Are We on the Same Page? The Performance Effects of Congruence Between Supervisor and Group Trust

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Taking a multiple-stakeholder perspective, we examined the effects of supervisor–work group trust congruence on groups’ task and contextual performance using a polynomial regression and response surface analytical framework. We expected motivation experienced by work groups to mediate the positive influence of trust congruence on performance. Although hypothesized congruence effects on performance were more strongly supported for affective rather than for cognitive trust, we found significant indirect effects on performance (via work group motivation) for both types of trust. We discuss the performance effects of trust congruence and incongruence between supervisors and work groups, as well as implications for practice and future research.

Keywords: supervisor trust, group trust, work group motivation, group task performance, group organizational citizenship behavior

A critical feature of many work groups is a well-developed relational core. Perhaps because of its fundamental importance for understanding social interaction (Holtz, 2013; Schoorman, Mayer, & Davis, 2007), trust has been examined as both an antecedent and consequence within groups (Fulmer & Gelfand, 2012). In this regard, the majority of studies conducted have focused on individual group members’ trust in leadership and its effect on their work outcomes (e.g., Dirks & Ferrin, 2002). Although researchers have increasingly identified a need for studies examining the effects of trust in leadership in group performance contexts (e.g., Burke, Sims, Lazzara, & Salas, 2007; Fulmer & Gelfand, 2012), when conducted such studies focus on group members’ trust in each other (e.g., Berson, Da’as, & Waldman, 2014; De Jong & Elfring, 2010) rather than in their immediate supervisors (see Dirks, 2000; Gong, Kim, Lee, & Zhu, 2013; Schaubroeck, Lam, & Peng, 2011, for exceptions).

We believe the impact of relational constructs such as trust is better framed by recognizing that work group members and supervisors both have a stake in the success of their relationship and group outcomes. The multiple-stakeholder perspective recognizes work groups comprise stakeholders who interact, perceive processes, and pursue performance from diverging viewpoints (e.g., Cole, Carter, & Zhang, 2013; Gibson, Cooper, & Conger, 2009). Researchers have begun to treat supervisors and work group members as identifiable stakeholders in group settings, finding supervisor–work group congruence on perceptions of salient work processes (e.g., organizational support; Bashshur, Hernández, & González-Romá, 2011) is positively associated with group performance. Although such research is consistent with the spirit of team effectiveness models that underscore the importance of emergent group properties (i.e., input-mediator-outcome [IMO]; Mathieu, Maynard, Rapp, & Gilson, 2008), it does not explicitly address relational concerns affecting interactions between these two stakeholders. We argue that focusing specifically on mutual trust (or lack of it) between these parties could allow a better understanding of if and how the nature of relations between them impacts group effectiveness.

Even though supervisors and group members must operate in concert to attain desired performance goals, research has typically examined effects of trust in leadership on group performance from the perspective of a single party (i.e., the group) assuming one perspective can serve as a proxy reflecting the trust held by another party (i.e., the supervisor) (Fulmer & Gelfand, 2012; Tomlinson, Dineen, & Lewicki, 2009). Such an assumption may not be an issue if both parties of a relationship have equivalent levels of trust in each other, but trust between parties can differ (Korsgaard, Brower, & Lester, 2015; Mayer, Davis, & Schoorman, 1995). An underlying premise of our study is congruence in the trust supervisors and work groups express in each other partly determines the shared reality (Echterhoff, 2012) of groups’ performance efforts, and the degree that the relational uncertainty (Knobloch & Satterlee, 2009) between them has been sufficiently settled. Trust involves holding positive expectations of other parties despite uncertainty about their motives, and a willingness to accept vulnerability to them (Rousseau, Sitkin, Burt, & Camerer, 1998).
But rather than being simply a psychological experience, we argue trust is a social reality for both supervisors and work groups (Lewis & Weigert, 1985) that builds predictability in their day-to-day interactions.

Trust congruence occurs when two parties express the same magnitudes of trust in each other (Serva, Fuller, & Mayer, 2005). Although researchers have long asserted it as critical for cooperation and other positive outcomes (e.g., Whitener, Brodt, Korsgaard, & Werner, 1998), direct tests of this assertion are surprisingly absent. Moreover, despite joint desires for positive performance outcomes, supervisors and groups may each harbor varying degrees of confidence in the other’s capacity to contribute toward this end. Recent research provides evidence that supervisors’ and group members’ trust in each other can vary (Brower, Lester, Korsgaard, & Dineen, 2009), and that trust variation can weaken the positive effect trust has on work outcomes (De Jong & Dirks, 2012). For example, this could cause the less trusting party to inaccurately perceive interactions as ingratiating or predatory (Graebner, 2009) and the more trusting party to over disclose information (Tomlinson et al., 2009) or ignore exploitation (Goel, Bell, & Pierce, 2005). Facing evidence that trust incongruence can be problematic, we suggest it is crucial to demonstrate that trust congruence does indeed give rise to positive outcomes. With regard to our study, the relational advantages of trust congruence between supervisors and groups may be considered overblown in lieu of such evidence. In light of its potential to underpin successful supervisor–group interactions (Lewicki, Tomlinson, & Gillespie, 2006), our first goal was to determine whether trust congruence between supervisors and their work groups positively influenced group outcomes.

Given our focus, a pertinent question is whether trust congruence occurring at higher levels of trust affects performance more positively than does congruence at lower levels of trust. Some supervisors and work groups may exhibit equally higher trust in each other, whereas other supervisors and work groups may exhibit equally lower trust in one another. Because higher level trust entails greater interdependence, hopeful initiatives, and assurances that prosocial behavior will be reciprocated (Lewicki et al., 2006), supervisor–work group congruence at such levels should theoretically foster better group performance. Alternatively, lower levels of trust involve bounded transactions and calculative exchanges (Lewicki et al., 2006), and thus congruence at these levels should be associated with lower group performance. However, although some group level research on salient supervisor–work group variables (e.g., goal accomplishment; Gibson et al., 2009) indicated that congruence at higher (vs. lower) levels produces better performance, other studies (e.g., organizational support; Bashshur et al., 2011; value orientation: Cole et al., 2013) have shown less support for this effect. A stronger impact for trust congruence at higher (vs. lower) levels is consonant with basic social exchange tenets (e.g., Gouldner, 1960), but scholars have cautioned that even if congruent, too much trust could be detrimental (e.g., Lewicki, McAllister, & Bies, 1998; Tomlinson et al., 2009). We believe that such reservations should be addressed, and thus our second goal was to investigate the performance effects of congruence at different levels of trust.

Although studies dealing with trust in supervisors generally have posited positive group member outcomes, trust congruence itself pertains to relationships rather than performance per se. Along these lines, Brower et al.’s (2009) research intimates that trust congruence could encourage supervisors to better structure subordinates’ task behavior, provide more autonomy, and grow group members’ intrinsic motivation and sense of empowerment. Recent research (e.g., Colquitt, LePine, Piccolo, Zapata, & Rich, 2012) has suggested trust-related attributes (e.g., competence, benevolence) act as exchange inducements that motivate reciprocation between parties. We believe such social exchange dynamics could occasion motivating conditions having the potential to increase work group performance. Thus, based on the IMO group effectiveness framework (Mathieu et al., 2008), our third research goal was to test whether emergent work group motivation mediates the influence of trust congruence on group performance. We focused on group-level in-role (task) and extrarole (organizational citizenship behavior [OCB]) performance behaviors because both underpin key aspects of group success (Hu & Liden, 2014). Task behaviors tap into the quality and quantity aspects of core group responsibilities (Mathieu et al., 2008), and OCB involves behaviors that support the core and promotes overall group functioning (Whitman, Van Rooy, & Viswesvaran, 2010). Figure 1 depicts our proposed theoretical model.

Research has suggested that trust in supervisors can facilitate positive outcomes at the individual (Dirks & Ferrin, 2002) and group levels (Schaubroeck et al., 2011). Why these outcomes accrue has been investigated primarily from the subordinates’ perspective, making the impact of supervisors’ trust in their work groups a potentially critical but overlooked issue. Trust involves at least two parties (Rousseau et al., 1998), yet supervisors and work groups do not always see eye-to-eye (Gibson et al., 2009). We argue full comprehension of how trust influences outcomes flowing from supervisor–work group relations requires that each parties’ trust in the other be taken into account (cf. Brower et al., 2009; Fulmer & Gelfand, 2012). Thus, one noteworthy contribution of our study is adopting the multiple-stakeholder perspective to empirically examine the impact of supervisor–work group trust congruence on group performance. We also investigate why trust congruence may influence group performance, modeling the mediational effect of work group motivation on group outcomes. By considering this motivational impetus, our study may contribute new insights into the links between trust congruence and work group effectiveness.

**Theoretical Framework**

**Trust in the Supervisor and the Group**

Work group members make sense of their work context collectively and develop a shared meaning for their experiences (James et al., 2008). In regard to trust specifically, there is theoretical (McEvily, Perrone, & Zaheer, 2003) and empirical (Ferrin, Dirks, & Shah, 2006) evidence suggesting group members’ decisions to trust their supervisor are affected by shared experiences they have with that person. Group-level trust has been infrequently studied, and there is little research on how individual members’ perceptions of trust in the supervisor might coalesce. Given supervisors’ central role in work groups, members would likely disclose information about interactions with their supervisors and express pertinent attitudes and emotions while doing so. Word of shared experiences with supervisors may spread within a group through social conta-
Fulmer and Gelfand (2012) offered that the emergence of group trust in supervisors hinges on how they interact with work group members overall. Sharing task-relevant information and showing respect and appreciation encourage subordinates to develop positive expectations about future exchanges with supervisors (Korsgaard, Brodt, & Whitener, 2002). When supervisors increase subordinates’ perceptions of their benevolence (by rendering care and support), ability (by demonstrating skill and competence), and integrity (by adhering to ethical principles), a climate of trust in the supervisor is promoted (Mayer et al., 1995).

Even though scant attention has been paid to supervisors serving in the role of trustor (Reiche et al., 2014), we offer that Mayer et al.’s (1995) model could apply equally well in reverse with work groups. When groups consistently meet goals and performance standards (ability), communicate honestly with supervisors (integrity), and demonstrate appropriate respect and support (benevolence), supervisors should develop positive outlooks on future interactions with them. Indeed, Zapata, Olsen, and Martins (2013) supported the idea that when subordinates behave toward supervisors with benevolence and integrity, supervisors will trust them more. Given employees’ traditional role responsibilities, it is likely that work groups would manifest trustworthiness in the form of salient work behaviors. Recent research has suggested that when subordinates demonstrate effective role-appropriate behavior, their supervisors exhibit trust in them commensurately (Reiche et al., 2014). Sy (2010) proposed supervisors may harbor implicit prototypes for subordinates based on normative and goal-derived expectations, and noted effective goal-derived follower behavior can include integrity, dependability, and communicability. These three characteristics are all associated with trust. We argue that just as work groups engage in sensemaking processes in developing trust in supervisors, so too may supervisors. If supervisors judge subordinates’ behavior as meeting expected role behaviors, higher trust in their work groups should ensue.

Reflecting its emotional- and competency-related bases (McAllister, 1995; Schaubroeck et al., 2011; Yang & Mossholder, 2010), we considered both affective and cognitive trust congruence in our study. Affective trust connotes close ties emerging from positive interactions between parties, and supports the expression of care and concern between them. Congruent affective trust between supervisors and groups should reinforce corresponding interactions as each party attends to the other’s social and emotional needs. Cognitive trust stems from judgments about ability and dependability, and should facilitate task-related information exchanges between supervisors and work groups. Groups assured of their supervisors’ abilities would more confidently accept performance feedback (Mayer & Gavin, 2005), whereas supervisors having confidence in their groups’ task-related capabilities are more likely to offer assistance that improves groups’ collective performance (Brower et al., 2009). Affective and cognitive trust are recognized as stemming from theoretically different dynamics (Colquitt et al., 2012; Schaubroeck et al., 2011; Schaubroeck, Peng, & Hannah, 2013; Yang & Mossholder, 2009). However, as we believe supervisor–work group congruence on either should be beneficial to group functioning and performance effectiveness, our hypotheses anticipate similar effects on work group outcomes.

Trust in the Supervisor and the Group: Congruence Versus Incongruence

Dynamics underlying both supervisor and work group interactions should shape the degree that mutual trust arises between them. A spiral model of trustworthiness and cooperation proposed by Ferrin, Bligh, and Kohles (2008) suggests how supervisors and work groups converge in their trust of each other. These researchers discovered evidence (at both individual and group levels) that interacting parties experience and observe each other’s cooperative behaviors, then infer trustworthiness and reciprocate cooperation accordingly. Related, Yakovleva, Reilly, and Werko (2010) found...
party’s perceptions of each other’s trustworthiness affected their trust of one another and subsequently influenced both parties’ OCB. This line of research suggests trust congruence between supervisors and work groups should encourage rough equivalences in interpreting psychosocial cues and promote positive behaviors enabled by their common understanding. Because trust is fundamental to social interaction (Lewis & Weigert, 1985), congruence should be better for both parties than incongruence (Lewicki et al., 2006) and promote positive work outcomes that benefit both parties (Tomlinson et al., 2009).

Trust incongruence occurs when parties differ in the degree with which they trust each other, and hampers exchanges because those with less trust are hesitant to accept exposure to relational risks (De Jong & Dirks, 2012). Studies of trust incongruence are few, but because trust critically influences how parties interpret and reciprocate each other’s behavior, we surmise its impact would not be positive. For example, the performance of work groups that are less trusting than their supervisors may suffer due to concerns about being taken advantage of (cf. Mayer & Gavin, 2005), but disproportionate work group trust in supervisors could tempt supervisors to assign heavier workloads or encourage supervisory malfeasance. From the supervisors’ perspective, a risk is that work groups may lower their work efforts if overly trusting supervisors insufficiently monitor work outputs (Langfred, 2004).

In the face of trust incongruence, a range of disruptive dynamics could send parties spiraling into opposition (e.g., misalignment of words and deeds: Simons, 2002; irrational risks: Weber, Malhotra, & Murnighan, 2004; psychological contract violation: Zhao, Wayne, Glibkowski, & Bravo, 2007). Although we emphasized the positive aspects of trust congruence, we acknowledge trust incongruence can readily occur. When it does, the less trusting party may not be able to overcome relational risks and accomplish role-appropriate behaviors.

Summarizing, with regard to trust in the supervisor and trust in the work group, we anticipate that affective and cognitive trust congruence (vs. incongruence) will lead to better group performance outcomes. More specific, we posit:

**Hypothesis 1a:** Affective trust congruence between supervisor and work group is positively related to group task performance and group OCB.

**Hypothesis 1b:** Cognitive trust congruence between supervisor and work group is positively related to group task performance and group OCB.

Although our study centers on the beneficial impact of trust congruence on work group performance, it is possible that supervisors and work groups will not have the same levels of trust in each other. When this is the case, which party trusts less (i.e., the direction of trust incongruence; Korsgaard et al., 2015) may differentially affect performance losses. In our study, there are two possible trust incongruence scenarios: work group trust in the supervisor could be higher than supervisor trust in the group or vice versa. Making inferences about the performance effects of trust incongruence directionality requires comparing one incongruence scenario against the other. However, extant studies have usually explained trust effects from the perspective of only one of the parties involved (Fulmer & Gelfand, 2012), making it difficult to theorize about how trust incongruence might influence work group performance.

To briefly illustrate this difficulty, consider comparing performance effects of trust incongruence when work group trust in the supervisor is higher than supervisor trust in the group against when work group trust is lower than supervisor trust. Research emphasizing a supervisory perspective has suggested that supervisors with lower trust in their work groups might share less information or restrict resource allocations, thus diminishing group performance (e.g., Ferrin, Bligh, & Kohles, 2007). Alternatively, research entertaining a work group perspective has intimated that groups with less trust in their supervisors may be less engaged and lower in productivity (e.g., Dirks, 2000; Schaubroeck et al., 2011). The issue of which party’s lower trust level is more detrimental further complicates trust incongruence inferences. For example, because supervisors have more hierarchical power and subordinates more vulnerability (Kramer, 1996; Seppälä, Lipponen, Pirttila-Backman, & Lipsanen, 2011), the trust supervisors express in the work group may have a stronger impact on group behaviors. On the other hand, work group trust in the supervisor may have greater influence on group performance because it is a more proximal determinant of group behaviors (cf. Matta, Scott, Koopman, & Conlon, 2014).

In sum, pertinent theory and empirical research on trust incongruence is currently limited (Korsgaard et al., 2015). The complexity of construing trust incongruence effects is further compounded by the group level focus of our study. Therefore, rather than a formal hypothesis, we offer an exploratory research question regarding the directional effects of trust incongruence.

**Research Question 1:** Does the direction of affective and cognitive trust incongruence between supervisors and work groups affect group task performance and OCB?

**Trust in the Supervisor and the Group:**

**Congruence at Higher Versus Lower Levels of Trust**

Recent research examining processes critical to work group outputs suggests supervisor–work group congruence effects are greater when occurring at higher levels of the focal process (e.g., Gibson et al., 2009). Tomlinson et al. (2009) suggested that supervisors and work groups should operate in tune with the level of trust they hold for each other. For example, supervisor–work group congruence at higher levels of trust should accentuate exchange potential (Crocianzo & Mitchell, 2005), whereas congruence at lower levels of trust could constrain interactions in ways that limit possible synergies. We offer that trusting at mutually higher rather than lower magnitudes could have positive spillover effects on other relational dynamics. For example, emotions associated with personal appraisals of others (i.e., “social emotions”; Blader, Wiesenfeld, Fortin, & Wheeler-Smith, 2013) may be amplified. Increases in emotions such as empathy and altruism could facilitate personal and working relationships between supervisors and groups. Mutually high trust should also elevate interdependent work behavior, ultimately increasing the social capital from which both supervisors and work groups could draw.

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1 We thank an anonymous reviewer for suggesting exploring trust incongruence directionality.
Supervisors should be open to risk-bearing leader behaviors (e.g., delegation, upward feedback) in proportion to the level of trust they have in their groups (Brower, Schoorman, & Tan, 2000; Reiche et al., 2014). Because supervisors have higher formal status, we suggest that trust shown by them should be viewed as a valuable commodity by work groups. To the extent this transpires, work group members should experience social indebtedness toward supervisors and rectify this imbalance by manifesting role-appropriate behavior. Supporting of this notion, Salamon and Robinson (2008) found that across 88 organizational retail outlets, collective perceptions of being trusted by higher management increased employees’ felt responsibility and subsequent performance. Likewise, Lau, Lam, and Wen (2014) showed that feelings of being trusted by supervisors boosted employee organization-based self-esteem and subsequent work performance. We believe subordinates can sense whether they have supervisors’ trust, and according to Yakovleva et al. (2010), such feelings coupled with their own trust in the supervisor impact performance and prosocial behavior.

Some researchers have noted parties should trust and monitor each other in proper proportions to maintain successful exchange relationships (e.g., Ferritt et al., 2007). When mutually lower levels of trust are held, supervisors and work groups may each constrain their interactional tendencies or actively protect against violations of appropriate exchange behavior. Congruence occurring at lower magnitudes of trust may take on features associated with deterrence- or calculus-based trust (Lewicki et al., 2006). For example, supervisors may develop lower expectations about the competence or integrity of work groups (Brower et al., 2009), and monitor more to guard against social loafing and other suboptimal group behaviors (De Jong & Dirks, 2012; Langfred, 2004). Alternatively, work group members may be less motivated to perform due to the lack of positive expectations (Brower et al., 2009), or suppress information about task-related problems fearing it could lead to negative reactions from supervisors (Mayer & Gavin, 2005). It is important to note that although such actions create lower expectations between the parties, congruence mechanisms still allow for balanced social exchanges. Tomlinson et al. (2009) suggested that under such conditions, “parties are likely to be mutually cautious yet understanding of where the other is coming from” (p. 180), which should allow them to operate more effectively under conditions of trust incongruence.

Summarizing, with regard to trust in the supervisor and trust in the work group, we anticipate congruence occurring at higher magnitudes of trust will lead to better group performance than that occurring at lower magnitudes of trust. More specific, we posit:

Hypothesis 2a: Group task performance and group OCB will be greater when supervisor–work group affective trust congruence occurs at higher levels rather than at lower levels.

Hypothesis 2b: Group task performance and group OCB will be greater when supervisor–work group cognitive trust congruence occurs at higher levels rather than at lower levels.

Trust in the Supervisor and the Group:
Work Group Motivation as a Mediator

Support for the idea that trust impacts group performance through motivational processes has been mixed. Some researchers have found evidence for this contention (e.g., Spreitzer, Noble, Mishra, & Cooke, 1999) whereas other studies have not (e.g., Dirks, 1999). Recently, De Jong and Elfring (2010) found intra-group trust affects performance outcomes through group processes that facilitate output and limit motivational losses. Regarding its impact on group performance, Schaubroeck et al. (2011) demonstrated that affective trust allows groups to feel secure in learning and when voicing performance concerns, whereas cognitive trust bolsters confidence in their knowledge and ability to accomplish tasks. Such circumstances should elevate groups’ motivation due to perceptions that their efforts will lead to better performance.

In line with the IMO group effectiveness framework (e.g., Mathieu et al., 2008), we posit supervisor–work group trust congruence creates an emergent motivational state within the groups that should translate into higher levels of group effectiveness (cf. Hu & Liden, 2014). To the degree that parties’ trust in each other is congruent, intrinsically motivating social exchange benefits (e.g., approval, informal assistance, socioemotional support) become better understood (Kong, Dirks, & Ferrin, 2014). This relational certainty lays the foundation for the synergistic effect on subordinates’ performance posited by Brower et al. (2009). After all, the principal means that work groups have of attaining these intrinsic social exchange benefits in the future is by contributing in-role and extra-role performance efforts.

Affective and cognitive trust may both exert motivational effects on work groups, and we expect these effects will be made more salient through trust congruence. Extrapolating from Colquitt et al.’s (2012) thesis that affective trust strengthens relationships, we argue that affective trust congruence signals stronger bidirectional ties. This deepens the care and consideration supervisors show for their work groups, and in return work groups become motivated to achieve supervisors’ goals as their own. Moreover, extending Colquitt et al.’s view that cognitive trust reduces uncertainty, we offer that cognitive trust congruence is a harbinger of reduced task performance uncertainty. As a consequence, supervisors and work groups can better synchronize the flow of task-relevant information (Tomlinson et al., 2009). This should facilitate a cycle of supportive coaching and feedback between them (Wildman et al., 2012), furthering groups’ commitment to task goals and role responsibilities. Given the commonalities created by trust congruence, supervisors and work groups can better incorporate the top-down and bottom-up contributions (Park, Spitzmuller, & Deshon, 2013) of each party to strengthen work group motivation. We therefore offer the following:

Hypothesis 3a: Supervisor–group affective trust congruence will have a positive indirect effect on group task performance and group OCB via work group motivation.

Hypothesis 3b: Supervisor–group cognitive trust congruence will have a positive indirect effect on group task performance and group OCB via work group motivation.

Method

Participants and Procedures

We collected data from a large hospitality organization in the People’s Republic of China. Guest services were delivered by
work groups that rotated through morning, midday, and evening work shift schedules. Members of each group were collectively responsible for accomplishing group goals (i.e., providing quality services in the assigned guest service areas). As such, work groups were the focal units in our study. Membership in a given group was fixed and relatively stable, with one formally appointed supervisor who worked alongside members across shifts. In addition to interfacing with other functional areas of the organization (e.g., food/beverage, maintenance/engineering), each supervisor often interacted with group members and provided guidance and support to facilitate their work efforts. Supervisors’ duties also included activities such as training and assisting members in delivering quality services, handling customer complaints, inspecting members’ service quality, and completing wage reports reflecting members’ work hours and performance. Work group members had interchangeable skill sets and applied them as needed for the tasks at hand. Because the nature of guest services requires coordination and information exchanges among work group members (e.g., Sun, Arvey, & Law, 2007), they interacted with each other and with their supervisor regularly. In short, to achieve desired group goals, their work required coordination and feedback from the supervisor, and cooperation, flexibility, and communication from group members.

All work groups in guest services areas were invited to participate in the survey process. As part of a larger research project (Waldman, Carter, & Hom, 2012), the study data were collected from two independent sources at two points in time. At Time 1, we distributed two sets of questionnaires to individual group members (i.e., subordinates) and group supervisors, respectively. The subordinate survey asked participants to provide responses concerning group trust in supervisor, perceptions of motivation, and demographic variables. The supervisor survey asked supervisors to self-report demographic information and rate their trust in their groups. Three months later at Time 2, supervisors assessed their group members’ task performance and OCB. All participants were assured response confidentiality. Completed surveys were returned in postage-paid envelopes.

The average group size was 5.22, ranging from three to 14 group members per supervisor. Out of 100 guest services work groups in the organization, we obtained usable data from 375 subordinates (i.e., subordinates) and group supervisors, respectively. The subordinate survey asked participants to provide responses concerning group trust in supervisor, perceptions of motivation, and demographic variables. The supervisor survey asked supervisors to self-report demographic information and rate their trust in their groups. At Time 1, we distributed two sets of questionnaires to individual group members (i.e., subordinates) and group supervisors, respectively. The subordinate survey asked participants to provide responses concerning group trust in supervisor, perceptions of motivation, and demographic variables. The supervisor survey asked supervisors to self-report demographic information and rate their trust in their groups. Three months later at Time 2, supervisors assessed their group members’ task performance and OCB. All participants were assured response confidentiality. Completed surveys were returned in postage-paid envelopes.

The average group size was 5.22, ranging from three to 14 group members per supervisor. Out of 100 guest services work groups in the organization, we obtained usable data from 375 subordinates (response rate = 72%) in 96 groups. An average of 3.91 subordinates (ranging from three to six members) completed the survey per group. This yields a within-group response rate of 75% (i.e., 3.91/5.22). We compared the demographic data of respondents with those of the overall guest services workforce in the company, finding no significant differences in age, gender, education, or tenure.

Measures

Study respondents used a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) to answer all questions, unless otherwise specified. The method of back-translation (Brislin, 1980) was used to translate items from English to Chinese. Our focal study measures had been used in Chinese organizational contexts and shown satisfactory reliability and validity (e.g., Schaubroeck et al., 2011).

Supervisor trust in group. Supervisor trust in group was measured using a five-item affective trust scale and six-item cognitive trust scale developed by McAllister (1995). Given our interest in a supervisor’s perceptions of trust in the entire group, we modified the original scale items through a referent-shift approach (Chan, 1998). Sample items are “I can talk freely to members in my group about difficulties I am having at work and know that they will want to listen” (affective trust, α = .72) and “Given the track record of members in my group, I see no reason to doubt their competence and preparation for their jobs” (cognitive trust, α = .77).

We conducted a discriminant validity test for the affective and cognitive trust variables. We compared a two-factor model in which the covariance between them was freely estimated with a one-factor model in which the covariance between the two variables was fixed to one. The test yielded a significant chi-square difference, indicating that affective and cognitive trust were distinct, Δχ²(1) = 21.92, p < .001.

Group trust in supervisor. Group trust in supervisor was measured using McAllister’s (1995) five-item affective trust scale and six-item cognitive trust scale. Given our interest in group members’ shared perceptions of trust in their supervisor (e.g., Gong et al., 2013; Schaubroeck et al., 2011), a referent-shift consensus composition approach was used to modify the original scale items (Chan, 1998). Sample items are “Members in our group can talk freely to our group supervisor about difficulties we are having at work and know that s/he will want to listen” (affective trust, α = .74) and “Given the track record of our group supervisor, members in our group see no reason to doubt his or her competence and preparation for the job” (cognitive trust, α = .75). The results of a discriminant validity test indicated that affective and cognitive trust were statistically distinct, Δχ²(1) = 34.37, p < .001.

We aggregated members’ ratings to yield group-level trust in supervisor scores. The appropriateness of aggregating individual scores to the group level was assessed using intraclass (i.e., ICC(1) and ICC(2)) and within-group agreement indexes (i.e., r_within). The ICC(1) estimates (.13 for affective trust; .25 for cognitive trust) and ICC(2) estimates (.65 for affective trust; .68 for cognitive trust) exceeded common thresholds for acceptability (Bliese, 2000). Further, within-group agreement indexes for group affective and cognitive trust in supervisor were .97 and .98, respectively. Altogether, our results indicate there is sufficient statistical justification to aggregate these data to the group level.

Work group motivation. As noted above, similarities of group members’ skill sets and responsibilities meant that each member contributed incrementally to overall group task accomplishment. The team-driven nature of the work context and generally uniform contributions by individual members reflects the pooled constrained emergence model of aggregation (Kozlowski & Klein, 2000), suggesting that members’ performance efforts and outcomes could be considered as combining together to yield a unit-level performance effort and outcome. We therefore used an additive/average rule in computing group level performance effort (i.e., work group motivation) and outcomes (i.e., group task performance and group OCB) to represent members’ collective contribution (Kozlowski & Klein, 2000; Teshuk, Mathieu, Zaccaro, & Marks, 1997).

We used a three-item scale from the Multi-Factor Leadership Questionnaire Form 5X (Avolio & Bass, 2004) to measure work motivation (cf. Judge & Bono, 2000). Respondents used a 5-point response format ranging from 0 (not at all) to 4 (frequently, if not always) to rate the items. A direct consensus approach (Chan, 1998) was used to modify the original scale items. Sample items
are “My supervisor gets me to do more than I expected to do in my work group” and “My supervisor increases my willingness to try harder in my work group” (α = .82). As other researchers have (e.g., Van Kleef et al., 2009), we averaged group members’ ratings to yield an overall work group motivation score, ICC(1) = .51, ICC(2) = .80, r_{wgij} = .94.

**Group task performance.** Group task performance was captured using Farh and Cheng’s (1997) four-item, in-role task performance scale. Sample items are “The performance of this subordinate can always meet the requirements of the supervisor” and “This subordinate makes an important contribution to the overall performance of our work group” (α = .75). Following the additive/average rule (Kozlowski & Klein, 2000; Tesluk et al., 1997), we used the group mean to represent group-level task performance, ICC(1) = .41, ICC(2) = .73, r_{wgij} = .98.

**Group organizational citizenship behavior.** Group OCB was measured using Podsakoff, MacKenzie, Moorman, and Fetter’s (1990) 24-item, five-dimension scale. It contains items such as “This subordinate willingly helps others who have work-related problems” and “This subordinate’s attendance at work is above the norm” (α = .81). We conducted a confirmatory factor analysis testing whether a five dimensions plus one higher order factor model fit our data. The fit indexes were consistent with the higher order model, χ^2(241) = 428.14, comparative fit index = .93, root mean square error of approximation = .05, standardized root mean square residual = .05. Consistent with earlier research (e.g., Cole et al., 2013; Sun et al., 2007), we averaged members’ OCB ratings to yield a group OCB score, ICC(1) = .54, ICC(2) = .82, r_{wgij} = .99.

**Control variables.** We included several relevant control variables in our analyses. First, we controlled for group size, as suggested by prior research (e.g., Schaubroeck et al., 2011). Group size information was provided by supervisors. Second, we controlled for employee demographic attributes (i.e., age, gender, education, and group tenure) because they may be associated with trust and performance outcomes (e.g., Chen, Eberly, Chiang, Farh, & Cheng, 2014). Employee age and tenure in the work group were assessed in years, and aggregated to the group level through group means. Gender was coded 0 for male and 1 for female, with gender composition reflecting the percentage of female members in a group. Education was coded 1 = middle school diploma, 2 = high school diploma, 3 = associate degree, 4 = bachelor’s degree, 5 = master’s degree, and 6 = doctoral degree. Because education is an ordinal variable, we computed a median score for each group to capture a group-level education measure. Finally, we controlled for within-group dispersion (i.e., standard deviation) in members’ assessments of their group’s trust in the supervisor, which allowed us to test hypotheses after partialing out within-group affective or cognitive trust variability (e.g., Cole et al., 2013; Gibson et al., 2009).

**Analyses**

**Tests of congruence effects.** To test hypotheses focusing on congruence effects (H1a, H1b, H2a, and H2b), we used polynomial regression and response surface approaches (Edwards & Cable, 2009). Because response surface analyses are sensitive to influential observations, we used studentized residuals, leverage, and Cook’s D statistics to screen for multivariate outliers (Edwards & Cable, 2009; Lambert, Tepper, Carr, Holt, & Barelka, 2012). Four groups were identified as outliers and deleted, resulting in a sample size of 92 for all analyses. The polynomial regression equation is as follows (control variables are not shown to simplify the equation):

\[
Y = b_0 + b_1S + b_2G + b_3SG + b_4SG^2 + b_5G^2 + e.
\] (1)

where \(Y\) represents the respective outcome (i.e., group task performance, group OCB), and \(S\) and \(G\) are supervisor and group affective or cognitive trust, respectively. We grand-mean centered supervisor and group trust scores to facilitate interpretation of our results (Cole et al., 2013). We then used the polynomial regression coefficients (i.e., \(b_1 - b_5\)) to create a three-dimensional response surface in which \(S\) and \(G\) values (in the range of ± 3 SD from the mean) were plotted on the perpendicular horizontal axes, and \(Y\) was plotted on the vertical axis. The horizontal plane of the plot comprises the congruence (solid) line where trust in supervisor and trust in group scores are the same (i.e., \(S = G\)) and the incongruence (dashed) line where trust in supervisor and trust in group scores are in opposite signs with the same absolute values (i.e., \(S = -G\)).

For H1a and H1b, we examined how performance outcomes change as trust scores between the two parties become more aligned, as opposed to more misaligned. These hypotheses correspond to points on the surface along the incongruence line. If the surface curves downward along the incongruence line, this indicates that performance increases as the two trust scores become more aligned and decreases as the two trust scores diverge from the congruence point (i.e., \(S = G\)) in either direction (i.e., either \(S > G\) or \(S < G\)). A significant negative curvature along the incongruence line (calculated as \(b_4 - b_3\)) would indicate results consistent with the hypothesized congruence effect (Edwards & Cable, 2009).

With respect to H2a and H2b, we examined how performance outcomes change when the alignment of trust between the two parties occurs at lower versus higher levels of trust. These hypotheses correspond to points on the surface along the congruence line. If the surface along the congruence line is positively sloped, this indicates that performance increases as trust congruence changes from lower (e.g., \(S = G = -1\)) to higher (e.g., \(S = G = 1\)) trust levels. A significant positive slope (calculated as \(b_3 + b_4\)) indicates results consistent with the hypothesized congruence effect (Edwards & Cable, 2009).

**Tests of mediation.** We used a block variable approach (Edwards & Cable, 2009) to test the mediation hypotheses (H3a and H3b). Combining the five polynomial regression terms (see Equation 1), we first created a block variable (i.e., a weighted linear composite) for work group motivation (WGM), group task performance, and group OCB, respectively. Second, we regressed the mediator (i.e., WGM) on the block variable to obtain a standardized regression coefficient referred to as the “\(a\)” path in mediation models. Third, we regressed \(Y\) on the mediator and a respective block variable for each of the two outcome variables. This produced a standardized coefficient for the mediator on \(Y\) representing the “\(b\)” path in mediated models. The \(a\) and \(b\) paths were then used to estimate the indirect effect, \(ab\). We tested for significant indirect effects using bias-corrected confidence intervals constructed from 20,000 bootstrap samples.

**Results**

Table 1 presents the means, standard deviations, coefficient alphas, and intercorrelations among study variables.
Hypotheses Tests

Hypotheses 1a and 1b posit that congruence between supervisor and group trust is positively related to group task performance and OCB. Table 2 shows that for affective trust, the curvature along the incongruence line is significantly negative for group task performance (curvature = −1.33, p < .01) and group OCB (curvature = −1.09, p < .001). As shown in Figures 2 and 3, the surface along the incongruence (dashed) line (from the left corner to the right corner on the respective surfaces) is curved downward, indicating that group task performance and OCB increase as supervisor and work group affective trust become more aligned, but decrease as supervisor and work group affective trust scores diverge. Thus, H1a is supported.

Table 3 shows that for cognitive trust, the curvature along the incongruence line is not significant for group task performance (curvature = −.09, ns) or group OCB (curvature = .07, ns). Depicted in Figures 4 and 5, the surface along the incongruence (dashed) line is not curved statistically, suggesting no congruence effect. Hence, H1b is not supported.

Hypotheses 2a and 2b propose that group task performance and OCB are greater when trust alignment occurs at higher rather than lower levels of trust. Table 2 shows that in the case of affective trust, there is a positive slope and nonsignificant curvature along the congruence line for group task performance (slope = .72, p < .001, curvature = −.28, ns) and OCB (slope = .46, p < .001, curvature = −.25, ns). These results indicate that supervisor–group affective trust congruence has a positive linear effect on performance. As shown in Figures 2 and 3, group task performance and OCB increase along the congruence (solid) line from the front corner to the back corner on the respective surfaces, thus supporting H2a.

Table 3 shows that with cognitive trust, the positive slope and nonsignificant curvature along the congruence line for group task performance (slope = .81, p < .001, curvature = .22, ns) and group OCB (slope = .49, p < .001, curvature = −.10, ns) suggest cognitive trust congruence has a positive linear effect on performance. As shown in Figures 4 and 5, group task performance and OCB increase along the congruence (solid) line from the front corner to the back corner on the respective surfaces, thus affirming H2b.

Hypotheses 3a and 3b suggest the effect of supervisor–work group trust congruence on performance is transmitted through WGM. Table 4 reports the indirect effects for affective trust. The

### Table 1

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<tr>
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<th>M</th>
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<td>Within-group CT dispersion</td>
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<td>−.04</td>
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<td>.05</td>
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<td>−.03</td>
<td>−.01</td>
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<td>.37**</td>
<td>.64**</td>
<td>.57**</td>
<td>.82</td>
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<td>−.05</td>
<td>.09</td>
<td>.20</td>
<td>−.02</td>
<td>−.01</td>
<td>.27**</td>
<td>.01</td>
<td>.22</td>
<td>.20</td>
<td>.62**</td>
<td>.66**</td>
<td>.66**</td>
<td>.75</td>
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</tr>
<tr>
<td>Group OCB</td>
<td>5.52</td>
<td>0.26</td>
<td>−.01</td>
<td>.02</td>
<td>.37**</td>
<td>.10</td>
<td>.01</td>
<td>.31**</td>
<td>.13</td>
<td>.25</td>
<td>.30</td>
<td>.59**</td>
<td>.55**</td>
<td>.69**</td>
<td>.76**</td>
<td>.81</td>
</tr>
</tbody>
</table>

Note. N = 96 groups. Values in parentheses and on the diagonal represent coefficient alphas. AT = affective trust; CT = cognitive trust; SATG = supervisor affective trust in group; SCTG = supervisor cognitive trust in group; GATS = group affective trust in supervisor; GCTS = group cognitive trust in supervisor; OCB = organizational citizenship behavior.

*p < .05. **p < .01. ***p < .001.

### Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group task performance</th>
<th>Group OCB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant (b0)</td>
<td>5.49***</td>
<td>5.54***</td>
</tr>
<tr>
<td>Group size</td>
<td>−.03</td>
<td>.01</td>
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<tr>
<td>Group mean age</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>Gender composition</td>
<td>.12</td>
<td>.08</td>
</tr>
<tr>
<td>Group median education</td>
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<td>.00</td>
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<tr>
<td>Group mean tenure</td>
<td>−.02</td>
<td>.04</td>
</tr>
<tr>
<td>Within-group AT dispersion</td>
<td>.55</td>
<td>.36</td>
</tr>
<tr>
<td>SATG (S1) (b1)</td>
<td>.09</td>
<td>.07</td>
</tr>
<tr>
<td>GATS (G1) (b2)</td>
<td>.63***</td>
<td>.39***</td>
</tr>
<tr>
<td>S1 × G1 (b3)</td>
<td>−.14</td>
<td>−.09</td>
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<tr>
<td>G1 (b4)</td>
<td>−.67</td>
<td>−.58</td>
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<tr>
<td>R²</td>
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<td>.45</td>
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<tr>
<td>∆R²</td>
<td>−.33**</td>
<td>−.35**</td>
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</table>

Incongruence (S1 = −G1) line
Slope (b1 − b2)                     −.55**                 −.31**
Curvature (b1 − b2 + b3)             −1.33**                −1.09***

Congruence (S1 = G1) line
Slope (b1 + b2)                      .72***                 .46***
Curvature (b1 + b2 + b3)             −.28                   −.25

Lateral shift quantity
(b1 − b2 + [b2 × (b3 − b1 + b4)])   −.20                  −.14

Note. N = 92 groups. Unstandardized regression coefficients are reported. b0 − b4 correspond to coefficients in Equation 1. AT = affective trust; SATG (S1) = supervisor affective trust in group; GATS (G1) = group affective trust in supervisor; OCB = organizational citizenship behavior.

*p < .05. **p < .01. ***p < .001.
block variable for supervisor-group affective trust congruence is positively related to WGM (path $a = .83$, $p < .001$). WGM is positively associated with group task performance (path $b = .47$, $p < .001$) and with group OCB (path $b = .45$, $p < .001$). Supporting H3a, bias-corrected bootstrap confidence intervals of the indirect effect ($ab$) of supervisor-group affective trust congruence on group task performance ($ab = .39$, 99% CI [.15, .65]) and on group OCB ($ab = .38$, [.16, .62]) exclude zero.

As displayed in Table 5, the block variable for supervisor-group cognitive trust congruence is related to WGM (path $a = .70$, $p < .001$). WGM is associated with group task performance (path $b = .46$, $p < .001$) and with group OCB (path $b = .48$, $p < .001$). Bias-corrected bootstrap confidence intervals of the indirect

<table>
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<tr>
<th>Variable</th>
<th>Group task performance</th>
<th>Group OCB</th>
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<tr>
<td>Constant ($b_0$)</td>
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<td>5.46***</td>
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<td>Group size</td>
<td>$- .03$</td>
<td>$- .00$</td>
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<tr>
<td>Group mean age</td>
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<td>Gender composition</td>
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<td>.15*</td>
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<tr>
<td>Group median education</td>
<td>$- .03$</td>
<td>.04</td>
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<td>Group mean tenure</td>
<td>$- .01$</td>
<td>.00</td>
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<tr>
<td>Within-group CT dispersion</td>
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<td>.03</td>
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<tr>
<td>SCTG ($S_C$) ($b_1$)</td>
<td>.15*</td>
<td>.16***</td>
</tr>
<tr>
<td>GCTS ($G_C$) ($b_2$)</td>
<td>.66***</td>
<td>.33***</td>
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<tr>
<td>$S_C$ ($b_3$)</td>
<td>$- .11$</td>
<td>.03</td>
</tr>
<tr>
<td>$G_C$ ($b_4$)</td>
<td>.16</td>
<td>$- .09$</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.06</td>
<td>.47</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
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<td>.47</td>
</tr>
<tr>
<td>Incongruence ($S_C = - G_C$) line</td>
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<tr>
<td>Slope ($b_3 - b_2$)</td>
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<td>$- .17$</td>
</tr>
<tr>
<td>Curvature ($b_1 - b_4$)</td>
<td>$- .09$</td>
<td>.07</td>
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<tr>
<td>Congruence ($S_C = G_C$) line</td>
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<tr>
<td>Slope ($b_2 + b_3$)</td>
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<td>.49***</td>
</tr>
<tr>
<td>Curvature ($b_1 + b_4$)</td>
<td>.22</td>
<td>$- .10$</td>
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</table>

Note. $N = 92$ groups. Unstandardized regression coefficients are reported. $b_0$–$b_5$ correspond to coefficients in Equation 1. CT = cognitive trust; SCTG ($S_C$) = supervisor cognitive trust in group; GCTS ($G_C$) = group cognitive trust in supervisor; OCB = organizational citizenship behavior. * $p < .05$. ** $p < .01$. *** $p < .001$. 

Figure 2. Supervisor–group affective trust congruence and incongruence effects on group task performance. Solid line = congruence line; dashed line = incongruence line.

Figure 3. Supervisor–group affective trust congruence and incongruence effects on group OCB. OCB = organizational citizenship behavior; Solid line = congruence line; dashed line = incongruence line.

Figure 4. Supervisor–group cognitive trust congruence and incongruence effects on group task performance. Solid line = congruence line; dashed line = incongruence line.

Table 3
Polynomial Regression Results for Cognitive Trust Congruence and Incongruence Effects
The effect of supervisor-group cognitive trust congruence on group task performance (ab = .32, 99% CI [.14, .55]) and on group OCB (ab = .34, [.14, .57]) exclude zero. Thus, H3b also is supported.

**Research Question Tests**

For both types of trust, Research Question 1 addressed whether the direction of trust incongruence between supervisors and work groups affects group performance outcomes. As shown in Table 2,

**Table 4**

Results for Indirect Effects of Affective Trust Congruence on Performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mediator WGM</th>
<th>Group task performance</th>
<th>Group OCB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient of the block variable (a path)</td>
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<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Coefficient of WGM, controlling for the block variable (b path)</td>
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<td>.46***</td>
<td>.48***</td>
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<td>Indirect effect (ab) of trust congruence via WGM 99% bootstrapped CIs for indirect effect (ab)</td>
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<td>[.14, .55]</td>
<td>[.14, .57]</td>
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</table>

**Note.** N = 92 groups. Standardized coefficients are reported. Bias corrected confidence intervals (CIs) in 20,000 bootstrap samples are reported. Control variables include group size, group mean age, gender composition, group median education, group mean tenure, and withingroup cognitive trust dispersion. WGM = work group motivation; OCB = organizational citizenship behavior. ***p < .001.

Table 5

Results for Indirect Effects of Cognitive Trust Congruence on Performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mediator WGM</th>
<th>Group task performance</th>
<th>Group OCB</th>
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<td>Coefficient of the block variable (a path)</td>
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<td>—</td>
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<tr>
<td>Coefficient of WGM, controlling for the block variable (b path)</td>
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<td>.46***</td>
<td>.48***</td>
</tr>
<tr>
<td>Indirect effect (ab) of trust congruence via WGM 99% bootstrapped CIs for indirect effect (ab)</td>
<td>—</td>
<td>[.14, .55]</td>
<td>[.14, .57]</td>
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</tbody>
</table>

**Note.** N = 92 groups. Standardized coefficients are reported. Bias corrected confidence intervals (CIs) in 20,000 bootstrap samples are reported. Control variables include group size, group mean age, gender composition, group median education, group mean tenure, and within-group cognitive trust dispersion. WGM = work group motivation; OCB = organizational citizenship behavior. ***p < .001.

The slope for affective trust along the incongruence line is negative for group task performance (slope = −.55, p < .01) and group OCB (slope = −.31, p < .01). This indicates the respective surface along the incongruence line at the congruence point (i.e., S = G = 0) is not flat. Because the respective surface is curved downward, we tested this trust incongruence effect by examining the lateral shift quantity. This quantity (calculated by \[(b_3 - b_1)\] for group OCB, indicating movement of the respective surface toward the area in which group affective trust is higher than supervisor affective trust. Figures 2 and 3 depict that both types of performance decrease more sharply when group affective trust is lower than supervisor affective trust (the area on the surface to the right of the congruence line), as compared to when group affective trust is higher than supervisor affective trust (the area on the surface to the left of the congruence line).

For cognitive trust, the curvature along the incongruence line is not significant for either group task performance or OCB, and the respective surface is considered to be flat (Edwards & Cable, 2009; Lambert et al., 2012). Therefore, we could test the trust incongruence effect simply by examining the slope along the incongruence line. As shown in Table 3, the slope along the incongruence line is negative for group task performance (slope = −.51, p < .001) and group OCB (slope = −.17, p < .05), indicating the respective surface along the incongruence line is negatively sloped. As can be seen in Figures 4 and 5, both types of performance increase as group cognitive trust increases to match supervisor cognitive trust (from the right corner to the congruence point (S = G = 0) along the incongruence line) and remain elevated when group cognitive trust is higher than supervisor cognitive trust (from the congruence point to the left corner along the incongruence line).
Discussion

Although it is reasonable to assume commonalities in how trust operates at individual and group levels, group-level trust has been an infrequently examined and theoretically underdeveloped topic (Fulmer & Gelfand, 2012). Countering this trend, we investigated whether congruence between groups’ trust in supervisors and supervisors’ trust in their work groups could affect two types of group performance outcomes. Parallel hypotheses for trust based on benevolence (i.e., affective trust) and ability/integrity (i.e., cognitive trust) were investigated. In line with the IMO framework (Mathieu et al., 2008), we further considered a motivational mechanism through which trust congruence might influence groups’ task and extrarole performance. In addition, we posed a research question exploring the performance effects of trust incongruence directionality.

Theoretical and Practical Implications

Our results show that performance was higher under conditions of affective trust congruence than incongruence (Hypothesis 1a), and higher for congruence occurring at higher rather than lower levels of affective trust (Hypothesis 2a). Affective trust that underpins positive exchanges and mutual sharing of work-related and extrarole issues may promote emotional obligations and shared psychological benefits between supervisors and their work groups. Reaching such a positive state gives groups and supervisors a mutual confidence that they can handle social challenges inherent in their work interactions (i.e., psychological availability) and pursue accomplishments with minimal risks (i.e., psychological safety; cf. Schaubroeck et al., 2011). Overcoming relational risks allows group members to become fully engaged in their work (Christian, Garza, & Slaughter, 2011) and perform at a higher level. Although affective trust provides personal assurance and supports work accomplishments generally, it is not tied to specific tasks or goals. We suggest the stronger performance effects associated with affective trust congruence could derive partly from its emphasis on reciprocal bonds. From both supervisor and work group perspectives, affective trust congruence at higher levels represents maturity in relational norms at the heart of their work interactions. Other researchers have offered explanations consistent with this notion (e.g., Colquitt et al., 2012; Schaubroeck et al., 2011; Zapata et al., 2013).

Although affective and cognitive trust are often moderately to highly correlated, they can involve different dynamics (e.g., Dunn, Ruedy, & Schweitzer, 2012). This may have been partly responsible for the divergent findings regarding affective versus cognitive trust congruence. Regarding the effects of cognitive trust congruence versus incongruence (Hypothesis 1b), we anticipated the former would facilitate knowledge sharing and idea exchanges because of the balance in supervisors’ and work groups’ trust in each other’s competencies. Although this hypothesis reflects conventional thinking, it was not supported. Hypothesis 2b was supported, however, demonstrating that performance outcomes are higher when supervisor–group cognitive trust congruence occurs at higher rather lower levels of trust. Assuming cognitive trust is an accurate reflection of knowledge about the other party’s abilities and skills, congruence at a higher level may simply indicate that parties with greater trust in each other’s competencies can work better together than when they are equally concerned with each other’s work capacity.

Regarding the indirect effects of affective as well as cognitive trust congruence via work group motivation, we found support for both Hypotheses 3a and 3b. As McAllister (1995) noted, trust stems from parties’ mutual understanding of their interactional history. By extension, we suggest trust congruence between supervisors and groups reflects a shared understanding of relational processes (e.g., communication, predictability, attraction: Edwards & Cable, 2009; approval, informal assistance, socioemotional support: Kong et al., 2014) that have transpired between them. Such conditions have been theorized to have an engaging, motivating effect on work behavior (Kahn, 1990; Macey & Schneider, 2008). These results are in line with recent empirical research suggesting such motivating conditions partly mediate the influence of trust on performance outcomes (e.g., Li & Tan, 2013; Schaubroeck et al., 2011).

Although our study focused on trust congruence between supervisors and work groups, it is safe to assume that incongruence also will occur between some supervisors and groups (Korsgaard et al., 2015; Tomlinson et al., 2009). Exploring our research question concerning trust incongruence directionality, we discovered the incongruence effects associated with affective trust differed from those found for cognitive trust. With affective trust incongruence, supervisors and work groups experience less relational certainty (Brower et al., 2009), fewer intrinsically motivating benefits (Kong et al., 2014), and reduced psychological availability and psychological safety (Schaubroeck et al., 2011), all of which can diminish group performance. However, because work groups are in a power dependent position relative to their supervisors (Kramer, 1996; Seppälä et al., 2011), their performance behavior may be more influenced by decreases in these social and relational resources. This may partly explain why the detrimental effect of affective trust incongruence was manifested asymmetrically on performance. As shown in Figures 2 and 3, work group performance suffered more when groups’ affective trust was lower than supervisors’ affective trust in them as compared to when groups’ affective trust in their supervisors was greater than the supervisors’ affective trust. Even though there was evidence of asymmetrical incongruence effects, we reiterate that group performance decreased under either trust incongruence scenario in comparison to trust congruence.

It is interesting that when work groups’ cognitive trust in their supervisors was greater than their supervisors’ cognitive trust in them, both group task performance and OCB were sustained rather than diminished. This can be seen in Figures 4 and 5. Schaubroeck et al. (2011) suggested members’ shared beliefs about the leader’s competence (i.e., cognitive trust in leadership) may increase confidence in their abilities to pursue team goals effectively (i.e., team potency; Gully, Incalcaterra, Joshi, & Beaubien, 2002). Assuming cognitive trust is associated with actual competencies, we interpret these results as suggesting groups’ work outcomes were enhanced by their confidence in supervisors’ greater knowledge and experience. Such incongruence reflects a need fulfillment model of fit (Cable & Edwards, 2004), whereby greater supplies of what employees need or desire (i.e., supervisor competence and guidance to accomplish challenging tasks and goals) facilitate better outcomes.
Our study has practical implications. A premise regarding trust congruence among parties is it encourages greater understanding in the workplace. Regarding affective trust, our results suggest organizations should facilitate supervisor and work group efforts to develop congruent trust at as high a level as possible. Such trust development may begin initially when supervisors display trustworthy behavior to their work groups (Lau et al., 2014). Leadership perspectives featuring such behavior (e.g., servant; Schaubroeck et al., 2011) may therefore be fundamental in developing leadership training programs. Edmondson (2004) also suggested that supervisors become more coaching oriented in their daily interactions with group members. These behaviors could elicit reciprocal gestures of goodwill from group members that positively shape supervisors’ affective trust toward their groups.

Regarding cognitive trust, research has suggested that demonstrating performance reliability is necessary in developing cognitive trust (Webber, 2008). Thus, it is important for both supervisors and work groups to exhibit competence as defined within their respective roles to make cognitive trust congruence possible. Supervisors should, for example, establish clear goals and model desired behaviors in training and assisting group members’ performance efforts. Alternatively, once trained, group members need to exhibit expected performance behaviors to raise supervisors’ perceptions of their competence. Our findings for cognitive trust also suggest that trust in supervisors’ competence could be critical for achieving satisfactory group performance even when they are leading relatively less capable groups. This suggests organizations’ first priority should be to ensure supervisory competencies by appropriate selection and training programs.

Limitations and Future Research

There are some potential limitations to our study. First, although we collected data at two points in time, our independent and mediating variables were measured at the same time. This prevents us from unambiguously establishing the causal direction implied by our mediation model. Future research should endeavor to temporally separate all measures. Second, we noted various supervisor and group interactive behaviors (e.g., role-appropriate behavior, monitoring, social loafing) in developing our hypotheses, but did not measure them directly. To better understand processes underlying trust congruence effects, future research should consider the roles these behaviors might play. Third, we also note there is a potential for bias in the performance ratings in that supervisors who had higher trust in their groups may have rated their members’ performance higher. Although this possibility cannot be unequivocally dismissed, the Time 1 to Time 2 data collection should have helped minimize it. Fourth, group task performance, OCĐ, and motivation were measured using a direct consensus approach (Chan, 1998) and then aggregated to the group level. In the future, a referent shift consensus model could be used for work group motivation, and global ratings of team productivity may be also gathered directly from supervisors. Finally, we acknowledge developing and testing parallel hypotheses for affective and cognitive trust congruence. Given that the trust bases we examined may exhibit distinct dynamics (e.g., Dunn et al., 2012) and give rise to different processes (e.g., Schaubroeck et al., 2011), future studies may benefit from finer theoretical delineations of each base.

We support the notion of examining trust in workplace relationships as “an emergent property of the dyad representing the pattern of trust between two parties” (Korsgaard et al., 2015, p. 49). Our study focused on trust occurring between parties at the group level (i.e., supervisors and their work groups). Other forms of dyadic trust could be investigated by further assessing congruence and incongruence among members of a group (cf. De Jong & Dirks, 2012) or between pairs of individual coworkers (cf. Yakovleva et al., 2010). More important, researchers should recognize the need to assess trust between all parties comprising the focal relationship.

Because the development of their trust in each other involves structured interactions between supervisors and subordinates (Brower et al., 2009), more fine-grained study of these interactions could be useful. For example, the social network approach has been underutilized in examining group level trust (Fulmer & Gelfand, 2012). It might open new avenues for understanding the emergence and convergence of supervisor and work group trust. Ferrin et al. (2006) used social network analyses to demonstrate that employees consider the judgments of others in whom they trust (i.e., trust transferrability) when forming trust perceptions. Such analyses might show whether group members exchange trust judgments about supervisors, and if trust-relevant information from other parties (e.g., “skip-level” managers; see Liu, Tangirala, & Ramanujam, 2013) shapes supervisors’ trust of their groups. As some types of ties (e.g., advice) promote similarity in social perceptions (Zagenczyk, Scott, Gibney, Murrell, & Thatcher, 2010), researchers also could consider whether the types of ties supervisors establish with group members affects the homogeneity of members’ trust in them. Finally, future researchers could investigate whether groups’ trustworthiness perceptions are affected by the density and cohesion of ties members form with each other and with their supervisors (Fulmer & Gelfand).

In terms of trust congruence, future research might address what underlies the process of developing agreement in such expectations. Further, a potentially fruitful question to address is whether role expectations and prototypical behaviors may be involved in developing trust congruence. Given that prototypes for supervisory and subordinate roles are common, behaviors demonstrating clarity and adherence to expected roles may underlie trust development and congruence (Sy, 2010). It also would be interesting to determine how changes in supervisors’ and work groups’ expectations influence trust between them, especially given the potentially contrasting dynamics of affective and cognitive trust. Social comparisons (and expectations) resulting from under- and over-performance could exert different effects on each type of trust (Dunn et al., 2012).

Although emphasizing the congruence narrative in developing our hypotheses, we found trust incongruence may not always be detrimental to work group performance. Differences in cognitive trust may arise on the basis of different roles that supervisor and work groups occupy. Being in a power dependent position, groups’ vulnerability may make them more alert to trust-relevant signals from supervisors’ actions (i.e., problem-solving knowledge and expertise). Our results contrast with the notion that an imbalance of trust between parties might lead to negative outcomes for all parties (De Jong & Dirks, 2012; Schoorman et al., 2007). We therefore suggest researchers should entertain further the consequences of trust incongruence and circumstances under which it may not produce expected shortcomings.
In their review, Fulmer and Gelfand (2012) underscored the importance of understanding the effects of trust alignment between interacting parties. Our study presages potential complexities underling the performance ramifications of trust congruence and incongruence between supervisors and work groups. Getting supervisors’ and work groups’ trust on the same “page” should be viewed as an ongoing venture. We hope that our study will spur further research on this issue, and lay the groundwork for a better understanding of trust dynamics in the workplace.

References


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