employee trust in leader (ET)	5.81	1.43	.19	.32	.06	.31	.08	.38	.07	(.90)						
9. Leader trust in employee	5.96	1.00	.20	-.03	-.09	.03	.12	.27	.05	.28						
10. Leader felt trust (FT)	5.92	.91	.14	-.05	-.11	.03	.14	.19	.00	.29	.62	(.84)				
11. Algebraic difference (FT – ET)	.12	1.46	-.10	-.35	-.13	-.28	.02	-.25	-.06	-.80	.11	.34				
12. Absolute difference ( FT – ET )	1.05	1.02	-.17	-.16	-.07	-.23	-.06	-.16	-.09	-.61	-.21	-.25	.45			
13. Relationship conflict	1.33	.56	-.19	-.05	.07	.04	-.06	-.20	.04	-.34	-.58	-.43	.07	.04	(.92)	
14. Leader effectiveness	5.82	1.35	.19	.09	.09	.27	-.10	.28	-.08	.60	.36	.08	-.54	-.42	-.33	(.98)

Note. *N* = 142 employees nested within 51 leaders. FT = leader's felt trust; ET = employee's trust in leader. Cronbach's alpha for is provided for multi-item scales in parentheses along the diagonal. Denotations of statistical significance are excluded due to nested data structure.

1 as we did with employees, simply because we needed the roster of completed Time 1 surveys to populate the Time 2 leader survey. There was high within-dyad agreement in leader and employee ratings of interaction frequency (median  $r_{wg(j)} = 0.92$ ). We thus operationalized employee–leader interaction frequency using the mean of employee and leader ratings.

**Leader social astuteness.** At Time 1, leaders completed the four-item social astuteness dimension of political skill from Ferris et al.'s (2005) measure. A sample item is "I am particularly good at sensing the motivations and hidden agendas of others."

**Leader narcissism.** Leaders responded to Ames, Rose, and Anderson's (2006) 16-item measure of narcissism at Time 1. Notwithstanding the large number of items, interitem reliability analysis indicated that the measure had poor psychometric qualities ( $\alpha = .56$ ). We thus used exploratory factor analysis to identify a subset of items that (a) assessed the egocentric aspect of narcissism and (b) had acceptable psychometric properties. This approach led us to create a five-item scale that captured a single factor and had acceptable interitem reliability ( $\alpha = .70$ ). A sample item is "Everybody likes to hear my stories."

**Leader trust in employee.** We measured a leader's trust in each of his or her employees at Time 2 using a single item: "I trust [employee name]." Leaders responded to this item using a 5-point Likert-type scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. We chose to use a single item for three reasons. First, our goal in Study 2 was to conduct a conceptual replication of our Study 1 findings regarding leader trust. Second, it was a practical necessity to minimize the number of items that leaders needed to respond to for each of their employees, particularly given that we asked leaders to complete several multiitem scales for each of their (up to five) employees in Study 2 (i.e., felt trust, frequency of interaction, relationship conflict). Third, prior trust research (e.g., Jones & Shah, 2016) suggests that single-item measures can adequately capture elements of trust and serve as useful measures in dyadic research. To ensure that our single-item measure possessed favorable psychometric characteristics, we followed the approach of prior researchers (e.g., Jones & Shah, 2016; Joshi & Knight, 2015) and collected data from an online sample of 187 adults residing in the United States. We asked respondents to think of a work relationship they held and respond to a set of

survey items that included (a) our single-item measure and (b) the three-item measure of trust described above (e.g., Kim et al., 2004). The results of a confirmatory factor analysis showed that a single factor model fit the data well ( $\chi^2 = 0.74$ ,  $p = .69$ ; CFI = 1.00; RMSEA = 0.00, SRMR = 0.01). All four items had high standardized loadings (i.e., all loadings >0.70) on the single latent factor, supporting the validity of the single item that we used. The correlation between the single item we used and the three-item scale score used in Study 1 was 0.82 ( $p < .01$ ).

**Relationship conflict.** At Time 2, both leaders and employees completed items measuring relationship conflict (Jehn & Mannix, 2001). Employees responded to three items that asked about conflict with their leader (e.g., "How much tension is there between you and [leader name]?") and leaders responded to the same three items asking about conflict with each of their employees (e.g., "How much tension is there between you and [employee name]?"). Respondents used a 7-point Likert-type scale ranging from 1 = *never* to 7 = *always*. There was high within-dyad agreement between employees and leaders in their ratings of relationship conflict (median  $r_{wg(j)} = 0.97$ ). Accordingly, we operationalized relationship conflict using the mean of employee and leader ratings.

**Analyses.** To test Hypotheses 1 and 2, which address the antecedents of leader trust meta-accuracy, we followed the same approach described above and used in Study 1. Hypotheses 3 and 4 consider dyadic leader trust meta-accuracy as a predictor of relationship conflict. Using meta-accuracy as a predictor of leader and employee outcomes presents a number of analytical challenges. Edwards and colleagues (Edwards, 1994, 1995, 2001; Edwards & Parry, 1993) have described in depth the potential problems and untested assumptions inherent in using difference scores as predictors in regression models. To circumvent these problems, we used polynomial regression and response surface analysis (Barranti, Carlson, & Côté, 2017; Edwards & Parry, 1993). Whereas using a difference score requires making several untested assumptions about how the alignment of two variables (i.e., leader felt trust and employee trust) relates to a criterion variable, polynomial regression models these assumptions in an unconstrained way. Furthermore, polynomial regression and response surface analysis enables examining how the relationship

between meta-accuracy and a given outcome might vary across different levels of employee trust. A number of published articles provide detailed tutorials of this method (e.g., Barranti et al., 2017), which we describe in greater depth below when presenting our results.

As in Study 1, we controlled in our analyses for the similarity of employees and leaders with respect to gender and ethnicity, as well as the tenure of the leader–employee relationship. We include these control variables both in predicting leader trust meta-accuracy and in using leader trust meta-accuracy to predict relationship conflict. The results of our hypothesis tests are the same if control variables are excluded from our models.

## Results

Table 3 presents the descriptive statistics for and intercorrelations among Study 2 variables. In contrast to Study 1, there was a very slight tendency for leaders to overestimate how much their employees trusted them, as reflected in the positive mean value for the algebraic difference of leader metaperception and employee trust ( $M = 0.12$ ,  $SD = 1.46$ ). As with Study 1, however, this tendency was slight—the median value was zero. Further, and as with Study 1, we observed meaningful variance ( $SD = 1.46$ ) in the alignment between a leader's felt trust and an employee's actual trust. Similar to our Study 1 findings, a leader's felt trust and an employee's actual trust were positively related ( $r = .29$ ).

**Antecedents of trust meta-accuracy.** Table 4 presents the results of analyses that are parallel to those that we ran in Study 1 to test Hypotheses 1 and 2. Model 1 predicts the absolute difference score. Model 2 predicts the algebraic difference score, but includes a dummy variable and interactions to separately model relations for over- and underestimators. Model 3 provides the results of a multivariate path analysis predicting the two components of these different scores separately.

Replicating our Study 1 results, we again found no support for Hypothesis 1 and the external pathway of leader trust meta-accuracy. As Table 4 shows, there were no significant effects of employee–leader interaction frequency (Hypothesis 1c), leader social astuteness (Hypothesis 1d), or leader narcissism<sup>4</sup> (Hypothesis 1e) on meta-accuracy. Moreover, we observed an effect inconsistent with what we predicted regarding employee impression management, which we posited in Hypothesis 1f would be negatively related to leader trust meta-accuracy and contribute to a leader's overestimation of the employee's trust. The coefficients in Table 4 show that employee impression management instead contributed to a leader's accuracy; impression management was negatively related to the absolute difference of leader felt trust and employee trust ( $B = -0.18$ ,  $p = .02$ ). Simple slopes analysis of Model 2 showed that the relationship between employee impression management was significantly negative for overestimators ( $B = -0.29$ ,  $p = .04$ ), but nonsignificant for underestimators ( $B = 0.07$ ,  $p = .71$ ). However, as Model 3 shows, this effect was driven by a relationship between impression management and an employee's actual trust ( $B = 0.29$ ,  $p = .04$ ), rather than by an association with a leader's felt trust, which is not what our theoretical development would suggest.

Also replicating our Study 1 results, we found support for the internal pathway and Hypothesis 2. In accordance with our findings from Study 1, analysis of the significant interaction term in

Model 2 ( $B = 0.50$ ,  $p < .01$ ) indicated that the effect was driven by overestimators (Model 2). Among overestimators, the relationship between a leader's trust in an employee and the algebraic difference was positive ( $B = 0.28$ ,  $p = .01$ ). The relationship was nonsignificant for overestimators ( $B = -0.22$ ,  $p = .12$ ). Model 3 shows, however, that a leader's trust in an employee was significantly and positively related to both components of this difference score—to a leader's felt trust ( $B = 0.38$ ,  $p < .01$ ) and to an employee's actual trust ( $B = 0.60$ ,  $p < .01$ )—and that there was no significant difference between under- and overestimators in these relationships. We thus examined the path model implied by a presumed reciprocity mechanism (Eisenkraft et al., 2017) without these interaction terms and found that the indirect effect of the relationship between a leader's felt trust and an employee's actual trust through the leader's trust in the employee was positive and significant ( $B = 0.11$ ,  $SE = 0.04$ ,  $p < .01$ ). This supports the idea that a leader's trust in an employee is positively related to meta-accuracy because the presumption of a reciprocal relationship is valid.

**Consequences of trust meta-accuracy.** Polynomial regression and response surface analysis enable researchers to understand how the interplay of two variables (e.g., leader felt trust and employee trust in a leader) relates to a third variable (e.g., relationship conflict). The parameters of a polynomial regression equation, along with response surface plots, provide a means for describing in a nuanced way how the congruence or incongruence of two variables might relate to variance in the third. The equation that we fit for relationship conflict, with the addition of control variables, is as follows:

$$Y = b_0 + b_1FT + b_2ET + b_3FT^2 + b_4(FT \times ET) + b_5ET^2 + e$$

where Y is relational conflict, FT is a leader's felt trust, and ET is an employee's actual trust in a leader.

To test Hypotheses 3 and 4, regarding the relationship between under- and overestimation of leader trust meta-accuracy and relationship conflict, we followed the procedure outlined by Barranti et al. (2017) for using polynomial regression and response surface analysis. This entails first examining the overall significance of the polynomial regression equation and second interpreting the combination of parameters that describe the shape of the surface. The first ( $a_1 = b_1 + b_2$ ) is the slope of the line of congruence in the response surface plot. This parameter indicates whether leader trust meta-accuracy is related to an outcome differently at higher or lower values of employee trust. Relevant for our hypotheses, a negative value of  $a_1$  would mean that relationship conflict is higher when a leader's felt trust and an employee's actual trust are aligned at lower levels of employee trust than at higher levels of employee trust. A positive value of  $a_1$  would mean that relationship conflict is higher when a leader's felt trust and an employee's actual trust are aligned at higher levels of employee trust than at lower levels of employee trust.

The second parameter ( $a_2 = b_3 + b_4 + b_5$ ) is the curvature of the line of congruence. This parameter indicates whether leader

<sup>4</sup>The 16-item measure of narcissism had low interim reliability ( $\alpha = 0.56$ ) and a multidimensional factor structure. Reflecting the decreased power of using a measure with low reliability, our finding of a nonsignificant relationship with trust meta-accuracy was the same when using the 16-item measure.

Table 4  
Study 2: Results of Regression Analyses Testing Predictors of Leader Trust Meta-Accuracy

Parameter	Model 1	Model 2	Model 3: Multivariate path analysis	
	DV =  FT - ET	DV = FT - ET	DV = FT	DV = ET
	B SE	B SE	B SE	B SE
Intercept	1.36 (.22)	2.17 (.38)	6.35 (.14)	4.18 (.37)
W		-2.79 (.43)	-.68 (.31)	2.11 (.43)
Same gender	-.27 (.22)	-.74 (.40)+	-.39 (.16)*	.35 (.45)
Same ethnicity	-.29 (.17)	-.80 (.25)**	.06 (.17)	.86 (.30)**
Employee-leader relationship tenure	.00 (.00)	-.01 (.01)	-.01 (.00)	.00 (.00)
Employee impression management	-.18 (.08)*	-.29 (.14)*	.00 (.07)	.29 (.14)*
Employee-leader interaction frequency	.04 (.13)	.10 (.18)	.12 (.10)	.02 (.21)
Leader social astuteness	-.08 (.17)	.13 (.21)	.19 (.09)*	.06 (.22)
Leader narcissism	-.08 (.10)	-.19 (.14)	-.02 (.08)	.18 (.15)
Leader trust in employee	-.19 (.10)*	-.22 (.14)	.38 (.11)**	.60 (.16)**
W × Same Gender		.68 (.48)	.68 (.28)*	.00 (.49)
W × Same Ethnicity		.70 (.30)*	-.09 (.25)	-.79 (.36)*
W × Employee-Leader Relationship Tenure		.01 (.01)	.01 (.00)	-.00 (.00)
W × Employee Impression Management		.31 (.16)*	.09 (.12)	-.22 (.15)
W × Employee-Leader Interaction Frequency		-.18 (.19)	-.18 (.12)	.01 (.20)
W × Leader Social Astuteness		-.01 (.23)	-.15 (.15)	-.14 (.21)
W × Leader Narcissism		.17 (.16)	-.03 (.08)	-.20 (.15)
W × Leader Trust in Employee		.50 (.18)**	.21 (.12)	-.29 (.20)
R <sup>2</sup>	.14	.70	.46	.67
F	2.28	.04		25.33**

Note.  $N = 142$  employees nested within 51 leaders. Entries are unstandardized parameter estimates. All continuous predictors are grand mean centered. DV = dependent variable; FT = leader's felt trust; ET = employee's trust in leader; W = dummy variable to indicate whether an observation represented overestimation or underestimation. Specifically,  $W = 0$  when  $FT > E$  and  $W = 1$  when  $FT < E$ . Standard errors are cluster robust standard errors.

\*  $p < .05$ . \*\*  $p < .01$  two-tailed.

trust meta-accuracy is related to an outcome differently at extreme values compared with midrange values. A positive value of  $a_2$  would indicate, for example, that relationship conflict is higher when a leader's felt trust and an employee's actual trust are aligned at the extremes (i.e., either very low or very high employee trust) than in the middle. A negative value of  $a_2$  would indicate that relationship conflict is higher when a leader's felt trust and an employee's actual trust are aligned in the middle than at the extremes.

The third parameter ( $a_3 = b_1 - b_2$ ) is the slope along the line of incongruence. This parameter indicates whether the outcome is higher for underestimators or overestimators of an employee's actual trust. A positive value of  $a_3$  would indicate that relationship conflict is higher when a leader overestimates than underestimates an employee's trust. A negative value of  $a_3$  would indicate that relationship conflict is higher when a leader underestimates than overestimates an employee's trust.

The fourth parameter ( $a_4 = b_3 - b_4 + b_5$ ) is the curvature of the line of incongruence. This parameter is used to determine whether the outcome is related to accuracy, per se—that is, whether alignment of leader trust metaperceptions with an employee's actual trust relates to an outcome. A positive value of  $a_4$  would indicate that relationship conflict is higher when a leader lacks meta-accuracy; that is, when a leader's felt trust is not aligned with an employee's actual trust. A negative value of  $a_4$  would indicate that relationship conflict is higher when a leader is accurate; that is, when a leader's felt trust is aligned with an employee's actual trust.

In addition to examining these individual parameters, response surface plots enable discerning the overall shape of the relationship between accuracy and an outcome variable.

Models 1 and 2 of Table 5, along with the response surface plot depicted as Figure 1, present the results testing the relationship between leader trust meta-accuracy and relationship conflict. Hypothesis 3 predicted that leader trust meta-accuracy would be negatively related to relationship conflict when employee trust is

Table 5  
Study 2: Results of Regression Analyses Predicting Relationship Conflict

Parameter	Model 1	Model 2
	B SE	B SE
Intercept	2.20 (.17)**	2.32 (.19)**
Same gender		-.21 (.09)*
Same ethnicity		.05 (.09)
Employee-leader relationship tenure		.00 (.00)
Leader felt trust ( $b_1$ )	-.21 (.14)	-.19 (.13)
Employee trust in leader ( $b_2$ )	-.28 (.07)**	-.30 (.07)**
Leader felt trust <sup>2</sup> ( $b_3$ )	-.07 (.04)	-.08 (.04)*
Leader felt Trust × Employee Trust in Leader ( $b_4$ )	.13 (.04)**	.15 (.04)**
Employee trust in leader <sup>2</sup> ( $b_5$ )	-.03 (.02)	-.03 (.02)
$a_1 = b_1 + b_2$	-.49 (.13)**	-.50 (.12)**
$a_2 = b_3 + b_4 + b_5$	.03 (.03)	.04 (.03)
$a_3 = b_1 - b_2$	.07 (.18)	.11 (.17)
$a_4 = b_3 - b_4 + b_5$	-.23 (.07)**	-.26 (.07)**
F	13.01**	9.04**
R <sup>2</sup>	.32	.35

Note.  $N = 142$  dyadic observations. Entries are unstandardized parameter estimates, with cluster robust standard errors in parentheses.

\*  $p < .05$ . \*\*  $p < .01$  two-tailed.

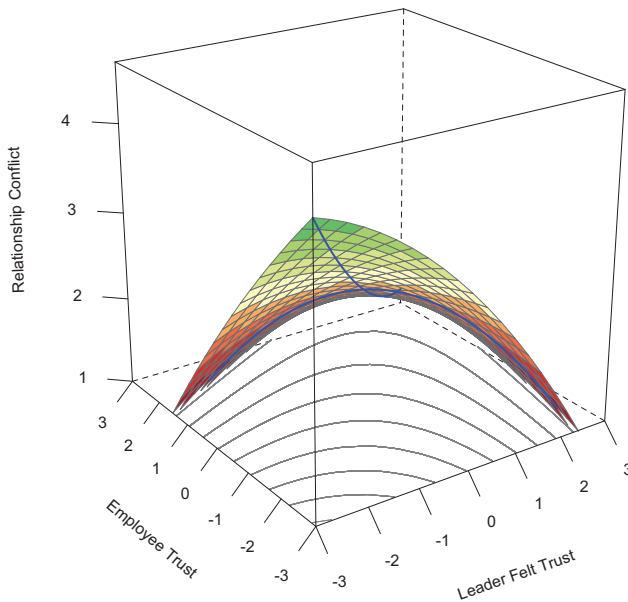


Figure 1. Response surface plot depicting the implications of leader trust meta-accuracy for relationship conflict. See the online article for the color version of this figure.

high, but positively related to conflict when trust is low. As shown in Model 2 of Table 5, Hypothesis 3 was partially supported. On the one hand, the significant negative curvature of the line of incongruence ( $a_4 = -0.23, p < .001$ ) indicated that relationship conflict is higher when a leader's felt trust accurately reflects an employee's actual trust—a result that runs counter to our expectation that, in general, accuracy would be more beneficial than inaccuracy. However, the significant negative slope of the line of congruence ( $a_1 = -0.50, p < .001$ ) clarifies specifically why accuracy resulted in higher relationship conflict. Specifically, and in line with our expectations, there is higher relationship conflict when a leader accurately perceives that an employee's trust is low, compared with when a leader accurately perceives that an employee's trust is high. The highest levels of relationship conflict occur when a leader is accurate about an employee's low trust.

Hypothesis 4 predicted that, compared with underestimation, overestimation would be positively related to relationship conflict. Because the slope along the line of incongruence was not significant ( $a_3 = 0.11, p = .50$ ), Hypothesis 4 was not supported. The amount of relationship conflict was similar between leaders who overestimated and leaders who underestimated an employee's actual trust.

## Discussion

In Study 2 we sought to conceptually replicate and extend the findings of Study 1. With respect to the antecedents of leader trust meta-accuracy, we examined an expanded set of conceptually similar characteristics that are implicated by the external pathway, as well as again tested the presumed reciprocity mechanism implicated by the internal pathway. Our findings largely corroborated those of Study 1. We again did not find evidence in support of the external perspective. Leader social astuteness, leader narcissism,

and the frequency of interactions between a leader and an employee were not related to leader trust meta-accuracy, and the role of employee impression management behavior was the opposite of our prediction. However, consistent with Study 1, we again found support for an internal perspective. Specifically, our findings suggested that to determine whether an employee trusts them, leaders refer to their own feelings of trust toward the employee and use a cognitive heuristic that trust relationships are reciprocal. Because leader–employee trust relationships tend to be reciprocal in reality, this heuristic yields an accurate metaperception.

We further extended Study 1 by considering how leader trust meta-accuracy relates to an important aspect of the quality of a leader–employee work relationship—the degree of relationship conflict. Our findings also show the implications of leader trust meta-accuracy; when leaders accurately detect that an employee does not trust them, relationship conflict is higher. Contrary to our predictions, we did not find that the leader's overestimation of the employee's trust led to greater conflict, compared with when they underestimated. By using response surface analysis, the findings of Study 2 paint a nuanced picture of the interplay between leader trust meta-accuracy and relationship conflict.

## General Discussion

Research has begun exploring the idea that felt trust—how much one person feels trusted by another—has important implications in organizations (Baer et al., 2015; Lau et al., 2014; Salamon & Robinson, 2008). Felt trust relates to meaningful individual outcomes, such as knowledge sharing (Nerstad et al., 2018), task performance (Lau et al., 2014; Salamon & Robinson, 2008), and emotional exhaustion (Baer et al., 2015). Given these findings, existing researchers have suggested that it is imperative that trust be bestowed upon others and communicated effectively to them. Underlying these recommendations, however, is the assumption that one person's felt trust is an accurate reflection of the other person's actual trust. Grounded in the more general literature on interpersonal perception, our theoretical development and empirical findings raise important questions about the validity of this basic assumption and current thinking about the origins and effects of felt trust in organizations.

## Theoretical Implications

Our article makes several contributions to the trust literature. Most importantly, our findings challenge two key assumptions in the existing literature on felt trust. First, existing theory and research on felt trust appears to have presumed that felt trust is inherently aligned with a counterpart's actual trust. Reflecting this assumption, existing research on felt trust has examined the unitary effects of felt trust on an individual's affect and behavior without considering the potential role of the actual trust held by a counterpart. Our empirical findings clearly show that this apparent presumption is untenable and misleading. Rather than observing a uniform, one-to-one correspondence between a leader's felt trust and an employee's actual trust, we observed substantial variance in the degree of alignment in both studies—sometimes leaders were accurate in understanding their employee's actual trust and sometimes they were inaccurate. Our findings thus point to an important concept for researchers studying felt trust—trust meta-accuracy.

Trust meta-accuracy, which varies across dyads, reflects the degree of alignment between one person's felt trust and a counterpart's actual trust.

Second, and similar to the literature on how individuals seek to determine whether someone is trustworthy (e.g., see Korsgaard, Brodt, & Whitener, 2002; Lewicki & Bunker, 1995), the literature on felt trust (Lau et al., 2007, 2014; Salamon & Robinson, 2008) and conventional wisdom have to date presumed that individuals are more likely to look for signals or cues gathered through direct observation during interpersonal exchanges. We identified how this thinking about the mechanism underlying felt trust is just one of the explanations offered in the more general literature on interpersonal perception to explain the origins of meta-accuracy. If this external pathway to trust meta-accuracy were true, the variance in meta-accuracy that we observed would be explainable by the nature of the social signaling process between a leader and his or her employee. We examined several factors that would logically enhance or impede a leader's accurate reading of the signals of an employee's trust but found no evidence supportive of this external pathway to meta-accuracy in either study. Instead, our findings suggested that trust meta-accuracy emerges through a different route—an internal pathway that theory and research on interpersonal perception suggest reliably shapes meta-accuracy for positive interpersonal relationships (e.g., Eisenkraft et al., 2017; Kenny & DePaulo, 1993). Rather than turning outward, the internal pathway suggests that individuals turn inward and rely on cognitive heuristics when trying to make sense of what another person thinks about their relationship. Consistent with this internal pathway, we found that a leader's trust meta-accuracy is a function of the leader's own trust for their employee. Because the cognitive representation of trust is one of reciprocity (e.g., De Soto & Keuthe, 1960) and because trust relationships are generally reciprocal in reality (Bacharach et al., 2007; Kenny, 1994; Kenny & Nasby, 1980; Pillutla et al., 2003), presuming reciprocity can yield meta-accuracy. Our consistent findings across two studies raise important questions about the validity of existing thinking in the literature on trust regarding the origins of felt trust.

Our findings also extend existing research on the implications of felt trust within organizations. A prevailing assumption in the literature on leader development—reflected in organizational programs and practices—is that leaders are best equipped to grow and improve when they understand others' idiosyncratic views of them. One of the reasons for this is that they are able to more effectively manage relationships with each employee, which is critical in gaining employee support, increasing coordination, and ultimately performance, for both parties. The most readily available indicator or symptom of understanding how others view them is the degree of animosity, or relationship conflict, present within the dyad. Relationship conflict can lower performance (de Dreu & Weingart, 2003) due to the increased tension between the parties (Spector & Jex, 1998) which distracts them from their work goals (Jehn & Mannix, 2001). Consistent with this line of thinking, we found that relationship conflict was low when the leader's felt trust and employee's trust perceptions were positive and aligned, demonstrating that the leader accurately detected that the employee trusted him or her. Inversely, conflict was highest when the leader's felt trust and employee's trust were negative and aligned, or when they were accurate about the employee's low trust. These findings reflect that the magnitude of the difference between the

leader's felt trust and the employee's trust had more influence on relationship conflict than the directional differences, or when the leader's felt trust was higher (i.e., overestimated) or lower (i.e., underestimated) than the employee's trust.

Finally, this article has important implications for leaders and trust. To date, existing empirical research on felt trust has focused primarily on employees feeling trusted by their supervisors or by management (e.g., Baer et al., 2015; Lau et al., 2014; Nerstad et al., 2018). But, research has long underscored that being trusted is a central concern for leaders (Dirks & Ferrin, 2002). Unfortunately, little knowledge exists about leader felt trust, the factors that might shape it, or whether leaders' perceptions are even accurate. In fact, to our knowledge, there are only a few relevant articles that have provide some insight into the topic (e.g., Brower, Lester, Korsgaard, & Dineen, 2009; Lau & Lam, 2008). Nevertheless, given the need to rely on their employees, and the implications for when they cannot, trust meta-accuracy may be particularly important for leaders. Academic and popular press articles have underscored that it is important for leaders to accurately know how their employees perceive—and relate to them—on key factors (Day, Fleenor, Atwater, Sturm, & McKee, 2014). The present study informs not only the trust literature, but also the leadership literature, by focusing on the processes by which leaders achieve accuracy, and the pathway which may mislead them when determining how others view them.

## Practical Implications

One of the practical insights raised by our results is how leader trust meta-accuracy might be improved. As suggested above, one reason why the external pathway may not yield accuracy is that there are two components of this process that are vulnerable to bias and distortion—the employee sending signals of trust, and the leader interpreting signals of trust. Conceptually, a structured process may help to increase the fidelity of the signals relative to the sources of noise. For example, 360-degree feedback is a structured process that addresses both parts of this model by (a) providing a mechanism for employees' feedback to a leader and (b) delivering accumulated feedback to leaders in a structured way. However, with respect to dyadic meta-accuracy, common 360-degree feedback processes may not be suitable, because leaders receive anonymous and aggregate feedback. In the absence of information about the variance of raters' views, the 360-degree process primarily informs a leader's *generalized* or collective felt trust (i.e., the sense of how colleagues, in general, view him or her).

The practical implications for increasing leaders' meta-accuracy through the internal pathway are less clear. Enhancing accuracy through this model would require increasing leaders' insight into the reciprocity of trust in a *given* relationship. Some scholars (e.g., Brion et al., 2015) have suggested that mindfulness practices could help enhance accuracy when individuals look inward to understand how others perceive them. Research is needed, however, to provide evidence for the practical value of such practices.

In addition, to the extent that they recognize potential employee tensions or lack of helpfulness, leaders may benefit from considering the possibility that there is a misalignment between how they think they are judged, and how their employees actually view them. In our study, we found that leaders who accurately assessed



an employee's trust benefited by having a better relationship with lower conflict. The presence of low relationship conflict can affect both parties by increasing their well-being (Jehn & Bendersky, 2003), decision quality (Simons & Peterson, 2000), and performance (de Dreu & Weingart, 2003). Monthly or bimonthly one-on-one goal-setting or developmental sessions with their employees, which include an emphasis on how the employee also views the leader to be performing, may help to increase a leader's accuracy. The regular, open exchange of information could be a precursor to trust, and perhaps also an effective mechanism for leaders to fine-tune their metaperceptions.

### Limitations and Future Directions

One key advantage of our empirical approach was our investigation of trust meta-accuracy in meaningful work relationships among leaders from two separate organizations. The disadvantage of our examination of ongoing relationships, however, is the inability to make claims about the causal flow among leader felt trust, employee trust, and various predictor variables. Although our theoretical foundation suggests one causal direction, it is likely that the interplay of these variables is complex with a number of feedback loops. For example, the process implicated by the internal pathway may begin with a leader trusting an employee, the employee returning the trust, and then the leader fine-tuning his or her felt trust perceptions. This is largely consistent with research showing that trust for a counterpart creates an upward spiral of reciprocated trust and cooperation. This reciprocity cycle could be due to the continuous exchange of positive behaviors reinforcing that trust exists. Or, perhaps reciprocity is due to a trust responsiveness effect, in which a person who feels trusted is more likely to also trust their counterpart (Bacharach et al., 2007). In either case, this may then further reinforce the leader's trust in the employee, the leader's felt trust, and so on. Thus, research is needed to more precisely understand how the reciprocity-based mechanism operates with respect to meta-accuracy. Disentangling these dynamics of mutual influence requires not only laboratory experiments that isolate and manipulate these variables, but more importantly, longitudinal studies that assess meta-accuracy at the start of a relationship and model change in trust, metaperceptions, and behavior over time. Alternatively, computational modeling may provide a useful way for future research to disentangle the feedback loops that are almost certainly a part of this process (Vancouver & Weinhardt, 2012).

A second potential limitation and direction for future research involves the direct assessment of the behavioral markers implicated by the external pathway. Accuracy for the external pathway is based on (a) the employee engaging in observable behaviors which are more or less a true representation of their actual trust in the leader, and (b) the leader being able to correctly interpret the underlying meaning of the employee's behavior. We chose to focus on attributes and characteristics of leaders and employees that would impact the fidelity of the employee's behavioral signals or the ability of the leader to interpret the employee's behavior. A different approach—which would remain consistent with the theoretical logic of the external pathway—would be to focus directly on behavioral acts that reveal trust and on the leader's attempts to assess those acts. For example, Gillespie (2003) suggested that there are two forms of trusting behavior—reliance (e.g., allowing

a leader to have control over one's career) and disclosure (e.g., sharing sensitive or incriminating information with the leader). Research could measure the extent to which employees display these types of behaviors and whether leaders correctly perceive them. This more direct approach would be feasible in a research context in which researchers could clearly identify and measure—or, perhaps, control—the display of specific behaviors believed to indicate trust.

Future research could examine the nature of other types of workplace relationships. We focused on leader–employee relationships because of the critical role of trust in those relationships. Meta-accuracy is also particularly interesting in the leader–employee relationship because the power difference may increase the likelihood of inaccurate metaperception. Meta-accuracy is also, however, likely to be relevant for other types of relationships frequently studied in the trust literature. For example, interpersonal trust is an important factor in relationships between teammates (De Jong, Dirks, & Gillespie, 2016), in negotiations (Kong, Dirks, & Ferrin, 2014), and in interorganizational relationships (Zaheer, McEvily, & Perrone, 1998). The framework provided in this article can be extended to each of these contexts. Theory and research are needed to determine whether the mechanisms that underlie trust meta-accuracy are consistent across contexts with varied power dynamics. The implications of accurate trust perceptions may also vary across contexts. For example, in a negotiation setting it may be particularly problematic to overestimate that one is trusted, whereas an accurate perception of not being trusted may enable more realistic, if not optimal, outcomes.

### Conclusion

Understanding the factors that affect leaders' ability to achieve trust meta-accuracy can help reduce relationship conflict. Our results suggest that leader trust meta-accuracy is shaped by an internal mechanism based on the presumed reciprocity of trust relationships. Whether meta-accuracy is associated with relationship conflict depends upon how much an employee trusts the leader and whether the leader accurately estimates the employee's trust. Our study highlights this intriguing, yet thus far overlooked, angle on leadership and trust, and we hope encourages future research on this issue.

### References

- Ames, D. R., Rose, P., & Anderson, C. P. (2006). The NPI-16 as a short measure of narcissism. *Journal of Research in Personality, 40*, 440–450. <http://dx.doi.org/10.1016/j.jrp.2005.03.002>
- Aronson, E., Carlsmith, J. M., Ellsworth, P. C., & Gonzales, M. (1990). *Methods of research in social psychology* (2nd ed.). New York, NY: McGraw-Hill.
- Bacharach, M., Guerra, G., & Zizzo, D. J. (2007). The self-fulfilling property of trust: An experimental study. *Theory and Decision, 63*, 349–388. <http://dx.doi.org/10.1007/s11238-007-9043-5>
- Baer, M. D., Dhensa-Kahlon, R. K., Colquitt, J. A., Rodell, J. B., Outlaw, R., & Long, D. M. (2015). Uneasy lies the head that bears the trust: The effects of feeling trusted on emotional exhaustion. *Academy of Management Journal, 58*, 1637–1657. <http://dx.doi.org/10.5465/amj.2014.0246>
- Bargh, J. A., & Chartrand, T. L. (1999). The unbearable automaticity of being. *American Psychologist, 54*, 462–479. <http://dx.doi.org/10.1037/0003-066X.54.7.462>

- Barranti, M., Carlson, E. N., & Côté, S. (2017). How to test questions about similarity in personality and social psychology research: Description and empirical demonstration of response surface analysis. *Social Psychological & Personality Science*, 8, 465–475. <http://dx.doi.org/10.1177/1948550617698204>
- Bolino, M. C. (1999). Citizenship and impression management: Good soldiers or good actors. *Academy of Management Review*, 24, 82–98. <http://dx.doi.org/10.5465/amr.1999.1580442>
- Bolino, M. C., Varela, J. A., Bande, B., & Turnley, W. H. (2006). The impact of impression-management tactics on supervisor ratings of organizational citizenship behavior. *Journal of Organizational Behavior*, 27, 281–297. <http://dx.doi.org/10.1002/job.379>
- Brion, S., Lount, R. B., Jr., & Doyle, S. P. (2015). Knowing if you are trusted: Does meta-accuracy promote trust development? *Social Psychological & Personality Science*, 6, 823–830. <http://dx.doi.org/10.1177/1948550615590200>
- Brower, H. H., Lester, S. W., Korsgaard, M. A., & Dineen, B. R. (2009). A closer look at trust between managers and subordinates: Understanding the effects of both trusting and being trusted on subordinate outcomes. *Journal of Management*, 35, 327–347. <http://dx.doi.org/10.1177/0149206307312511>
- Burnstein, E. (1967). Sources of cognitive bias in the representation of simple social structures: Balance, minimal change, positivity, reciprocity, and the respondent's own attitude. *Journal of Personality and Social Psychology*, 7, 36–48. <http://dx.doi.org/10.1037/h0024926>
- Cable, D. M., Aiman-Smith, L., Mulvey, P. W., & Edwards, J. R. (2000). The sources and accuracy of job applicants' beliefs about organizational culture. *Academy of Management Journal*, 43, 1076–1085.
- Cable, D. M., & Yu, K. Y. T. (2006). Managing job seekers' organizational image beliefs: The role of media richness and media credibility. *Journal of Applied Psychology*, 91, 828–840.
- Caldwell, D. F., & O'Reilly, C. A., III. (1982). Responses to failure: The effects of choice and responsibility on impression management. *Academy of Management Journal*, 25, 121–136.
- Campagna, R. L., Mislin, A. A., & Bottom, W. P. (2019). Motivated by guilt and low felt trust: The impact of negotiators' anger expressions on the implementation of negotiated agreements. *Journal of Behavioral Decision Making*, 32, 450–470.
- Carlson, E. N. (2016). Meta-accuracy and relationship quality: Weighing the costs and benefits of knowing what people really think about you. *Journal of Personality and Social Psychology*, 111, 250–264. <http://dx.doi.org/10.1037/pspp0000107>
- Carlson, E. N., & Kenny, D. A. (2012). Meta-accuracy: Do we know how others see us? In S. Vazire & T. D. Wilson (Eds.), *Handbook of self-knowledge* (pp. 242–257). New York, NY: The Guilford Press.
- Carlson, K. D., & Wu, J. (2012). The illusion of statistical control: Control variable practice in management research. *Organizational Research Methods*, 15, 413–435. <http://dx.doi.org/10.1177/1094428111428817>
- Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology*, 92, 909–927. <http://dx.doi.org/10.1037/0021-9010.92.4.909>
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113–126. <http://dx.doi.org/10.1037/0022-3514.44.1.113>
- Day, D., Fleenor, J., Atwater, L., Sturm, R., & McKee, R. (2014). Advances in leader and leadership development: A review of 25 years of research and theory. *The Leadership Quarterly*, 25, 63–82. <http://dx.doi.org/10.1016/j.leaqua.2013.11.004>
- de Dreu, C. K., Van Dierendonck, D., & Dijkstra, M. T. (2004). Conflict at work and individual well-being. *International Journal of Conflict Management*, 15, 6–26. <http://dx.doi.org/10.1108/eb022905>
- de Dreu, C. K., & Weingart, L. R. (2003). Task versus relationship conflict: A meta-analysis. *Journal of Applied Psychology*, 88, 741–749. <http://dx.doi.org/10.1037/0021-9010.88.4.741>
- De Jong, B. A., Dirks, K. T., & Gillespie, N. (2016). Trust and team performance: A meta-analysis of main effects, moderators, and covariates. *Journal of Applied Psychology*, 101, 1134–1150. <http://dx.doi.org/10.1037/apl0000110>
- DePaulo, B. M., Kenny, D. A., Hoover, C. W., Webb, W., & Oliver, P. V. (1987). Accuracy of person perception: Do people know what kinds of impressions they convey? *Journal of Personality and Social Psychology*, 52, 303–315. <http://dx.doi.org/10.1037/0022-3514.52.2.303>
- De Soto, C. B. (1960). Learning a social structure. *Journal of Abnormal and Social Psychology*, 60, 417–421. <http://dx.doi.org/10.1037/h0047511>
- De Soto, C. B., & Kueth, J. L. (1958). Perception of mathematical properties of interpersonal relations. *Perceptual and Motor Skills*, 8, 279–286. <http://dx.doi.org/10.2466/pms.1958.8.3.279>
- De Soto, C. B., & Kueth, J. L. (1959). Subjective probabilities of interpersonal relationships. *Journal of Abnormal and Social Psychology*, 59, 290–294. <http://dx.doi.org/10.1037/h0045430>
- De Soto, C. B., & Kueth, J. L. (1960). On the relation between two variables. *Educational and Psychological Measurement*, 20, 743–749.
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87, 611–628. <http://dx.doi.org/10.1037/0021-9010.87.4.611>
- Edwards, J. R. (1994). The study of congruence in organizational behavior research: Critique and a proposed alternative. *Organizational Behavior and Human Decision Processes*, 58, 51–100. <http://dx.doi.org/10.1006/obhd.1994.1029>
- Edwards, J. R. (1995). Alternatives to difference scores as dependent variables in the study of congruence in organizational research. *Organizational Behavior and Human Decision Processes*, 64, 307–324. <http://dx.doi.org/10.1006/obhd.1995.1108>
- Edwards, J. R. (2001). Ten difference score myths. *Organizational Research Methods*, 4, 265–287. <http://dx.doi.org/10.1177/109442810143005>
- Edwards, J. R., & Parry, M. E. (1993). On the use of polynomial regression equations as an alternative to difference scores in organizational research. *Academy of Management Journal*, 36, 1577–1613.
- Eisenkraft, N., Elfenbein, H. A., & Kopelman, S. (2017). We know who likes us, but not who competes against us: Dyadic meta-accuracy among work colleagues. *Psychological Science*, 28, 233–241. <http://dx.doi.org/10.1177/0956797616679440>
- Elfenbein, H. A., & Ambady, N. (2002). On the universality and cultural specificity of emotion recognition: A meta-analysis. *Psychological Bulletin*, 128, 203–235. <http://dx.doi.org/10.1037/0033-2909.128.2.203>
- Elfenbein, H. A., Eisenkraft, N., & Ding, W. W. (2009). Do we know who values us? Dyadic meta-accuracy in the perception of professional relationships. *Psychological Science*, 20, 1081–1083. <http://dx.doi.org/10.1111/j.1467-9280.2009.02396.x>
- Farwell, L., & Wohlwend-Lloyd, R. (1998). Narcissistic processes: Optimistic expectations, favorable self-evaluations, and self-enhancing attributions. *Journal of Personality*, 66, 65–83. <http://dx.doi.org/10.1111/1467-6494.00003>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191. <http://dx.doi.org/10.3758/BF03193146>
- Ferris, G. R., Treadway, D. C., Kolodinsky, R. W., Hochwarter, W. A., Kacmar, C. J., Douglas, C., & Frink, D. D. (2005). Development and validation of the political skill inventory. *Journal of Management*, 31, 126–152. <http://dx.doi.org/10.1177/0149206304271386>
- Ferris, G. R., Treadway, D. C., Perrewe, P. L., Brouer, R. L., Douglas, C., & Lux, S. (2007). Political skill in organizations. *Journal of Management*, 33, 290–320. <http://dx.doi.org/10.1177/0149206307300813>

- Freeman, L. C. (1992). Filling in the blanks: A theory of cognitive categories and the structure of social affiliation. *Social Psychology Quarterly*, *55*, 118–127. <http://dx.doi.org/10.2307/2786941>
- Funder, D. C. (1987). Errors and mistakes: Evaluating the accuracy of social judgment. *Psychological Bulletin*, *101*, 75–90. <http://dx.doi.org/10.1037/0033-2909.101.1.75>
- Gabriel, M. T., Critelli, J. W., & Ee, J. S. (1994). Narcissistic illusions in self-evaluations of intelligence and attractiveness. *Journal of Personality*, *62*, 143–155. <http://dx.doi.org/10.1111/j.1467-6494.1994.tb00798.x>
- Gelfand, M. J., Leslie, L. M., Keller, K., & de Dreu, C. (2012). Conflict cultures in organizations: How leaders shape conflict cultures and their organizational-level consequences. *Journal of Applied Psychology*, *97*, 1131–1147. <http://dx.doi.org/10.1037/a0029993>
- George, B. (2016). *The truth about authentic leaders*. Boston, MA: Harvard Business School Working Knowledge. <https://hbswk.hbs.edu/item/the-truth-about-authentic-leaders>
- Gillespie, N. (2003, August). *Measuring trust in working relationships: The behavioural trust inventory*. Paper presented at the Academy of Management meeting, Seattle, WA.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York, NY: Wiley. <http://dx.doi.org/10.1037/10628-000>
- Janssen, O., Van de Vliert, E., & Veenstra, C. (1999). How task and person conflict shape the role of positive interdependence in management teams. *Journal of Management*, *25*, 117–141. <http://dx.doi.org/10.1177/014920639902500201>
- Jehn, K. A., & Bendersky, C. (2003). Intragroup conflict in organizations: A contingency perspective on the conflict-outcome relationship. *Research in Organizational Behavior*, *25*, 187–242. [http://dx.doi.org/10.1016/S0191-3085\(03\)25005-X](http://dx.doi.org/10.1016/S0191-3085(03)25005-X)
- Jehn, K. A., & Mannix, E. A. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal*, *44*, 238–251.
- John, O. P., & Robins, R. W. (1994). Accuracy and bias in self-perception: Individual differences in self-enhancement and the role of narcissism. *Journal of Personality and Social Psychology*, *66*, 206–219. <http://dx.doi.org/10.1037/0022-3514.66.1.206>
- Jones, S. L., & Shah, P. P. (2016). Diagnosing the locus of trust: A temporal perspective for trustor, trustee, and dyadic influences on perceived trustworthiness. *Journal of Applied Psychology*, *101*, 392–414. <http://dx.doi.org/10.1037/apl0000041>
- Joshi, A., & Knight, A. P. (2015). Who defers to whom and why? Dual pathways linking demographic differences and dyadic deference to team effectiveness. *Academy of Management Journal*, *58*, 59–84. <http://dx.doi.org/10.5465/amj.2013.0718>
- Kenny, D. A. (1994). *Interpersonal perception: A social relations analysis*. New York, NY: Guilford Press.
- Kenny, D. A., & Albright, L. (1987). Accuracy in interpersonal perception: A social relations analysis. *Psychological Bulletin*, *102*, 390–402. <http://dx.doi.org/10.1037/0033-2909.102.3.390>
- Kenny, D. A., Bond, C. F., Jr., Mohr, C. D., & Horn, E. M. (1996). Do we know how much people like one another? *Journal of Personality and Social Psychology*, *71*, 928–936. <http://dx.doi.org/10.1037/0022-3514.71.5.928>
- Kenny, D. A., & DePaulo, B. M. (1993). Do people know how others view them? An empirical and theoretical account. *Psychological Bulletin*, *114*, 145–161. <http://dx.doi.org/10.1037/0033-2909.114.1.145>
- Kenny, D. A., & Nasby, W. (1980). Splitting the reciprocity correlation. *Journal of Personality and Social Psychology*, *38*, 249–256. <http://dx.doi.org/10.1037/0022-3514.38.2.249>
- Kilduff, M., & Day, D. V. (1994). Do chameleons get ahead? The effects of self-monitoring on managerial careers. *Academy of Management Journal*, *37*, 1047–1060.
- Kim, P. H., Ferrin, D. L., Cooper, C. D., & Dirks, K. T. (2004). Removing the shadow of suspicion: The effects of apology versus denial for repairing competence- versus integrity-based trust violations. *Journal of Applied Psychology*, *89*, 104–118. <http://dx.doi.org/10.1037/0021-9010.89.1.104>
- Kong, D. T., Dirks, K. T., & Ferrin, D. L. (2014). Interpersonal trust within negotiations: Meta-analytic evidence, critical contingencies, and directions for future research. *Academy of Management Journal*, *57*, 1235–1255. <http://dx.doi.org/10.5465/amj.2012.0461>
- Korsgaard, M. A., Brodt, S. E., & Whitener, E. M. (2002). Trust in the face of conflict: The role of managerial trustworthy behavior and organizational context. *Journal of Applied Psychology*, *87*, 312–319. <http://dx.doi.org/10.1037/0021-9010.87.2.312>
- Lau, D. C., & Lam, L. W. (2008). Effects of trusting and being trusted on team citizenship behaviours in chain stores. *Asian Journal of Social Psychology*, *11*, 141–149. <http://dx.doi.org/10.1111/j.1467-839X.2008.00251.x>
- Lau, D. C., Lam, L. W., & Wen, S. S. (2014). Examining the effects of feeling trusted by supervisors in the workplace: A self-evaluative perspective. *Journal of Organizational Behavior*, *35*, 112–127. <http://dx.doi.org/10.1002/job.1861>
- Lau, D. C., Liu, J., & Fu, P. P. (2007). Feeling trusted by business leaders in China: Antecedents and the mediating role of value congruence. *Asia Pacific Journal of Management*, *24*, 321–340. <http://dx.doi.org/10.1007/s10490-006-9026-z>
- Lennox, R. D., & Wolfe, R. N. (1984). Revision of the self-monitoring scale. *Journal of Personality and Social Psychology*, *46*, 1349–1364. <http://dx.doi.org/10.1037/0022-3514.46.6.1349>
- Lewicki, R. J., & Bunker, B. B. (1995). Trust in relationships. *Administrative Science Quarterly*, *5*, 583–601.
- Lewicki, R. J., & Bunker, B. B. (1996). Developing and maintaining trust in work relationships. In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 114–139). Thousand Oaks, CA: Sage.
- Lewicki, R. J., Tomlinson, E. C., & Gillespie, N. (2006). Models of interpersonal trust development: Theoretical approaches, empirical evidence, and future directions. *Journal of Management*, *32*, 991–1022. <http://dx.doi.org/10.1177/0149206306294405>
- Lynch, J. G., Jr., Bradlow, E. T., Huber, J. C., & Lehmann, D. R. (2015). Reflections on the replication corner: In praise of conceptual replications. *International Journal of Research in Marketing*, *32*, 333–342. <http://dx.doi.org/10.1016/j.ijresmar.2015.09.006>
- Malinowski, B. (1932). *Crime and custom in savage society*. New York, NY: Harcourt, Brace.
- Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, *84*, 123–136. <http://dx.doi.org/10.1037/0021-9010.84.1.123>
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, *20*, 709–734. <http://dx.doi.org/10.5465/amr.1995.9508080335>
- McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, *38*, 24–59.
- McKee, R. A., Lee, Y., Atwater, L., & Antonakis, J. (2018). Effects of personality and gender on self-other agreement in ratings of leadership. *Journal of Occupational and Organizational Psychology*, *91*, 285–315. <http://dx.doi.org/10.1111/joop.12209>
- McNeish, D., Stapleton, L. M., & Silverman, R. D. (2017). On the unnecessary ubiquity of hierarchical linear modeling. *Psychological Methods*, *22*, 114–140. <http://dx.doi.org/10.1037/met0000078>
- Nerstad, C. G., Searle, R., Černe, M., Dysvik, A., Škerlavaj, M., & Scherer, R. (2018). Perceived mastery climate, felt trust, and knowledge sharing. *Journal of Organizational Behavior*, *39*, 429–447. <http://dx.doi.org/10.1002/job.2241>
- Parker, S. K., & Axtell, C. M. (2001). Seeing another viewpoint: Antecedents and outcomes of employee perspective taking. *Academy of Management Journal*, *44*, 1085–1100.

- Peterson, R. S. (1999). Can you have too much of a good thing? The limits of voice for improving satisfaction with leaders. *Personality and Social Psychology Bulletin*, *25*, 313–324. <http://dx.doi.org/10.1177/0146167299025003004>
- Pillutla, M. M., Malhotra, D., & Murnighan, J. K. (2003). Attributions of trust and the calculus of reciprocity. *Journal of Experimental Social Psychology*, *39*, 448–455. [http://dx.doi.org/10.1016/S0022-1031\(03\)00015-5](http://dx.doi.org/10.1016/S0022-1031(03)00015-5)
- Robins, R. W., & John, O. P. (1997). Effects of visual perspective and narcissism on self-perception: Is seeing believing? *Psychological Science*, *8*, 37–42. <http://dx.doi.org/10.1111/j.1467-9280.1997.tb00541.x>
- Römer, M., Rispens, S., Giebels, E., & Euwema, M. C. (2012). A helping hand? The moderating role of leaders' conflict management behavior on the conflict–stress relationship of employees. *Negotiation Journal*, *28*, 253–277. <http://dx.doi.org/10.1111/j.1571-9979.2012.00340.x>
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, *23*, 393–404. <http://dx.doi.org/10.5465/amr.1998.926617>
- Salamon, S. D., & Robinson, S. L. (2008). Trust that binds: The impact of collective felt trust on organizational performance. *Journal of Applied Psychology*, *93*, 593–601. <http://dx.doi.org/10.1037/0021-9010.93.3.593>
- Shectman, Z., & Kenny, D. A. (1994). Metaperception accuracy: An Israeli study. *Basic and Applied Social Psychology*, *15*, 451–465. [http://dx.doi.org/10.1207/s15324834basps1504\\_4](http://dx.doi.org/10.1207/s15324834basps1504_4)
- Simons, T. L., & Peterson, R. S. (2000). Task conflict and relationship conflict in top management teams: The pivotal role of intragroup trust. *Journal of Applied Psychology*, *85*, 102–111. <http://dx.doi.org/10.1037/0021-9010.85.1.102>
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, *30*, 526–537. <http://dx.doi.org/10.1037/h0037039>
- Snyder, M. (1979). Self-monitoring processes. *Advances in Experimental Social Psychology*, *12*, 85–128. [http://dx.doi.org/10.1016/S0065-2601\(08\)60260-9](http://dx.doi.org/10.1016/S0065-2601(08)60260-9)
- Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology*, *3*, 356–367. <http://dx.doi.org/10.1037/1076-8998.3.4.356>
- Thomas, K. W. (1992). Conflict and negotiation processes in organizations. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., pp. 651–717). Palo Alto, CA: Consulting Psychologists Press.
- Vancouver, J. B., & Weinhardt, J. M. (2012). Modeling the mind and the milieu. *Organizational Research Methods*, *15*, 602–623. <http://dx.doi.org/10.1177/1094428112449655>
- Wayne, S. J., & Ferris, G. R. (1990). Influence tactics, affect, and exchange quality in supervisor-subordinate interactions: A laboratory experiment and field study. *Journal of Applied Psychology*, *75*, 487–499. <http://dx.doi.org/10.1037/0021-9010.75.5.487>
- Zaheer, A., McEvily, B., & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*, *9*, 141–159. <http://dx.doi.org/10.1287/orsc.9.2.141>
- Zajonc, R. B., & Burnstein, E. (1965). Structural balance, reciprocity, and positivity as sources of cognitive bias. *Journal of Personality*, *33*, 570–583. <http://dx.doi.org/10.1111/j.1467-6494.1965.tb01403.x>

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