

Interactional justice, leader–member exchange, and employee performance: Examining the moderating role of justice differentiation

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Summary

Past research suggests that interactional justice plays a pivotal role in facilitating high-quality leader–member exchange (LMX), with downstream implications for employee performance. However, the broader context in which these effects unfold has received scarce attention. Drawing from deontic justice and social exchange theories, we suggest that interactional justice differentiation is an important contextual moderator of the link between interactional justice and LMX. Specifically, we argue that high interactional justice differentiation attenuates the link between interactional justice and LMX, in turn influencing the effects of interactional justice on employee task and creative performance. Results from two studies employing both experimental and multisource, multilevel survey designs provide convergent support for the hypothesized model. We conclude by highlighting several key theoretical and practical implications of our findings. Copyright © 2016 John Wiley & Sons, Ltd.

Keywords: interactional justice; LMX; justice differentiation; social exchange; deontic justice

Over the past several decades, organizational justice research has flourished (see Colquitt, Greenberg, & Zapata-Phelan 2005, for a review). Researchers have demonstrated that distributive justice (i.e., the fairness of resource allocation; Adams 1965), procedural justice (i.e., the fairness of the processes through which resources are allocated; Leventhal 1980; Thibaut & Walker 1975), and interactional justice (i.e., the fairness of interpersonal treatment one receives from others in the workplace; Bies & Moag 1986) each can exert influence over a wide range of employee attitudes, relationships, and behaviors (Cohen-Charash & Spector 2001; Colquitt, Conlon, Wesson, Porter, & Ng 2001; Colquitt et al. 2013).

Within this literature, scholars have often noted the key role of leaders in administering just treatment, particularly with respect to interactional justice (Scott, Garza, Conlon, & Kim 2014). Whereas leaders are often unable to directly influence an organization's distributive or procedural justice principles, they are typically free to determine the extent to which they treat their employees with dignity, respect, and truthfulness, namely, interactional justice (Scott, Colquitt, & Paddock 2009). Research in turn has shown that interactional justice has a particularly strong relationship with LMX (Rockstuhl, Dulebohn, Ang, & Shore 2012), and that high-quality LMX is a key underlying mechanism linking interactional justice to more distal employee outcomes such as job performance (Cropanzano & Mitchell 2005).

Although interactional justice has many positive effects, leaders must expend time and effort to ensure that a given employee is treated with dignity, respect, and truthfulness. Sometimes, leaders expend these efforts differentially across employees, treating some with high levels of interactional justice and others with low levels of

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interactional justice. At the group level, such disparate treatment is referred to as high *interactional justice differentiation*. Broadly defined, interactional justice differentiation is a process by which leaders engage in differing levels of interactional justice behavior to followers within a work group.

Integrating deontic justice and social exchange theories (Blau 1964; Cropanzano, Goldman, & Folger 2003; Folger 2001), we challenge the existing assumption that LMX is solely determined by how a leader treats a particular follower within the dyad. Instead, we argue that employees take careful note of how their leaders interact with their coworkers and use this information to guide their own leader–follower interactions (Cropanzano & Mitchell 2005). We specifically argue that interactional justice is most likely to positively influence LMX when interactional justice differentiation is low. Then, we theorize that the interactive effects of interactional justice and interactional justice differentiation will have downstream implications for employee task and creative performance, mediated by LMX. A summary of our model is presented in Figure 1.

In total, our research makes three interrelated contributions. First, we contribute to the LMX literature by challenging the assumption that just treatment toward a particular follower is a sufficient condition for high-quality LMX. We specifically demonstrate that followers also care deeply about how their coworkers are treated, and react negatively when group members are treated differently by the leader, even when they themselves are treated fairly. Relatedly, we contribute to the justice literature by demonstrating the unique importance of justice differentiation for employee behavior, highlighting its downstream implications for employees' task and creative performance. Finally, we contribute to the justice and LMX literatures by demonstrating the utility of deontic justice and social exchange theories in explaining how and why followers are likely to respond negatively when leaders engage in high levels of interactional justice differentiation among group members.

Theory and Hypotheses

Our theoretical model begins with a consideration of the relationship between interactional justice and LMX. According to Bies and Moag (1986), interactional justice refers to individuals' concerns about “the quality of interpersonal treatment they receive during the enactment of organizational procedures” (p. 44). When an employee is treated with interactional justice, he or she is treated with dignity and respect and provided with explanations of decisions in a timely, open, and truthful manner (Bies 2001). It is worth noting that unlike distributive or procedural justice, interactional justice is not limited to the exchange contexts of resource allocation and decision making. Rather, it covers the entire spectrum of social interactions between leaders and their employees on a daily basis (Mikula, Petri, & Tanzer 1990). Therefore, Bies (2005) conceptualized interactional justice as an encounter-based perception of leader fairness and regarded it as a central component of the process of leadership itself. Based on this conceptualization, scholars have argued that interactional justice plays an important role in

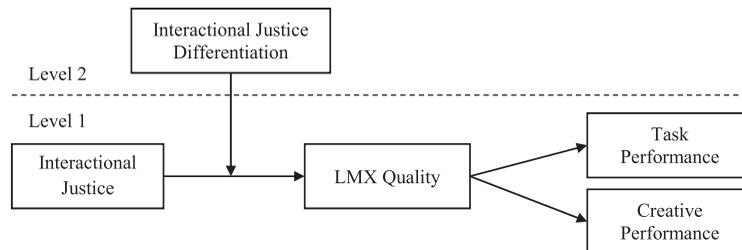


Figure 1. Hypothesized multilevel model. LMX, leader–member exchange

leader success, enabling leaders to garner the trust and support they need to lead effectively (Bies 2005; Tyler & Lind 1992).¹

Whereas interactional justice represents a series of episodic social interactions between a leader and a follower, LMX is a concept used to describe the quality of the overall relationship between a leader and a follower, built over time as a function of many repeated episodes of social interaction (Graen & Uhl-Bien 1995). High-quality LMX relationships are characterized by correspondingly high levels of interpersonal liking, trust, and feelings of long-term mutual obligation and reciprocity between a leader and a follower (Sparrowe & Liden 1997). Extant research points to a positive relationship between interactional justice and LMX (e.g., Cropanzano, Prehar, & Chen 2002; Erdogan & Liden 2006; Masterson, Lewis, Goldman, & Taylor 2000). Generally, this relationship is explained through the lens of social exchange theory's norm of reciprocity (Blau 1964; Cropanzano & Mitchell 2005), whereby fair treatment in everyday encounters is reciprocated, facilitating trust and loyalty over time.

Although the direct link between interactional justice and LMX is well established, research has tended to overlook the role of the social context in this link (Masterson & Tong 2015). In other words, extant research has tended to overemphasize the dyadic leader–follower relationship itself, in turn underemphasizing how these relationships are also shaped by how leaders treat employees' coworkers. Interestingly, this under-emphasis in the leader–follower relationship literature has persisted despite a growing body of work on third-party perceptions of injustice (Skarlicki & Kulik 2005). In this stream of work, scholars have demonstrated that employees care deeply about how others are treated, and tend to avoid and even punish the perpetrators of unfair treatment (O'Reilly & Aquino 2011), especially transgressions related to interactional justice (O'Reilly, Aquino, & Skarlicki 2016).

The moderating role of interactional justice differentiation

In considering the role of the social context in the link between interactional justice and LMX, we focus on two complementary theoretical lenses: deontic justice theory and social exchange theory. The former argues that employees care about how their coworkers are treated for moral reasons. The latter argues that employees care about how their coworkers are treated for instrumental reasons. We begin with the deontic perspective and follow with the social exchange perspective.

The deontic perspective

Deontic justice theory was first popularized by Folger (2001). Its central tenant is that people are motivated to react to injustice out of a sense of duty and obligation and not merely self-interest. Its origins can be traced to Kantian ethics, which argues that individuals' reactions to injustice are governed by a set of a priori beliefs about fundamental moral and ethical principles, regardless of personal consequences (Folger & Skarlicki 2008). As a result, employees' concerns about justice are not limited to how they themselves are treated. Rather, employees also care about how others are treated and will react negatively whenever they observe others violating their moral standards, even if they themselves are not the victims of these moral wrongdoings (Skarlicki & Kulik 2005). Prior research has found strong support for the deontic perspective. When employees see their coworkers being treated unfairly, they experience increased negative emotions (Barclay, Skarlicki, & Pugh 2005; O'Reilly et al. 2016; Spencer & Rupp 2009). Furthermore, they often attempt to punish these moral violations, even when doing so is detrimental to their own self-interest (Turillo, Folger, Lavelle, Umphress, & Gee 2002). For example, research has demonstrated that employees will compromise their own work performance to retaliate against leaders who are rude and abusive toward their coworkers (Mitchell & Ambrose 2012; Mitchell, Vogel, & Folger 2015). In another study, Brockner, Grover,

¹Empirical evidence has demonstrated that interactional justice can be further decomposed into interpersonal and informational sub-dimensions (Colquitt, Conlon, Wesson, Porter, & Ng 2001). We focus on interactional justice as an aggregate construct because we do not expect these sub-dimensions to play differential roles in our model (Colquitt et al. 2012).

Reed, and Dewitt (1992) found that when laid-off employees are treated unjustly, survivors are less committed to their work and exhibit decreased performance.

Deontic justice theory has direct implications for the role of interactional justice differentiation in the link between interactional justice and LMX. When an employee is treated unfairly (i.e., with low interactional justice), high-quality LMX is unlikely to emerge. From a deontic perspective, the employee will directly experience the leader's immoral behavior, witnessing firsthand the leader's lack of regard for the fundamental moral principle of justice, thus leading to low levels of LMX (Shao, Rupp, Skarlicki, & Jones 2013). Levels of justice differentiation are unlikely to be relevant, as the employee will already have sufficient information to discount the leader's morality. However, when a focal employee is treated fairly, deontic justice theory suggests that interactional justice differentiation is likely to play a significant role. When interactional justice differentiation is low, which means that a leader treats all of his or her employees fairly, the link between interactional justice and LMX is likely to remain strong. From a deontic perspective, a focal employee would see that the leader is consistently adhering to important moral principles, and feel highly satisfied with the leader as a result (Folger 2001). In contrast, even when an employee is treated fairly, high interactional justice differentiation is likely to have a detrimental effect on the interactional justice–LMX link. The focal employee, upon witnessing a third party being treated unjustly, is likely to experience significant negative emotions and attitudes toward the perpetrating leader (Skarlicki & Kulik 2005). As a result, the leader–follower relationship is likely to suffer.

The social exchange perspective

In contrast to deontic justice theory, the social exchange perspective argues that employees care how their coworkers are treated for more instrumental reasons. Briefly summarized, social exchange theory (Blau 1964) posits that relationships tend to become more trusting and committed over time as individuals develop rules of exchange that guide their interactions (Cropanzano & Mitchell 2005). Research to date has primarily focused on the reciprocity principle, which suggests that individuals respond to positive and negative experiences by reciprocating in kind. However, exchange relationships are not founded solely on reciprocity. According to Meeker (1971), exchange relationships are also founded on a more fundamental principle of rationality. Simply put, the rationality principle states that individuals will initiate positive interactions with others not only after they have been treated well but also when they believe that others' trust and respect are authentic and that their trust is unlikely to be betrayed in the future (Cropanzano & Mitchell 2005; Meeker 1971).

As with deontic justice theory, social exchange theory has direct implications for the role of interactional justice differentiation in the impact of interactional justice on LMX. When a focal employee is treated with a low level of interactional justice, high LMX is unlikely to emerge. The basic principle of reciprocity will be violated, and so employees will not be satisfied with the leader–follower relationship (Cropanzano et al. 2002; Masterson et al. 2000). However, when an employee is treated fairly, interactional justice differentiation becomes critical. When this differentiation is low, the social exchange relationship is likely to remain intact. The employee is likely to remain confident that the leader will treat him or her with fairness, and be satisfied with the relationship as a result. High interactional justice differentiation can instead be expected to introduce significant uncertainty into the situation. From an instrumental perspective, employees who see their coworkers treated unfairly are likely to experience high levels of uncertainty about how they themselves will be treated in the future. According to uncertainty management theory (Lind & Van den Bos 2002), uncertainty perceptions associated with justice differentiation displayed by the leader may induce employees to worry that they might be the ones who will experience the low justice in their future interactions with the leader, even if they themselves are treated fairly in the present. As a result, the link between interactional justice and LMX is likely to be attenuated.

In sum, deontic justice and social exchange theories each suggest that interactional justice differentiation has a cross-level moderating effect on the relationship between interactional justice and LMX at the dyadic level. From a deontic perspective, employees are likely to have moral objections to leaders who display high levels of interactional justice differentiation across group members, and perceive their leaders less positively as a result. From a social

exchange perspective, employees are likely to perceive leaders who display high levels of interactional justice differentiation as inconsistent, and therefore feel less satisfied with the stability and certainty of the leader–follower relationship. Thus, we propose the following:

Hypothesis 1: Low interactional justice differentiation will strengthen the link between interactional justice and LMX

Moderated mediation effects on task and creative performance

In addition to their direct implications for LMX, we also theorize interactional justice and interactional justice differentiation to have downstream implications for employee task and creative performance. Indeed, a number of studies have demonstrated that LMX has a positive impact on employee performance. Specifically, under conditions of high LMX, leaders provide employees with high-quality assignments and goals (Graen 1976), key information about their work tasks (e.g., mentoring; Yukl 2002), and valuable performance feedback (Ostroff & Kozlowski 1992). High LMX keeps employees engaged in their work by motivating them to perform at high levels (Li & Liao 2014). Several meta-analyses have provided support for these arguments, identifying high LMX as an important driver of employee task performance (Dulebohn, Bommer, Liden, Brouer, & Ferris 2012; Gerstner & Day 1997). Moreover, research has indicated that high-quality LMX facilitates creative performance by improving employees' energy (Atwater & Carmeli 2009), increasing empowerment and felt obligation (Pan, Sun, & Chow 2012), and improving employees' self-efficacy (Liao, Liu, & Loi 2010; Tierney, Farmer, & Graen 1999). More directly, Khazanchi and Masterson (2011) have demonstrated a significant and positive indirect relationship between interactional justice and employee creative performance via LMX.

Integrating these arguments with our earlier discussion of the interactive effects of interactional justice and interactional justice differentiation on LMX, we suggest that interactional justice differentiation will moderate the mediated effects of interactional justice on employee task and creative performance via LMX. When interactional justice differentiation is low, employees will regard leaders' fair treatment as authentic and consistent, strengthening its effects on LMX and in turn task and creative performance. In contrast, when interactional justice differentiation is high, employees will likely feel uncertain about the authenticity and consistency of leaders' fair treatment, mitigating its effects on LMX and in turn employee task and creative performance. Thus, we predict the following moderated mediation effects:

Hypothesis 2: Interactional justice differentiation moderates the mediated relationship between interactional justice and employee task performance through LMX such that the mediated relationship will be more positive when interactional justice differentiation is low than when it is high.

Hypothesis 3: Interactional justice differentiation moderates the mediated relationship between interactional justice and employee creative performance through LMX such that the mediated relationship will be more positive when interactional justice differentiation is low than when it is high.

Research Overview

We conducted two studies to test our theoretical model. In Study 1, we tested the moderating effect of interactional justice differentiation on the relationship between interactional justice and LMX (Hypothesis 1) utilizing a scenario experiment with two different samples (U.S. undergraduate students and Chinese full-time employees). In Study 2,

we tested our full theoretical model with a multilevel, multisource study conducted in China. Using both experimental and field methodologies, we aimed to establish (i) the causal effects of interactional justice and interactional justice differentiation and (ii) the generalizability of the theorized model to the workplace.

Study 1

Participants and procedure

Given that culture can play a significant role in both organizational justice perceptions (Lam, Schaubroeck, & Aryee 2002) and LMX (Rockstuhl et al. 2012), we aimed to cross-validate our conceptual model using samples from different cultures and contexts. Thus, we recruited two distinct samples for Study 1 with the aim of increasing the generalizability of our findings. Our first sample consisted of 74 undergraduate students ($M_{\text{age}} = 21.18$, 66.2 percent female, 48.6 percent Caucasian) from a large public business school in the United States. A total of 87.8 percent of respondents indicated prior work experience, and all were compensated with course credit. Our second sample consisted of 201 full-time employees in China ($M_{\text{age}} = 24.84$, 66.7 percent female) recruited via Sojump.com, a voluntary online survey panel. The 201 participants reported an average of 2.29 years (standard deviation (SD) = 1.11) of tenure at the firm, and an average of 1.86 years (SD = 1.12) of tenure with their direct supervisors. Respondents were given a small amount of financial compensation for their time (for previous uses of this survey panel in management research, see Jin, Ford, & Chen 2013; Zhou, Zhang, Su, & Zhou 2012).

With both samples, we conducted a 2 (international justice: high vs. low) \times 2 (interactional justice differentiation: high vs. low) between-subjects experiment. Participants were randomly assigned to one of the four conditions and were asked to imagine themselves working in a mid-sized consulting firm. All participants were then presented with a short description of their workplace and their direct supervisor. Demographic information and manipulation checks were assessed at the end of the survey. All materials were originally written in English and subsequently translated into Mandarin following established translation procedures (Brislin 1980).

Manipulations and measures

Interactional justice manipulation

We manipulated interactional justice based on predominant conceptualizations of the construct within the existing literature (Bies 2005; Bies & Moag 1986). Specifically, we manipulated interactional justice by emphasizing four major components of the construct discussed in the literature—respect, propriety, justification, and truthfulness (Scott et al. 2009). In the high interactional justice condition, participants were told that their direct supervisor, John, generally treats them with respect and dignity. In addition, participants were told that when John makes decisions that affect their job, he is sensitive to their personal needs and offers explanations for his decisions. In the low interactional justice condition, participants were told that their direct supervisor generally does not treat them with respect and dignity and often ignores their personal needs and declines to offer explanations for his decisions. Similar manipulations of interactional justice have been used in prior research (e.g., Zapata-Phelan, Colquitt, Scott, & Livingston 2009). A sample scenario is presented in the Appendix.

Interactional justice differentiation manipulation

Given that interactional justice differentiation was conceptualized as a leader's differential social interactions with his or her followers, we followed the differentiated leadership literature (Wu, Tsui, & Kinicki 2010) and manipulated interactional justice differentiation by emphasizing the extent to which the leader selectively treats his or her followers in different ways. In the high interactional justice differentiation condition, participants were told that John

treats some of his other employees this way (e.g., with respect and dignity), but that he treats others very differently. In the low interactional justice differentiation, participants were told that John treats most of his other employees in the same way he treats the focal employee (Appendix).

Leader–member exchange

Immediately following the manipulations, participants completed Graen and Uhl-Bien's (1995) seven-item LMX scale, adapted to the context. Sample items include “How would you characterize your working relationship with John?” (1 = *extremely ineffective* to 5 = *extremely effective*) and “How well does John recognize your potential?” (1 = *not at all* to 5 = *fully*). Prior research has used similar scenario-based experiments to manipulate leadership behaviors (De Cremer, van Knippenberg, van Knippenberg, Mullenders, & Stinglhamber 2005; van Knippenberg & van Knippenberg 2005) and demonstrated the validity of measuring hypothetical LMX relationships in an

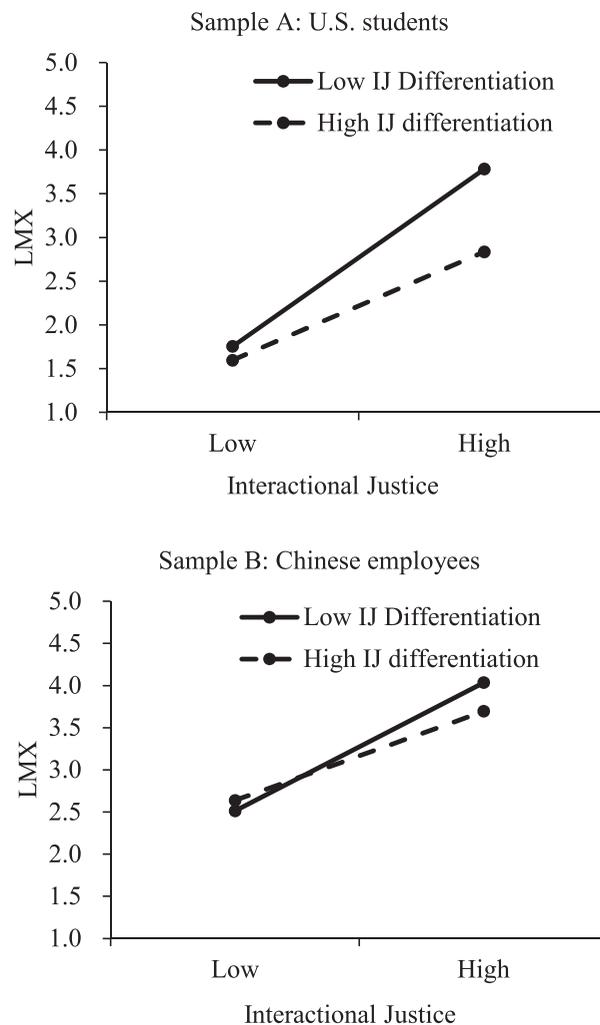


Figure 2. Interactive effects of interactional justice (IJ) and IJ differentiation on leader–member exchange (LMX) quality in Study 1

experimental setting (Bhal & Dadhich 2011). The reliability of this measure was .93 in both the U.S. sample and the Chinese sample.

Manipulation checks

At the end of the study, participants were asked to complete two manipulation check questions: (1) to what extent does John treat you well (e.g., explains his actions; is considerate) when implementing decisions? and (2) to what extent does John treat you the same way he treats all of his other employees? Both items were assessed on a 7-point scale (1 = *not at all* to 7 = *very much*). Analysis of variance results showed that the interactional justice manipulation had a strong effect on the interactional justice check (U.S. sample: $F = 347.48, p < .001, Ms = 1.22$ vs. $4.29, \eta^2 = 0.83$; Chinese sample: $F = 249.74, p < .001, Ms = 2.75$ vs. $5.87, \eta^2 = 0.83$). Similarly, the interactional justice differentiation manipulation had a strong effect on the interactional justice differentiation check (U.S. sample: $F = 49.43, p < .001, Ms = 3.72$ vs. $1.58, \eta^2 = 0.41$; Chinese sample: $F = 175.05, p < .001, Ms = 5.94$ vs. $3.22, \eta^2 = 0.47$). These results indicated that our manipulations were successful.²

Results

Hypothesis 1 predicted an interactive effect of interactional justice and interactional justice differentiation on LMX quality. In the U.S. sample, analysis of variance results suggested that the interactive effect of interactional justice and interactional justice differentiation on LMX was significant, $F(1, 70) = 8.28, p < .01, \eta^2 = 0.11$. The direction of the interaction effect was in the hypothesized direction (Figure 2). Planned comparisons showed that, in the low interactional justice differentiation condition, levels of LMX were significantly higher in the high interactional justice condition ($M = 3.78, SD = 0.12$) than in the low interactional justice condition ($M = 1.75, SD = 0.14$). However, this difference was significantly smaller among participants in the high interactional justice differentiation condition (high interactional justice: $M = 2.84, SD = 0.16$; low interactional justice: $M = 1.60, SD = 0.14$). Similar findings were obtained in the Chinese sample. The interaction effect was again significant, $F(1, 201) = 4.97, p < .05, \eta^2 = 0.03$. Planned comparison again showed that, in the low interactional justice differentiation condition, levels of LMX were significantly higher in the high interactional justice condition ($M = 4.03, SD = 0.53$) than in the low interactional justice condition ($M = 2.51, SD = 0.87$). Moreover, this difference was again significantly smaller in the high interactional justice differentiation condition (high interactional justice: $M = 3.69, SD = 0.53$; low interactional justice: $M = 2.64, SD = 0.94$).³

In sum, through an experimental design, Study 1 provided initial evidence for the interactive effects of interactional justice and interactional justice differentiation on LMX. Results from two independent samples demonstrated that the relationship between interactional justice and LMX is stronger when interactional justice differentiation is low than when it is high.

²The interactional justice manipulation showed no spillover effect on the interactional justice differentiation check (U.S. sample: $F = 0.87, n.s., Ms = 2.64$ vs. $3.00, \eta^2 = 0.01$; Chinese sample: $F = 1.95, n.s., Ms = 4.39$ vs. $4.78, \eta^2 = 0.01$). The interactional justice differentiation manipulation showed no spillover effect on the interactional justice check in the Chinese sample ($F = 0.87, n.s., Ms = 4.46$ vs. $4.18, \eta^2 = 0.00$), and some spillover to the interactional justice check in the U.S. sample ($F = 4.37, p < .05, Ms = 3.14$ vs. $2.32, \eta^2 = 0.06$). The degree of spillover, however, was relatively small compared with the magnitude of the intended effect and is unlikely to impair interpretation of results (Shadish, Cook, & Campbell 2002). Specifically, the F statistic for the effect of the interactional justice manipulation on the interactional justice check was almost 80 times larger than the statistic for the interactional justice differentiation manipulation, and the η^2 value was over 13 times larger.

³Although we conducted two sets of analyses for our two samples, results were identical when both samples were combined. The combined analyses are available from the first author upon request.

Study 2

In Study 2, we aimed to complement and build upon Study 1's results in several ways. First, we sought to replicate and extend our findings by testing our full theoretical model, examining the downstream implications of interactional justice and interactional justice differentiation on employee performance. Second, although we found experimental support for Hypothesis 1 in Study 1, we aimed to complement these findings with field data by conducting a multilevel, multisource study wherein interactional justice differentiation was assessed within discrete workgroups. Third, we sought to examine the generalizability of our model by collecting field data from employees working full time across a wide range of function-based workgroups. Finally, because Study 1 did not enable us to capture the effects of interactional justice and interactional justice differentiation above group-mean interactional justice, we aimed to increase the robustness of our findings in Study 2 by controlling for groups' mean levels of interactional justice in the field.

Participants and procedure

Participants were full-time employees at a large electronics company in mainland China. The company is divided into 38 business units managing duties associated with the design, production, sale, and servicing of a variety of products. Within these units, employees are divided into function-based workgroups (administration, sales, production, etc.). In general, each unit is divided into 8–16 functional workgroups headed by three or four executive managers. We gained entrance into the organization through the company's chief executive officer, who allowed us to randomly select several business units to carry out a field study. The managers of each business unit provided further support throughout our survey administration.

We randomly selected a total of 50 workgroups from 12 business units to implement the survey. In order to increase the participation rate and encourage truthful responses, we ensured confidentiality throughout the data collection process. After completing the survey, each participant was asked to place the survey into a numerically coded envelope and return it directly to the research administrators. These codes allowed us to match employees by group while ensuring that each employee's individual responses remained confidential. Following these procedures, paper surveys were distributed to each employee in the 50 selected workgroups. Leader data were collected in a similar fashion.

At the end of the data collection phase, 252 complete employee surveys were received. To ensure our ability to test our hypotheses, we excluded five groups where response rates were less than 60 percent (Timmerman 2005). An additional group was also excluded owing to significant missing leader data, leaving a final sample size of 203 employees nested in 44 groups, with an average group response rate of 82.1 percent.

The 203 employees in the final sample were an average of 31.62 years old, 51 percent female, and reported an average of 6.18 years ($SD=6.89$) of tenure at the firm. The 44 group leaders were an average of 38.3 years old, 75 percent male, and reported an average of 8.96 years ($SD=6.90$) of tenure at the firm. Among the 44 workgroups, 11 (25.0 percent) were administrative management groups, eight (18.18 percent) were focused on production and operations, seven (15.91 percent) were marketing groups, seven (15.91 percent) were finance groups, and the remaining 11 (25.0 percent) consisted of human resource management, research and development, customer services, and others. On average, the 44 groups had a mean size of 5.89 employees ranging from 3 to 11 ($SD=1.98$). All scale items were translated from English to Mandarin via the back-translation process (Brislin 1980). Whenever possible, we used measures that have been previously validated among Chinese samples to ensure measurement invariance.

Measures

Interactional justice

Interactional justice was assessed with six items adapted from Niehoff and Moorman's (1993) justice scale. Sample items include "When decisions are made about my job, my supervisor treats me with respect and dignity," "When decisions are made about my job, my supervisor is sensitive to my personal needs," and "When making decisions about my job, my supervisor offers explanations that make sense to me" (1 = *strongly disagree* to 5 = *strongly agree*; $\alpha = .92$). This six-item interactional justice scale has been used and validated in prior research with Chinese samples (Aryee, Budhwar, & Chen 2002; Zhang & Agarwal 2009).

Interactional justice differentiation

Following prior studies on differentiated leadership (e.g., Chen, He, & Weng 2015; Chen, Yu, & Son 2014), we calculated interactional justice differentiation as the within-group *SD* of individuals' interactional justice scores.

Leader-member exchange

LMX was measured using Graen and Uhl-Bien's (1995) seven-item LMX scale as in Study 1 ($\alpha = .86$; see Liao et al., 2010, for an example of past research utilizing this particular LMX measure in the Chinese context).

Task performance

Leaders rated their group members' individual task performance via a three-item scale adapted from Farh, Dobbins, and Cheng (1991). Research with Chinese samples (Farh, Hackett, & Liang 2007) has shown satisfactory reliability and validity of this scale. The three items focused on three different facets of task performance including (i) the quality of work, (ii) the efficiency of work, and (iii) the accomplishment of work goals. A 6-point scale was utilized to avoid central tendency biases (1 = *strongly disagree* to 6 = *strongly agree*; $\alpha = .89$).

Creative performance

Leaders rated the extent to which each employee's work was novel and useful to the group. We used the Tierney et al. (1999) four-item creativity scale because it has shown adequate validity in prior research conducted in Chinese settings (e.g., Farmer, Tierney, & Kung-McIntyre 2003). Sample items are "Seeks new ideas and ways to solve problems" and "Is a good role model for creativity." Once again, we used a 6-point scale (1 = *strongly disagree* to 6 = *strongly agree*; $\alpha = .95$).

Control variables

We collected data for several control variables at the individual and group levels to rule out alternative explanations of our findings. At the individual level, we controlled for employees' age, tenure, gender, and educational background because these attributes have been shown to affect LMX quality (Gerstner & Day 1997) and leader-rated employee performance (Ng & Feldman 2010). To rule out the confounding effects of other organizational justice dimensions, we controlled for distributive and procedural justice as measured by Niehoff and Moorman's (1993) justice scale. A sample item from the distributive justice scale is "Overall, the rewards I receive here are quite fair." A sample item from the procedural justice scale is "Job decisions are made by my supervisor in an unbiased manner." Reliabilities for these two scales were .94 and .91, respectively. Age, gender, and education were not correlated with any dependent variable in our research and therefore were not included in our final analyses (Table 1).

At the group level, we controlled for group size in all analyses because it has been demonstrated to affect LMX quality (Green, Anderson, & Shivers 1996).⁴ We also controlled for the group means of all three justice variables

⁴Follow-up analyses indicated that our results remain unchanged regardless of whether or not group size is included as a control, and also regardless of whether or not any of the control variables are included. Analyses without the control variables are available upon request from the first author.

Table 1. Means, SDs, reliability coefficients, and correlations among the variables in Study 2.

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11
Level 1 variables													
1. Age	31.62	7.08	—										
2. Gender	0.51	0.50	.03	—									
3. Organizational tenure	6.18	6.89	.63**	.15*	—								
4. Education	2.54	0.73	-.35**	-.00	-.27**	—							
5. Distributive justice	3.01	0.85	.05	-.03	-.06	-.18*	—						
6. Procedural justice	3.15	0.77	-.05	-.14	-.16*	-.18*	.54**	(.91)					
7. Interactional justice	3.41	0.70	-.19**	-.11	-.23**	-.05	.51**	.59**	(.92)				
8. LMX quality	3.18	0.69	.00	-.12	-.13	-.06	.28**	.36**	.59**	(.86)			
9. Task performance	4.40	0.81	.03	-.01	-.11	.05	.16*	.15*	.18*	.23**	(.89)		
10. Creative performance	3.63	0.91	-.01	-.05	-.18*	.13	.05	.12	.14*	.27**	.72**	(.95)	
Level 2 variables													
1. Group size	5.89	1.98	—										
2. Group-mean distributive justice	3.03	0.49	-.15	—									
3. Group-mean procedural justice	3.15	0.50	-.02	.61**	—								
4. Group-mean interactional justice	3.42	0.38	-.06	.57**	.67**	—							
5. Interactional justice differentiation	0.62	0.26	-.14	-.00	.04	-.14	—						

Note: Internal consistency reliabilities appear in parentheses along the diagonal; $n = 203$ at individual level and $n = 44$ at group level. Gender, 0 = man, 1 = woman. Education, 1 = high school, 2 = vocational college, 3 = undergraduate education in university, and 4 = graduate education in university. SD, standard deviation; LMX, leader-member exchange. * $p < .05$; ** $p < .01$ (two tailed).

Table 2. Parameter estimates and variance composition of level 1 variables in Study 2.

Variable	Within-group variance (e^2)	Between-group variance (r^2)	ICC(1)
Interactional justice	0.43	0.05*	0.10
LMX	0.40	0.07***	0.16
Task performance	0.33	0.34***	0.51
Creative performance	0.35	0.54***	0.61

Note: b_{00} represents the average level of the variable across groups. e^2 represents the within-group variance, and r^2 the between-group variance in the variable. ICC(1) represents the percentage of between-group variance, and it was computed as the between-group variance/(within + between variance).

LMX, leader-member exchange.

*** $p < .001$; * $p < .0015$.

(i.e., group-mean distributive justice, group-mean procedural justice, and group-mean interactional justice) as research has shown that average levels of justice within a group affect employee work outcomes (Liao & Rupp 2005).⁵

Results

Preliminary analyses

We first conducted a set of confirmatory factor analyses to ensure adequate discriminant validity among the four focal level 1 latent variables (i.e., interactional justice, LMX quality, employee task performance, and employee creative performance). Confirmatory factor analysis results indicated acceptable fit for the hypothesized four-factor model, $\chi^2(164) = 321.60$; $\chi^2/df = 1.96$; RMSEA = 0.07; IFI = 0.97; CFI = 0.97. Chi-square difference tests indicated that the four-factor model was also superior to more parsimonious models, including a three-factor model that combined the interactional justice and LMX items ($\Delta\chi^2(3) = 412.67$, $p < .01$) and a three-factor model that combined the task performance and creative performance items ($\Delta\chi^2(3) = 169.87$, $p < .01$). Descriptive statistics are presented in Table 1.

Before running our cross-level regression analyses, we also conducted a variance partition to examine whether there is sufficient between-group variance in our individual-level constructs (i.e., LMX, task performance, and creative performance). These results are presented in Table 2. As the table shows, 16 percent of the variance in LMX was due to variation between groups, 51 percent of the variance in task performance was due to variation between groups, and 61 percent of the variance in creative performance was due to variation between groups. In addition, results of chi-square tests demonstrated significant between-group variance for LMX quality, $\chi^2(43) = 80.34$, $p < .01$, employee task performance, $\chi^2(43) = 239.80$, $p < .01$, and creative performance, $\chi^2(43) = 321.99$, $p < .01$, thereby justifying the use of cross-level regression analyses to test our hypotheses.

Test of hypotheses

Given the nested structure and multiple dependent variables in our model, we used multilevel structural equation modeling to test our hypotheses. Model estimation was conducted using the MPLUS 7.0 software (Muthén & Muthén 2007). We estimated a multilevel moderated mediation model that specified the level 1 random slope effect of interactional justice on LMX quality, the level 1 random slope effects of LMX quality on employee task and creative performance, and the cross-level moderating effect of interactional justice differentiation on the random slope for interactional justice predicting LMX quality. Following Tofighi, West, and MacKinnon (2013), the covariances

⁵On the helpful recommendation of a reviewer, we conducted supplementary analyses to examine the three-way interaction between interactional justice, interactional justice differentiation, and group mean interactional justice. However, the three-way interaction term was not significantly related to LMX ($\gamma = 0.11$, $p = .14$).

among random slope effects were also estimated for the purpose of estimating the level 1 indirect effects. We also modeled the direct effect of interactional justice on our outcome variables. All control variables and interactional justice differentiation were included in this model. To facilitate the interpretation of the findings, we group mean-centered interactional justice and other level 1 controls to obtain an unbiased estimate of the individual-level relationship between interactional justice and LMX quality (Hofmann & Gavin 1998). In addition, level 2 variables were grand mean-centered. Unstandardized coefficient estimates of this model are presented in Table 3 and graphed in Figure 3.

It can be seen from Table 3 that interactional justice differentiation was negatively related to the random slope between interactional justice and LMX quality ($\gamma = -0.67$, $p < .05$). In addition, interactional justice differentiation accounted for 25.7 percent of the variance in this random slope (residual variance $\tau = 0.08$, $p > .05$; when the cross-level moderating effect of interactional justice differentiation on the random slope for interactional justice predicting LMX quality was not included in the model, residual variance $\tau = 0.11$, $p < .05$). Following Cohen, Cohen, West, and Aiken (2003), we plotted this interaction as shown in Figure 4. Simple slope analyses revealed that the relationship between interactional justice and LMX quality was stronger when interactional justice differentiation was low ($\gamma = 1.29$, $p < .001$) than when it was high ($\gamma = 0.93$, $p < .001$). This finding provides strong support for Hypothesis 1.

To test Hypotheses 2 and 3, we estimated the indirect relationships of interactional justice on employee task and creative performance via LMX at high (+1 *SD*) and low levels (-1 *SD*) of interactional justice differentiation. Because the covariances between the random slopes were not significant (for task performance: $\tau [a, b] = 0.002$, $p = .957$; for creative performance: $\tau [a, b] = 0.028$, $p = .483$), we computed the indirect effects without including the covariance among random slope effects (Tofighi et al. 2013). Therefore, we utilized Selig and Preacher's (2008) tool to calculate indirect effects at different conditional values of interactional justice differentiation. Similarly, a Monte Carlo simulation method was applied to obtain 95 percent confidence intervals (CIs) for these indirect effects as well as their difference (Tofighi & MacKinnon 2011).

Table 3. Unstandardized coefficients of the multilevel model for testing cross-level moderation in Study 2.

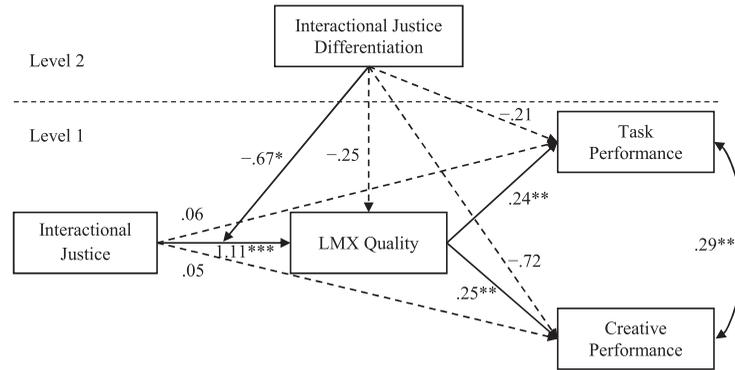
	LMX quality	
	Estimate	SE
Fixed effect		
Tenure	0.001	0.008
Distributive justice	0.001	0.058
Procedural justice	0.001	0.076
Group size	-0.022	0.057
Group-mean distributive justice	0.004	0.114
Group-mean procedural justice	-0.046	0.145
Group-mean interactional justice	0.656***	0.136
Interactional justice differentiation	-0.250	0.162
Interactional justice slope ^a	1.110***	0.247
LMX quality		
Interactional justice × Interactional justice differentiation	-0.668*	0.310
Variance component		
Intercept	0.213***	0.026
Interactional justice slope	0.081	0.045
Residual	0.052*	0.021

Note: $n = 203$ at the individual level, $n = 44$ at the group level.

LMX, leader-member exchange.

^aThe effect of interactional justice was estimated as a random slope on LMX quality.

*** $p < .001$; ** $p < .01$; * $p < .05$.



Note:
 Solid lines represent statistically significant paths, whereas dashed lines represent statistically non-significant paths.
 *** $p < .001$, ** $p < .01$, * $p < .05$.

Figure 3. Unstandardized estimates of the path coefficients in Study 2. Note: Solid lines represent statistically significant paths, whereas dashed lines represent statistically non-significant paths. *** $p < .001$, ** $p < .01$, * $p < .05$. LMX, leader–member exchange

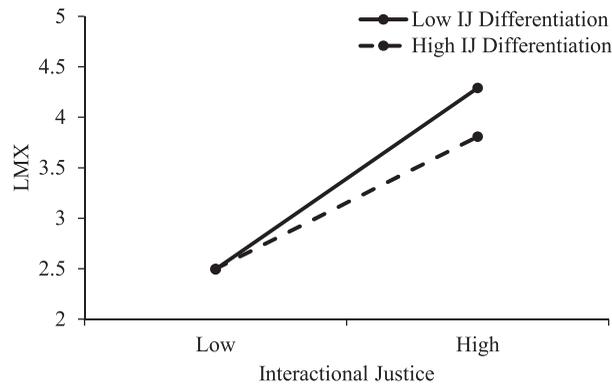


Figure 4. Interactive effects of interactional justice and interactional justice differentiation on leader–member exchange (LMX) quality in Study 2. II, interactional justice

For task performance, the conditional indirect effect was 0.31 with a 95 percent CI of [0.103, 0.566] when interactional justice differentiation was low versus 0.23 with a 95 percent CI of [0.064, 0.447] when interactional justice differentiation was high. The difference between the two conditional indirect effects was 0.08 with a 95 percent CI of [0.006, 0.196], indicating that when interactional justice differentiation is low, interactional justice has a stronger relation to employee task performance via LMX than when interactional justice differentiation is high. Results were similar for creative performance. The conditional indirect effect was 0.31 with a 95 percent CI of [0.096, 0.581] when interactional justice differentiation was low versus 0.23 with a 95 percent CI of [0.064, 0.452] when interactional justice differentiation was high. The difference between the two conditional indirect effects was 0.08 with a 95 percent CI of [0.005, 0.197], indicating that when interactional justice differentiation is low, interactional justice has a stronger impact on employee creative performance via LMX than when interactional justice differentiation is high. Thus, Hypotheses 2 and 3 were supported.

General Discussion

Past research has established a direct impact of interactional justice on LMX (Cropanzano et al. 2002; Erdogan & Liden 2006; Masterson et al. 2000), emphasizing the importance of fair treatment in the development and maintenance of high-quality relationships between leaders and followers. Recently, researchers have emphasized the importance of the social context in understanding the dyadic link between interactional justice and LMX (e.g., Masterson & Lenses 2015; Masterson & Tong 2015). In this research, we developed a multilevel model that highlighted interactional justice differentiation as an important but understudied moderator in the link between interactional justice and LMX. Empirical results from two studies employing both experimental and multisource survey designs provided convergent support for the hypothesized model. Our results demonstrated that high interactional justice differentiation weakens the link between interactional justice and LMX. In addition, we found that interactional justice and interactional justice differentiation exhibit indirect effects on employee task and creative performance via LMX. In the following sections, we discuss the theoretical and practical implications of our findings, as well as several limitations and key directions for future research.

Theoretical implications

Our research makes three major theoretical contributions. First, we contribute to the justice and LMX literatures by challenging the assumption that the development of LMX is solely a dyadic process. We found that a leader's fair treatment of a particular follower is a necessary but not sufficient condition for high-quality LMX. Rather, the leader must also engage in similar levels of interactional justice for those that surround the follower. Thus, our research responds to recent calls for research to more closely examine the broader context in which the leader–follower relationship is embedded (Masterson & Lenses 2015; Masterson & Tong 2015). More specifically, the moderating role of interactional justice differentiation as demonstrated in our research provides initial evidence for Masterson and Lenses's (2015) argument that scholars' understanding of the justice–LMX relationship can be enriched by “incorporating employees' social networks as a potential source of information influencing both justice and LMX perceptions” (p. 80).

Our second contribution is to deontic justice theory and research on its implications for workplace dynamics. Extant research (Rupp, Shao, Thornton, & Skarlicki 2013; Skarlicki & Rupp 2010; Turillo et al. 2002; Umphress, Simmons, Folger, Ren, & Bobocel 2013) has shown that individuals value justice not only for instrumental reasons (e.g., economic self-interest and social standing within a group) but also for moral reasons (e.g., a belief that people should be treated fairly). In general, empirical findings have shown that people tend to have negative attitudinal, affective, and behavioral reactions toward those who violate the principled moral obligations of justice (Folger & Glerum 2015). We extend this line of research by suggesting that employees may be willing to sacrifice the potential instrumental benefits of a high-quality leader–follower relationship if the leader violates an employee's moral standards by displaying unequal fairness across all of his or her followers.

Finally, we contribute to social exchange theory by emphasizing that social exchange relationships are not solely driven by the principle of reciprocity. Rather, our findings suggest that individuals are likely also driven by a rationality principle (Meeker 1971). In other words, in leader–follower relationships, it is likely that followers do not only pay attention to their direct interactions with their leaders but also use logic and rational thinking to determine the costs and benefits of their actions, and make these decisions in part by observing how leaders treat other coworkers. As Cropanzano and Mitchell (2005) noted, management scholars have focused on the reciprocity principle of social exchange almost exclusively to the neglect of other viable exchange principles. Although we did not directly test these social exchange mechanisms in our studies, we hope that our work can act as a stepping stone in redirecting scholarly attention to a range of viable exchange rules by emphasizing their utility.

Practical implications

Our research also has important practical implications for leaders and their organizations. Past work has underscored the importance of justice for a wide array of outcomes (Cohen-Charash & Spector 2001; Colquitt et al. 2001, 2013). However, the extent to which leaders are free to treat their employees justly varies depending on the type of justice in question. Distributive justice and procedural justice often largely depend on the organization's top-level policies and procedures, such as their formal compensation and promotion systems. In contrast, leaders have significant control over the extent to which they treat their followers with respect and dignity, offer clear explanations for their actions, and show concern for them (Scott et al. 2014). Thus, interactional justice represents a useful starting point for leaders wishing to improve their employees' justice experiences in the workplace. Similarly, interactional justice represents a potentially useful starting point for training and selection programs aimed at ensuring high-quality leader–follower relationships. In sum, consistent with previous research findings (e.g., Cropanzano et al. 2002; Erdogan & Liden 2006; Masterson et al. 2000), our research underscores the importance of interactional justice. To forge high-quality relationships, leaders must treat their employees with dignity and respect, and communicate with them transparently.

Beyond the importance of interactional justice for individual relationships, our research demonstrates that leaders should not be selective in their utilization of interactional justice. When leaders treat some employees with low levels of interactional justice, other followers are bound to take note and adjust their behaviors accordingly. Thus, even among employees who are low performers, low status, or otherwise outside the scope of a leader's daily focus, dignity and respect are vital. As our findings indicated, leader–follower relationships do not exist in a vacuum. Each relationship that a leader forges with his or her followers sends signals about the leader's morality and likely future behaviors that can influence how the leader is perceived and treated. We thus encourage leaders to be sensitive to how they treat all of their employees on a daily basis, and not simply focus on the followers they deem to be most important in their everyday interactions.

Limitations and future research

Several limitations of our research should be noted, highlighting important avenues for future research. First, it is important to note that the full complexities of the relationship between interactional justice and LMX remain somewhat unclear (Masterson & Lenses 2015). Although we followed prior justice work (e.g., De Cremer et al. 2005; Zapata-Phelan et al. 2009) to experimentally manipulate interactional justice and interactional justice differentiation in Study 1 and hence were able to establish causal inferences, it is still possible to theorize more complex relationships among our focal variables. For instance, it could still be argued that interactional justice exerts a reciprocal causal effect LMX. Social exchange theory suggests that LMX is best conceptualized as a relational outcome of fair treatment (Erdogan & Liden 2006; Masterson et al. 2000), and as a contextual determinant of employee performance (Graen & Uhl-Bien 1995; Tierney et al. 1999). However, we urge future research to look beyond an “either/or” approach to the link between interactional justice and LMX. For example, future research might benefit from exploring nonlinear relationships between the two phenomena, as well as their evolution over time via longitudinal designs.

Second, we note that we did not directly test the role of employees' psychological reactions toward interactional justice differentiation in our empirical model. For instance, although we theorized that uncertainty perceptions might play a role in explaining the mitigating effect of interactional justice differentiation on the interactional justice–LMX relationship, we did not measure this mechanism directly. Future research can extend the social exchange arguments presented in this paper by directly measuring the specific instrumental considerations (e.g., status uncertainty) through which interactional justice differentiation influences employee outcomes. In addition to directly examining the explanatory power of uncertainty management theory (Lind & Van den Bos 2002) in our model, future research can also expand upon the deontic justice perspective by directly examining the specific moral reactions (e.g., moral anger) through which interactional justice differentiation affects employee outcomes.

A third conceptual limitation of the current work is that we only considered how leaders treat their followers through the lens of differentiation. Although our research is one of the first to consider interactional justice differentiation, we suggest that leaders may engage in interactional justice differentiation in a variety of ways, with different theoretical implications. For example, leaders may treat two groups of followers differently (i.e., separation), or treat one follower especially well but not the others (i.e., disparity; Harrison & Klein 2007). Different forms of differentiation may affect other follower outcomes in addition to the ones we examined. For example, if a leader exhibits a high level of interactional justice differentiation by treating only one follower with respect and dignity, other followers may engage in social undermining behavior toward the coworker who is being treated well. Conversely, if a leader exhibits a high level of interactional justice differentiation by treating one group of followers nicely but not the other, inter-group conflict may result. Each of these configurations suggests unique implications for employees' individual experiences, and how they make sense of the organization and their roles within it (Weick 1995).

Finally, we encourage future scholars to carefully consider the similarities, differences, and linkages between justice differentiation and other group-level justice constructs, most notably justice climate and climate strength. Looking first to justice climate, we note that although we controlled for the direct influence of justice climate on LMX in our regression analyses, justice climate may still affect the positive relationship between interactional justice and LMX (Mayer, Nishii, Schneider, & Goldstein 2007) and even influence the interactive effects of interactional justice with interactional justice differentiation on LMX.

Whereas justice differentiation is rooted within the literature on the broader concept of differentiated leadership, reflecting a leader's intentional, differential treatment of and interactions with his or her followers (Wu et al. 2010; p. 90), the construct of justice climate strength in turn captures the level of agreement among a group's members with respect to their climate perceptions (Whitman, Carpenter, Horner, & Bernerth 2012). We note that although our operationalization of interactional justice differentiation (i.e., the within-group *SD* of members' individual scores) is consistent with prior studies on differentiated leadership (e.g., Chen et al. 2015; Chen et al. 2014), it is only based on followers' perceptions. Thus, it is a potentially incomplete reflection of the concept of differentiation. We encourage future researchers to assess justice differentiation in a more comprehensive manner and directly consider its relationship to justice climate strength.

Conclusion

For many years, organizational justice scholars have suggested that interactional justice plays a pivotal role in facilitating high-quality LMX, with downstream implications for employee performance. However, the broader context in which these effects unfold has received scarce attention. Our study extends this literature by demonstrating the crucial role of interactional justice differentiation in the impact of interactional justice on LMX, task performance, and creative performance. Drawing from social exchange and deontic justice theories, we demonstrate that employees' perceptions of their leaders are determined not only as a function of how they themselves are treated but also as a function of how other members of their groups are treated. Through this research, we emphasize the role of justice differentiation in the development of a deeper understanding of organizational justice.

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Appendix: A sample scenario used in Study 1

Instructions

This is a study of interpersonal relationships. We are interested in knowing how you would respond to an interpersonal situation in the workplace. First, you will read some background information about you and another person. Then, you will be asked to respond to a series of questions. Please read the information carefully before responding to the questions.

[High Interactional Justice/High Interactional Justice Differentiation]

John is your boss at a Mid-sized consulting firm based here in ###. He has worked at the firm for about 15 years and has been your boss for the past 2 years. You see each other frequently and discuss client projects with each other on a daily basis.

John generally treats you with respect and dignity. He is kind and considerate and deals with you in a truthful manner. When he makes decisions that affect your job, he is sensitive to your personal needs and offers explanations for his decisions that make sense to you.

John treats some of his other employees this way, but he treats others very differently. For instance, he treats some with respect and dignity, but not others. Similarly, he is kind and considerate to some employees, but is not to others. Whereas he offers sensible explanations to some employees when making decisions that affect their jobs, he does not offer explanations to others.