

In-Role Perceptions Buffer the Negative Impact of Low LMX on Helping and Enhance the Positive Impact of High LMX on Voice

Linn Van Dyne
Michigan State University

Dishan Kamdar
Indian School of Business

Jeffrey Joireman
Washington State University

In 2 field studies, we demonstrated that the relationship between leader–member exchange (LMX) and organizational citizenship behavior (OCB) is moderated by employee role perceptions—the extent to which employees view specific types of OCB as in-role behavior (IRB) versus extra-role behavior (ERB). In addition, we predicted and demonstrated that the form of these interactions differs on the basis of the type of OCB. For helping (aimed at the supervisor or the organization), results show a substitute effect in which viewing helping as IRB buffers the negative effect of low-quality LMX on helping. In contrast, for voice (aimed at the supervisor or the organization), results demonstrate an enhancer effect in which viewing voice as IRB amplifies the positive effect of high-quality LMX on voice. We discuss theoretical and practical implications with an emphasis on how conceptual differences in types of OCB influence the interactive effects of role perceptions on LMX–OCB relationships.

Keywords: helping, voice, OCB, LMX, role perceptions

Organizations often benefit when employees help one another and voice suggestions for constructive change (Van Dyne, Cummings, & McLean Parks, 1995). Employees in the same job, however, often differ in the extent to which they view these organizational citizenship behaviors (OCBs) as part of their jobs (Morrison, 1994; Tepper, Lockhart, & Hoobler, 2001; Tepper & Taylor, 2003). Some employees may view helping and/or voice to be core aspects of their jobs (i.e., in-role behavior [IRB]), whereas others may view helping and/or voice as going above and beyond the call of duty (i.e., extra-role behavior [ERB]). Building on recent theory and research, we argue that these role perceptions have a significant impact on employees' willingness to engage in helping and voice in two ways.

To begin, we assume that employees will be more likely to engage in helping and voice when they view these behaviors as IRB. Second, and more important, we expect that these role perceptions will moderate the impact of leader–member exchange (LMX) relationships on helping and voice. In general, we anticipate that employees will be more likely to engage in helping and voice when they have a high-quality LMX relationship with their supervisor. We argue, however, that the nature of the relationship

between LMX and OCBs will vary as a function of employees' role perceptions, and we predict that the form of the interaction between LMX and role perceptions will be fundamentally different for helping and voice. Specifically, we expect that the relationship between LMX and helping will be weaker when employees view helping as IRB. By contrast, we expect that the relationship between LMX and voice will be stronger when employees view voice as IRB. The contrasting nature of these interactions suggests that in-role perceptions buffer the negative impact of low-quality LMX relationships on helping and enhance the positive impact of high-quality LMX relationships on voice.

Readers acquainted with work on OCBs will no doubt recognize some familiar themes in our work. For example, numerous studies have shown that employees are more likely to engage in behaviors that they believe are in-role (e.g., Kamdar, McAllister, & Turban, 2006; McAllister, Kamdar, Morrison, & Turban, 2007; Tepper et al., 2001), and they are more likely to perform OCB when they have a good relationship with their supervisor (Ilies, Nahrgang, & Morgeson, 2007; Organ, Podsakoff, & MacKenzie, 2006). Moreover, research has shown that role perceptions moderate the impact of fairness considerations (i.e., procedural justice) on OCBs (Kamdar et al., 2006; McAllister et al., 2007; Tepper et al., 2001; Tepper & Taylor, 2003; Zellars, Tepper, & Duffy, 2002), and one recent study has reported contrasting interactions between procedural justice and role perceptions on helping and taking charge (McAllister et al., 2007).

From this perspective, our work is clearly linked to existing research. At the same time, we offer two unique contributions. First, although previous research has shown that quality of LMX relationships predicts OCBs, the majority of this work has focused on affiliative behaviors (such as helping or cooperation; e.g., Ilies et al., 2007; Liden, Sparrowe, & Wayne, 1997). Thus, we know

Linn Van Dyne, Eli Broad Graduate School of Management, Michigan State University; Dishan Kamdar, Indian School of Business, Hyderabad, India; Jeffrey Joireman, Department of Marketing, Washington State University.

We thank M. Spitzmuller and A. Tekleab for helpful comments on earlier versions of this article.

Correspondence concerning this article should be addressed to Linn Van Dyne, N476 Business College Complex, Eli Broad Graduate School of Management, Michigan State University, East Lansing, MI 48824. E-mail: vandyne@msu.edu

little about how LMX might predict change-oriented OCBs (such as voice or taking charge). Accordingly, the present work complements past work on LMX and OCBs by examining the relationship between LMX and voice behavior. Second, although several studies have explored how role perceptions moderate the impact of procedural justice on OCBs (including change-oriented OCBs, such as taking charge; McAllister et al., 2007), little is known about how role perceptions might moderate the impact of LMX on helping and voice. Although perceptions of procedural justice and perceptions of LMX quality are likely to be positively related, these constructs are not identical (e.g., Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Masterson, Lewis, Goldman, & Taylor, 2000). As such, the present study complements recent work by examining whether interactions between role perceptions and LMX conceptually replicate the interactions that McAllister et al. (2007) reported between role perceptions and procedural justice. Below, we review key differences between helping and voice, outline the expected impact of LMX and role perceptions on these two outcomes, and explain how role perceptions are likely to differentially moderate the impact of LMX on helping and voice.

Similarities and Differences Between Helping and Voice

Helping and voice are both constructively intended. Helping is affiliative behavior (Van Dyne et al., 1995); it is interpersonal, cooperative, and noncontroversial (McAllister et al., 2007). In contrast, voice is change-oriented behavior (Van Dyne et al., 1995); it is constructive challenge to the status quo and likely involves more risk than helping (LePine & Van Dyne, 1998). As noted earlier, one of our fundamental assumptions is that the nature of the interactions between LMX and role perceptions will differ for helping and voice. In line with this assumption, four recent studies indicate that the antecedents of helping and voice often differ. As an example, LePine and Van Dyne (2001) showed a positive relationship between agreeableness and cooperative behavior and a negative relationship between agreeableness and voice. In another study, Stamper and Van Dyne (2001) showed that bureaucratic organizational culture lowered helping but had no effect on voice. In a more recent study, Graham and Van Dyne (2006) showed positive effects of justice beliefs and self-esteem on change-oriented OCB and no effects on affiliative OCB. Finally, as noted earlier, McAllister et al. (2007) demonstrated that the interaction between procedural justice and role perceptions differed for helping and voice.

As a set, these studies suggest that helping and voice, although both constructive behaviors, are likely to be influenced by different processes, and they are likely to yield different patterns of interactions between role perceptions and LMX. Before outlining our contrasting interaction predictions for helping and voice, we first consider the main effects of LMX and role perceptions, which we assume will be similar for helping and voice.

LMX, Helping, and Voice

Helping and voice can be viewed as types of OCB (Van Dyne & LePine, 1998). The dominant theoretical explanation for why people engage in OCBs was offered by Organ (1988), who grounded his conceptualization of OCB in social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960). In

short, when employees believe that they are being treated well, they should feel a need to reciprocate this favorable treatment and should contribute to the organization above and beyond the call of duty.

One important factor that determines how well employees believe that they are being treated is the quality of the employee's relationship with his or her supervisor. Historically, the quality of the supervisor-employee relationship has often been framed in terms of LMX theory (Liden et al., 1997). The basic premise behind LMX is that leaders differentiate between employees in their work group (Dansereau, Graen, & Haga, 1975) and do not use the same leadership style with all subordinates. High-quality LMX relationships are characterized by liking, loyalty, professional respect, and work contributions (Liden & Maslyn, 1998). These high LMX relationships, in turn, have been shown to predict higher levels of affiliative OCB, such as helping (for reviews, see Gerstner & Day, 1997; Graen & Uhl-Bien, 1995; Liden et al., 1997). Indeed, in their recent meta-analysis, Ilies et al. (2007) reported an average correlation of .38 between LMX and affiliative OCB.

Although we are not aware of research on LMX and change-oriented OCB, several studies show that the quality of supervisor relationships predicts voice. For example, Detert and Burris (2007) and Ashford, Rothbard, Piderit, and Dutton (1998) showed that management receptiveness to new ideas predicted voice and issue selling, defined as speaking up about gender equity issues, whereas Edmondson (1999) and Detert and Burris (2007) showed relationships between psychological safety and voice. Extending these arguments, we suggest that the liking, loyalty, and respect characteristic of high-quality LMX relationships create contexts in which employees are willing to speak up and express their ideas for change. Accordingly, we predicted the following:

Hypothesis 1: Employees will be more likely to engage in helping (Hypothesis 1a) and voice (Hypothesis 1b) when they perceive a high-quality LMX relationship with their supervisor.

Role Perceptions, Helping, and Voice

Another important predictor of helping and voice is likely to be an employee's role perceptions. Formally defined, roles are the set of expected activities for a specific position. According to Katz and Kahn (1966), roles represent the "building blocks of social systems" (p. 219). Employees and supervisors, however, do not always agree on what constitutes an employee's job. Indeed, several theoretical perspectives include the idea that role perceptions often differ across people, situations, and time. For example, role making (Graen, 1976) and job crafting (Wrzesniewski & Dutton, 2001) describe the initiative that employees use to change their roles to fit personal strengths and preferences. Social information processing theory (Salancik & Pfeffer, 1978) argues that individuals often differ in role perceptions because they rely on different social cues. Also, psychological contracts theory suggests that employee roles are not fixed and that employees establish their roles via environmental cues from formal and informal structures of the organization (Robinson & Morrison, 1995).

As Morrison (1994) has noted, differences in role perceptions are important because they help us understand whether an employee engages in a particular form of OCB because he/she wishes

to exert extra effort to benefit the organization or because he/she sees it as part of the job. Differences in perception are also important because they, in turn, predict employee behaviors (Hofmann, Morgeson, & Gerrass, 2003; Kamdar et al., 2006; Lam, Hui, & Law, 1999; Tepper et al., 2001; Tepper & Taylor, 2003). When employees view a specific behavior as in-role, it occurs more frequently than when the same behavior is viewed as extra-role (Coyle-Shapiro & Kessler, 2002; Coyle-Shapiro, Kessler, & Purcell, 2004; Morrison, 1994; Zellars et al., 2002). This is because employees generally conform to role expectations to obtain rewards and avoid sanctions. Although most research to date focuses on role perceptions and affiliative OCB, one study (McAllister et al., 2007) showed that role perceptions predicted helping (affiliative) and taking charge (change-oriented) behaviors. We seek to replicate their results by examining how role perceptions predict helping and voice. Consistent with prior theory and research, we predicted the following:

Hypothesis 2: Employees will be more likely to engage in helping (Hypothesis 2a) and voice (Hypothesis 2b) when they perceive these behaviors to be a part of their job (i.e., as IRBs).

Having advanced this hypothesis, we wish to note an important difference between our operationalization of role perceptions and that offered by McAllister et al. (2007). In the present study, we assess role perceptions by asking the extent to which an employee views helping/voice items as part of the job and believes that these behaviors are rewarded. By contrast, McAllister et al. provided a more nuanced treatment of role perceptions, differentiating between four types of role perceptions: role breadth (the extent to which a given behavior is seen as part of one's job), instrumentality (the extent to which a given behavior is seen as linked with rewards/punishment), efficacy (the extent to which an employee believes he/she can perform the OCB in question), and discretion (the extent to which an employee believes he/she has a choice about whether to engage in a certain type of OCB). Because we collected our data prior to McAllister et al.'s study, we did not differentiate between these role perceptions. Instead, we assessed role breadth and instrumentality. As we note in the General Discussion section, future research building on our work would benefit by drawing on McAllister et al.'s distinctions.

LMX × Role Perception Interactions

To this point, we have outlined two relatively straightforward sets of main effect predictions. Namely, helping and voice will be higher when employees have high-quality LMX relationships and when they view helping and voice as part of their job. As noted earlier, drawing on the recent work by McAllister et al. (2007), we also anticipate that LMX and role perceptions will interact and that the nature of these interactions will differ for helping and voice. Consistent with past theory and research (Kamdar et al., 2006; McAllister et al., 2007; Tepper et al., 2001), we treat role perceptions as a moderator of the impact of LMX on helping and voice. In setting up our predictions, we also draw on a distinction in the leadership literature between two types of moderators known as leadership substitutes and leadership enhancers (Howell, Dorfman, & Kerr, 1986; Kerr & Jermier, 1978; Podsakoff, MacKenzie, & Bommer, 1996).

Leadership Substitute and Leadership Enhancement Interactions

According to Howell et al. (1986), *leadership substitutes* are features of the person, situation, or task that can render leadership "unnecessary" (p. 92).¹ For example, although positive LMX relationships are likely to predict OCBs, it is possible that some features of the person (e.g., the perception that a specific behavior is part of one's job) may lead to high levels of OCBs even in the face of a poor quality LMX relationship, as illustrated in the left half of Figure 1. From this perspective, in-role perceptions would serve as a substitute for low-quality LMX relationships in predicting higher levels of OCBs, and OCBs should thus be lower only when LMX is low and the OCB is seen as ERB. By contrast, Howell et al. defined *leadership enhancers* as features of the person, situation, or task that magnify or enhance the impact of leadership variables on employee behavior. For example, again assuming that positive LMX relationships predict higher OCBs, it is possible that some features of the person (e.g., the perception that a specific behavior is part of one's job) may serve to strengthen or enhance the relationship between LMX and OCBs, as illustrated in the right half of Figure 1. In this case, OCBs should be higher only when LMX is high and the OCB is seen as IRB.²

Application to LMX and Role Perceptions

To date, most research relating LMX and OCBs has focused on main effects (Ilies et al., 2007). Thus, we know less about boundary conditions that constrain LMX-OCB relationships (Erdogan & Enders, 2007). This is an important gap because, as Ilies et al. (2007) noted in their recent review, past studies have shown notable differences in the strength of the relationship between LMX and OCBs, which strongly suggests the presence of moderators. In the present study, we aimed to address this gap in the literature by examining whether role perceptions would moderate the relationship between LMX and OCBs.

Although we are aware of no research that has examined how role perceptions moderate the impact of LMX on OCBs, research has demonstrated that role perceptions moderate the impact of procedural justice on helping, personal industry (Tepper et al.,

¹ Howell et al. (1986) also noted that leadership substitutes can render leadership "impossible" (p. 92). Because we view in-role perceptions as facilitating helping in the absence of high LMX (e.g., left half of Figure 1), we have chosen to highlight the view that substitutes can make leadership unnecessary, rather than impossible.

² Technically, the interaction shown in the right half of Figure 1 can also be interpreted as indicating that ERB operates as a "neutralizer" of the impact of LMX on OCBs (Howell et al., 1986). In an effort to maintain consistency in the language we used across our two interaction predictions (for helping and voice), we chose to present IRB as an "enhancer" rather than ERB as a neutralizer of the relationship between LMX and voice. As illustrated in the General Discussion section, framing the interactions in this way allows us to focus on a unifying practical implication, namely, to encourage helping and voice it is important to encourage employees to view these behaviors as in-role. Although not our primary focus, Figure 1 also suggests that helping is generally higher than voice (on the basis of averaging the four points in each part of the figure). Indeed, in both studies, helping was higher than voice.

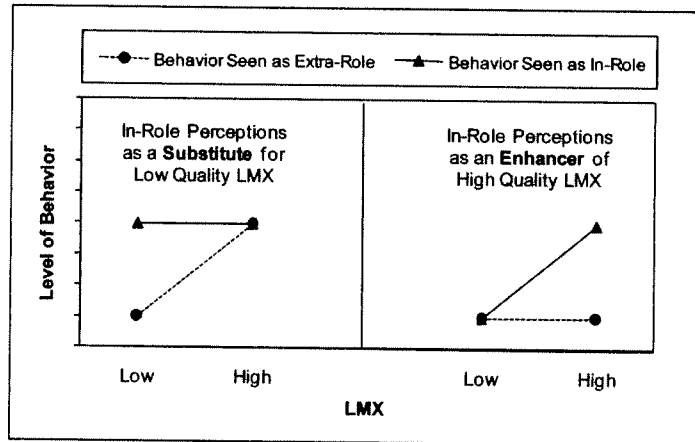


Figure 1. Illustration of in-role perceptions as a substitute for low-quality leader-member exchange (LMX) versus an enhancer of high-quality LMX relationships.

2001), loyal boosterism, and interpersonal helping (Kamdar et al., 2006). More recently, McAllister et al. (2007) advanced this research by demonstrating that the nature of the interactions between role perceptions and procedural justice differs for helping and taking charge. Specifically, their results for helping showed a substitute effect, such that low levels of procedural justice reduced helping when helping was viewed as ERB but had less impact on helping when helping was viewed as IRB. Restated, helping tended to be lower only when procedural justice was low and employees viewed helping as ERB. In contrast, results for taking charge showed an enhancement effect, such that high levels of procedural justice increased taking charge, and this relationship was stronger when taking charge was viewed as IRB. Restated, taking charge tended to be higher only when procedural justice was high and employees viewed taking charge as IRB. In interpreting these interactions, McAllister et al. emphasized fundamental differences between affiliative behaviors (such as helping) and change-oriented behaviors (such as taking charge). McAllister et al. commented that this finding “provides corroboration for the claim that change-oriented citizenship behavior may not be driven by the same conditions as other forms of OCB because of the risk inherent in questioning the status quo” (p. 1209).

We aimed to extend McAllister et al.’s (2007) findings using LMX. Although procedural justice and LMX are not the same, both address the extent to which employees believe that they are being treated well, and both are governed by the norm of reciprocity (Gouldner, 1960). As such, we expected to find role perception \times LMX interactions that are similar to the interactions reported by McAllister et al. between role perceptions and procedural justice.

In-Role Perceptions Substitute for Low-Quality LMX in Predicting Helping

Drawing on the work of McAllister et al. (2007), we propose that in-role perceptions will serve as a substitute for low-quality LMX in predicting helping. More specifically, we expect that LMX and role perceptions will interact in a form similar to that shown in the left half of Figure 1. Specifically, lower LMX will

lead to lower helping when helping is viewed as ERB, but LMX will be unrelated to helping when helping is viewed as IRB. Reframed, we expect helping to be lower only when LMX is low and employees view helping as ERB. This reasoning is consistent with Organ’s (1988) rationale that employees have the freedom to increase/decrease discretionary helping in response to how they are treated, whereas they generally feel constrained to perform IRBs regardless of their attitudes. Our prediction is also consistent with the interactions demonstrated in research on procedural justice, role perceptions, and affiliative OCBs (Kamdar et al., 2006; McAllister et al., 2007; Tepper et al., 2001). Accordingly, we predicted the following:

Hypothesis 3: Helping role perceptions will moderate the relationship between LMX and helping, such that lower LMX will lead to lower helping when helping is viewed as ERB but not when helping is viewed as IRB. Helping should, accordingly, be lower only when LMX is low and helping is viewed as ERB.

In-Role Perceptions Enhance the Impact of High-Quality LMX on Voice

Drawing on the work of McAllister et al. (2007), we also propose that in-role perceptions will enhance the relationship between LMX and voice. More specifically, we expect LMX and role perceptions to interact in a form similar to that shown in the right half of Figure 1. Thus, voice will be more strongly related to LMX when employees view voice as IRB. Restated, voice should be higher only when LMX is high and employees view voice as IRB. This reasoning is consistent with the findings of McAllister et al., who demonstrated that procedural justice was more strongly related to taking charge when taking charge was viewed as part of the job. Commenting on this interaction, they observed that taking charge was generally low because employees are reluctant to engage in behaviors that attempt to change the status quo (Morrison & Phelps, 1999). We assume a similar process underlies voice, because voice and taking charge are both change-oriented behaviors directed at constructively modifying the status quo. Given the

potential risk associated with voice, at least two factors would seem necessary for encouraging an employee to challenge the status quo: first—a belief that voicing one’s opinion is an expected part of one’s job, and second—believing one’s supervisor will be willing to entertain new ideas. The latter, in turn, should be more likely among employees who perceive that they have a high-quality (LMX) relationship with their supervisor characterized by loyalty, liking, and professional respect. On the basis of this reasoning, we predicted the following:

Hypothesis 4: Voice role perceptions will moderate the relationship between LMX and voice, such that higher LMX will lead to higher levels of voice when voice is viewed as IRB but not when voice is viewed as ERB. Voice should, accordingly, be higher only when LMX is high and employees view voice as IRB.

Study 1 Method

Participants and Procedure

Participants were 218 engineers and their supervisors working for a Fortune 500 oil refinery in India (70% response rate). The employee sample was 94% male, with a mean age of 32 years (range = 20–53) and 5.9 years of tenure; 82% had at least a bachelor’s degree. Employees completed surveys in groups at company facilities, as part of a larger study on work attitudes and behavior. Participants could withdraw at any time and were assured of response confidentiality. Supervisors provided data on employee helping and voice at the same time in a separate room.

Measures

Helping and voice. Supervisors ($n = 34$) rated employee helping and voice (average ratings per supervisor = 6.5; minimum = 1, maximum = 10) using Van Dyne and LePine’s (1998) seven-item scales (1 = *strongly disagree*, 7 = *strongly agree*) adapted to focus on the supervisor as the target of helping (Help-S; $\alpha = .92$) and the organization as the target of voice (Voice-O; $\alpha = .90$). Example items include the following: “This particular employee volunteers to do things that help me with my work”; “This particular employee speaks up and encourages others to get involved in issues that effect the organization.” Because most supervisors rated

multiple employees, we conducted 30° within and between analysis (WABA) tests (helping $E = .74$; voice $E = .38$) to assess sources of variance. Results indicated that lack of independence was not a problem, as neither E value exceeded the cutoff of 1.73. As such, we analyzed relationships at the individual level (Danse-reau, Alutto, & Yammarino, 1984).

Role perceptions and LMX. We followed prior research (Tepper et al., 2001; Tepper & Taylor, 2003; Zellars et al., 2002) and had employees assess the extent to which they viewed the same 14 items that supervisors completed for helping ($\alpha = .90$) and voice ($\alpha = .88$) as part of their job responsibilities (1 = *Definitely not part of my job ~ I am not rewarded for doing this or punished for not doing this*; 7 = *Definitely part of my job ~ I am rewarded for doing this or punished for not doing this*). Higher scores indicate IRB perceptions, and lower scores indicate ERB perceptions. We assessed LMX with employee responses to Liden and Maslyn’s (1998) 12-item scale (ranging from 1 = *strongly disagree* to 7 = *strongly agree*; $\alpha = .91$).

Discriminant validity. We assessed the discriminant validity of the constructs with confirmatory factor analysis. We first examined a five-factor model (helping and voice OCB, helping and voice role perceptions, and LMX). This model had good fit to the observed covariance matrix, $\chi^2(453) = 758.68$, comparative fit index (CFI) = .93, Tucker–Lewis index (TLI) = .92, root-mean-square error of approximation (RMSEA) = .05, with all standardized factor loadings being significant (.47–.96, $p < .001$). We compared the fit of this five-factor model with a series of conceptually reasonable competing models. Table 1 summarizes these results and shows that the hypothesized model (Model 4) with five factors had the best fit.

To further establish discriminant validity, we examined whether the average variance extracted (AVE) that each construct accounts for in its own indicators was greater than the shared variance among construct pairs (i.e., squared construct intercorrelations; Fornell & Larcker, 1981; MacKenzie, Podsakoff, & Paine, 1999) and found that this was always the case. Fornell and Larcker (1981) proposed that the AVE statistic also serves as an index of convergent validity or reliability, with AVE statistics of .50 and above considered adequate. Our AVE ranged from .63 to .86, providing strong support for convergent validity. Taken together, the findings provide rigorous support for discriminant validity of

Table 1
Confirmatory Factor Analysis of Alternative Models (Study 1)

Model	Description	χ^2	df	CFI	TLI	RMSEA	Comparison with Model 4	
							$\Delta\chi^2$	Δdf
Model 1	One-factor model	2,556.85	463	.52	.48	.14	1,798.17***	10
Model 2	Two-factor model ^a	2,378.74	462	.56	.53	.14	1,620.06***	9
Model 3	Three-factor model ^b	2,168.55	460	.60	.58	.13	1,409.87***	7
Model 4	Five-factor model ^c	758.68	453	.93	.92	.05		

Note. $N = 218$. CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root-mean-square error of approximation.
^a Supervisor assessments (two types of organizational citizenship behavior [OCB]) and employee assessments (two role perceptions and leader–member exchange [LMX]). ^bOCB (two types of OCB), role perceptions (two role perceptions), and LMX. ^cHypothesized model: two types of OCB, two role perceptions, and LMX.
 *** $p < .001$.

Table 2
Correlations and Descriptive Statistics (Study 1)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Gender ^a	0.94	0.24	—						
2. Work Experience	9.23	6.64	.07	—					
3. LMX	4.13	1.12	-.07	.04	(.91)				
4. Role perceptions Help-S ^b	4.22	1.47	.04	-.06	.46**	(.91)			
5. Role perceptions Voice-O ^b	4.19	1.27	-.18**	-.04	.43**	.15*	(.88)		
6. Help-S	4.83	1.16	-.09	-.03	.53**	.54**	.31**	(.92)	
7. Voice-O	3.53	1.19	-.01	.07	.50**	.37**	.59**	.31**	(.90)

Note. *N* = 218. Cronbach's alphas are shown on the diagonal in parentheses. LMX = leader-member exchange; Help-S = helping aimed at the supervisor; Voice-O = voice aimed at the organization.

^a Gender: 0 = female; 1 = male. ^b Role perceptions: Higher scores = more in-role behavior.

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

our constructs. To form scores on the various measures, we therefore averaged the items for each respective scale.

Study 1 Results

We tested our hypotheses using hierarchical regression. In Step 1, we entered gender (0 = female, 1 = male) and years of full time work experience as controls (Van Dyne & LePine, 1998). In Steps 2 and 3, we entered LMX and role perceptions. In Step 4, we entered the LMX × Role Perception interaction. To avoid multicollinearity problems, prior to the analyses, we centered the main effects (Cohen, Cohen, West, & Aiken, 2003). With significant interactions, we plotted simple slopes of the relationship between LMX and the outcome of interest at +1 *SD* (IRB perceptions) and -1 *SD* (ERB perceptions) on role perceptions (Cohen et al., 2003).³

Table 2 reports descriptive statistics, correlations, and reliabilities, whereas Table 3 presents the hierarchical regression results. As can be seen in Table 3, consistent with Hypothesis 1, higher LMX was related to helping (Hypothesis 1a: $\beta = .36$, $p < .001$) and voice (Hypothesis 1b: $\beta = .32$, $p < .001$), and, consistent with H2, matched in-role perceptions predicted Help-S (Hypothesis 2a: $\beta = .38$, $p < .001$) and Voice-O (Hypothesis 2b: $\beta = .43$, $p < .001$). More important, in Step 4, the interaction between LMX and role perceptions on helping was significant ($\beta = -.23$, $p < .001$), and the interaction was consistent with the hypothesis (Hypothesis 3) that in-role perceptions would substitute for low LMX (see Figure 2). Simple slope analyses showed, as expected, that higher LMX was related to higher helping when helping was viewed as ERB ($\beta = .58$, $p < .001$), whereas LMX was not related to helping when helping was viewed as IRB ($\beta = .13$, *ns*). Viewed from another perspective, although low LMX was associated with reduced helping, this did not occur when employees viewed helping as IRB. This is consistent with the hypothesis that IRB would substitute for low-quality LMX in predicting helping. Helping was lower only when LMX was low and helping was viewed as ERB.

Hypothesis 4 proposed that in-role perceptions would enhance the LMX-voice relationship. Consistent with this expectation, results showed a significant interaction between LMX and role perceptions in predicting voice ($\beta = .27$, $p < .001$). As predicted,

simple slope analysis showed that LMX was not related to voice when it was viewed as ERB ($\beta = .03$, *ns*) but was positively related to voice when voice was viewed as IRB ($\beta = .61$, $p < .001$), indicating that IRB role perceptions enhanced the relationship between LMX and voice (see Figure 3). Also consistent with Hypothesis 4, voice was higher only when LMX was high and voice was viewed as IRB.

Study 1 Discussion

Results of Study 1 demonstrate the benefits of considering role perceptions as moderators of the relationship between LMX and OCB. In sum, the results show that employees are more likely to engage in Help-S and Voice-O when they have a high-quality LMX relationship with their supervisor and perceive helping/voice to be IRB. More important, the results reveal a contrasting pattern of interactions between LMX and role perceptions for helping and voice that conceptually replicate and extend a similar pattern of interactions between procedural justice and role perceptions reported by McAllister et al. (2007). Specifically, the results suggest that in-role perceptions can substitute for low-quality LMX when predicting helping: Even when employees had low-quality LMX relationships, they helped when they viewed helping as part of the job. Thus, helping was lower only when LMX was low *and* helping was viewed as ERB. In contrast, the interaction for voice revealed that in-role perceptions enhance the relationship between high-quality LMX and voice. Reframed, voice was higher only when LMX was high *and* employees viewed voice as IRB.

Although promising, Study 1 confounded type of OCB (helping and voice) with target of OCB (supervisor and organization). This confounding is problematic because it prevents us from firmly concluding that the contrasting interactions were due to fundamental differences in types of OCB (e.g., helping is

³ As noted in the Study 1 Method section, role perceptions were coded such that higher scores reflect a stronger belief that the behavior in question is IRB. A close inspection of the means for role perceptions (see Tables 2 and 5) suggests that +1 *SD* does, in fact, correspond to in-role perceptions (it is above the scale midpoint of 4), whereas -1 *SD* corresponds to ERB (it is below the scale midpoint of 4).

Table 3
Regression Results for Help-S and Voice-O (Study 1)

Variable	Help-S				Voice-O			
	Step 1	Step 2	Step 3	Step 4	Step 1	Step 2	Step 3	Step 4
Gender ^a	-.09	-.05	-.08	-.07	-.01	.03	.10	.07
Work experience	-.02	-.05	-.01	-.02	.07	.05	.07	.07
LMX		.53***	.35***	.36***		.51***	.30***	.32***
RPs ^b			.38***	.38***			.49***	.43***
LMX × RP				-.23***				.27***
ΔR ²	.01	.27	.12	.05	.01	.25	.19	.06
R ²	.01	.28	.40	.45	.01	.26	.45	.51
ΔF	1.00	81.47***	40.08***	20.13***	0.53	73.29***	72.02***	29.77***
dfs	2, 215	1, 214	1, 213	1, 212	2, 215	1, 214	1, 213	1, 212
F	1.00	28.07***	34.91***	34.47***	0.53	24.91***	42.88***	44.89***
dfs	2, 215	3, 214	4, 213	5, 212	2, 215	3, 214	4, 213	5, 212
Adjusted R ²				.43				.50

Note. N = 218. Results are standardized regression weights. Help-S = helping aimed at the supervisor; Voice-O = voice aimed at the organization; LMX = leader-member exchange; RP = role perception.
^a Gender: 0 = female, 1 = male. ^b RPs: Higher scores = more in-role behavior; the helping equation includes role perceptions for Help-S, and the voice equation includes role perceptions for Voice-O.
 *** p < .001.

affiliative, and voice is change-oriented). Rather, because of the confound, it is possible that the contrasting interactions for helping and voice could have been due to differences in the target of the OCB (supervisor or organization). Accordingly, in Study 2, we attempted to replicate the interactions found in Study 1 with more refined conceptualizations of OCB that did not confound type of OCB and target of OCB. Specifically, we assessed helping targeted at the supervisor (Help-S) and helping targeted at the organization (Help-O). Likewise, we assessed voice targeted at the supervisor (Voice-S) and voice targeted at the organization (Voice-O). In addition to addressing the confound from Study 1, in Study 2, we evaluated the generalizability of our results using a sample from a different culture and organizational setting.

Study 2 Method

Participants and Procedure

Participants were 234 clerical and administrative employees and their immediate supervisors from three multinational banks in Singapore (82% response rate). The employee sample was 64% male, with a mean age of 33 years (range = 19–49) and 5.6 years of tenure; 84% had at least a bachelor’s degree. We used the same procedures as in Study 1.

Measures

Helping and voice. Supervisors (n = 36) rated the four types of OCB (average ratings per supervisor = 6.5; minimum = 4,

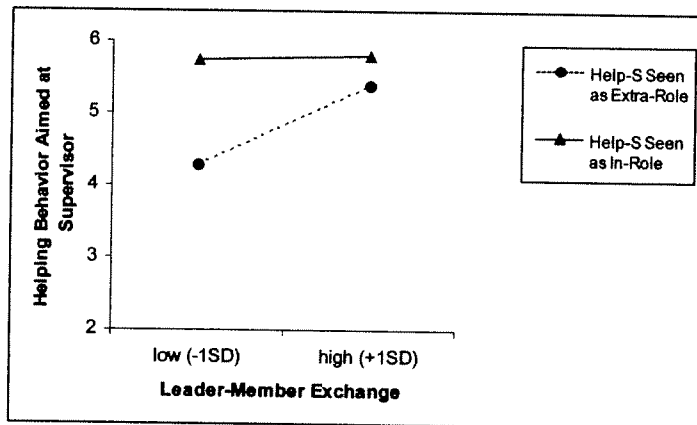


Figure 2. Study 1 interaction between leader-member exchange and role perceptions in predicting helping aimed at the supervisor (Help-S).

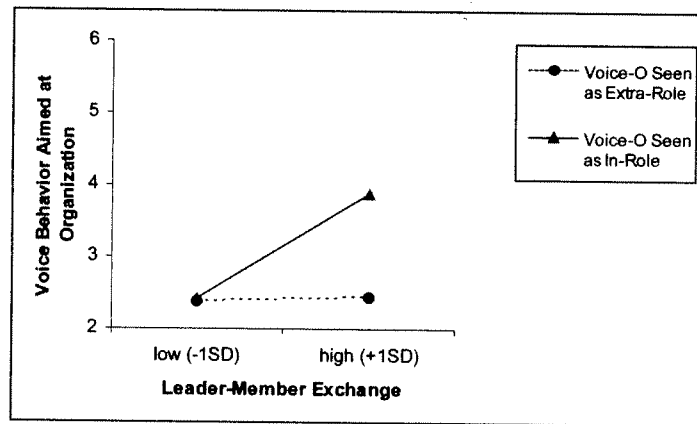


Figure 3. Study 1 interaction between leader-member exchange and role perceptions in predicting voice aimed at the organization (Voice-O).

maximum = 10). Because we included four types of OCB, we reduced the length of the helping and voice scales (Van Dyne & LePine, 1998) by using the five helping items and the five voice items with the highest loadings in Study 1 (e.g., "This particular employee volunteers to do things that help me with my work" [Help-S; $\alpha = .93$]; "This particular employee volunteers to do things that help the organization" [Help-O; $\alpha = .92$]; "This particular employee speaks up and encourages others to get involved in issues that affect me" [Voice-S; $\alpha = .92$]; and "This particular employee speaks up and encourages others to get involved in issues that affect the organization" [Voice-O; $\alpha = .88$]). The 30° WABA tests (Help-S $E = .34$; Help-O $E = .39$; Voice-S $E = .71$; Voice-O $E = .32$) supported individual level analysis (Dansereau et al., 1984).

Role perceptions and LMX. Employees provided data on the four role perceptions (e.g., Tepper et al., 2001)—Help-S ($\alpha = .90$), Help-O ($\alpha = .91$), Voice-S ($\alpha = .95$), and Voice-O ($\alpha = .94$)—and completed Liden and Maslyn's (1998) 12-item LMX scale ($\alpha = .91$).

Discriminant validity. A nine-factor confirmatory factor analysis model (four types of OCB, four matched role perceptions, and LMX) showed excellent fit to the observed covariance matrix, $\chi^2(866) = 1,041.18$, CFI = .98, TLI = .98, RMSEA = .03, and all standardized loadings were significant (.79–.97, $p < .001$). Table 4 summarizes comparisons with conceptually reasonable competing models, showing the best fit for the nine-factor model (Model 6). AVE analysis supported convergent (AVE = .83–.86) and discriminant validity (the AVE that each construct accounted for in its own indicators was greater than the shared variance among construct pairs).

Study 2 Results

Table 5 reports descriptive statistics, correlations, and reliabilities. Table 6 reports the hierarchical regression results. As a set, results replicated all of our findings from Study 1. In line

Table 4
Confirmatory Factor Analysis of Alternative Models (Study 2)

Model	Description	χ^2	df	CFI	TLI	RMSEA	Comparison with Model 6	
							$\Delta\chi^2$	Δdf
Model 1	One-factor model	6,093.70	902	.39	.36	.16	5,053.52***	36
Model 2	Two-factor model ^a	5,701.66	901	.44	.41	.15	4,660.48***	35
Model 3	Three-factor model ^b	5,009.37	899	.52	.50	.14	3,968.19***	33
Model 4	Five-factor model ^c	3,761.67	892	.67	.65	.12	2,720.49***	26
Model 5	Five-factor model ^d	3,645.55	892	.68	.66	.12	2,604.37***	26
Model 6	Nine-factor model ^e	1,041.18	866	.98	.98	.03		

Note. $N = 234$. CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root-mean-square error of approximation.

^aSupervisor assessments (four types of organizational citizenship behavior [OCB]) and employee assessments (four role perceptions and leader-member exchange [LMX]). ^bOCB (four types of OCB), role perceptions (four role perceptions), and LMX. ^cOCB directed toward supervisor (helping aimed at the supervisor [Help-S] and voice aimed at the supervisor [Voice-S]), OCB directed toward organization (helping aimed at the organization [Help-O] and voice aimed at the organization [Voice-O]), role perceptions directed toward supervisor (two role perceptions), role perceptions directed toward organization (two role perceptions), and LMX. ^dHelping (Help-S and Help-O), voice (Voice-S and Voice-O), role perceptions for helping (two role perceptions), role perceptions for voice (two role perceptions), and LMX. ^eHypothesized model: four types of OCB, four role perceptions, and LMX. *** $p < .001$.

Table 5
Correlations and Descriptive Statistics (Study 2)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Organization Dummy 1 ^a	0.26	0.44	—													
2. Organization Dummy 2 ^a	0.39	0.49	-.47**	—												
3. Organization Dummy 3 ^a	0.35	0.48	-.44**	-.59**	—											
4. Gender ^b	0.65	0.48	.01	.02	-.04	—										
5. Work experience	10.73	5.82	.08	-.10	.03	.06	—									
6. LMX	4.52	1.03	-.01	.04	-.03	.05	-.04	(.93)								
7. Role perceptions Help-S ^c	4.38	1.15	-.04	.13*	-.09	-.07	-.02	.35**	(.90)							
8. Role perceptions Help-O ^c	4.37	1.41	-.04	.04	.00	-.07	-.01	.33**	.41**	(.91)						
9. Role perceptions Voice-S ^c	4.27	1.65	-.09	.06	.02	-.11	-.13*	.28**	.50**	.45**	(.95)					
10. Role perceptions Voice-O ^c	4.14	1.51	-.01	.02	-.01	.01	-.02	.40**	.49**	.40**	.48**	(.94)				
11. Help-S	4.76	1.49	-.03	.08	-.06	.00	-.07	.34**	.49**	.37**	.30**	.38**	(.93)			
12. Help-O	4.14	1.42	-.04	.06	-.02	-.03	-.13*	.35**	.31**	.54**	.46**	.32**	.42**	(.92)		
13. Voice-S	3.64	1.44	-.08	.11	-.04	-.14*	-.06	.34**	.36**	.29**	.41**	.40**	.21**	.28**	(.92)	
14. Voice-O	3.40	1.35	-.07	.02	.04	-.03	.02	.27**	.31**	.22**	.23**	.35**	.28**	.23**	.54**	(.88)

Note. N = 234. Cronbach's alphas are shown on the diagonal in parentheses. LMX = leader-member exchange; Help-S = helping aimed at the supervisor; Help-O = helping aimed at the organization; Voice-S = voice aimed at the supervisor; Voice-O = voice aimed at the organization.

^a Organization: Three categories represented by three dummies variables (Organization Dummy 1: Bank A coded as 1, and other banks as 0; Organization Dummy 2: Bank B coded as 1, and other banks as 0; Organization Dummy 3: Bank C coded as 1, and other banks as 0). ^bGender: 0 = female, 1 = male. ^cRole perceptions: Higher scores = more in-role behavior.

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

with Hypothesis 1, LMX predicted Help-S ($\beta = .17, p < .01$), Help-O ($\beta = .17, p < .01$), Voice-S ($\beta = .29, p < .001$), and Voice-O ($\beta = .19, p < .01$). In line with Hypothesis 2, matched in-role perceptions predicted Help-S ($\beta = .41, p < .001$), Help-O ($\beta = .46, p < .001$), Voice-S ($\beta = .35, p < .001$), and

Voice-O ($\beta = .32, p < .001$). Also consistent with Study 1, results show significant interactions between LMX and role perceptions for helping (Help-S: $\beta = -.12, p < .05$; Help-O: $\beta = -.13, p < .05$) and voice (Voice-S: $\beta = .23, p < .001$; Voice-O: $\beta = .23, p < .001$). For purposes of comparison with

Table 6
Regression Results for Helping and Voice (Study 2)

Variable	Help-S				Voice-S					
	Step 1	Step 2	Step 3	Step 4	Step 1	Step 2	Step 3	Step 4		
Organization Dummy 1 ^a	.02	.01	.01	.01	-.03	-.04	-.02	-.03		
Organization Dummy 2 ^a	.08	.07	.01	.01	.10	.08	.08	.07		
Gender ^b	.00	-.01	.02	.02	-.14*	-.16*	-.12*	-.12*		
Work experience	-.06	-.05	-.05	-.04	-.04	-.02	.01	.03		
LMX		.34***	.19***	.17**		.34***	.25***	.29***		
RPs ^c			.43***	.41***			.32***	.35***		
LMX × RP				-.12*				.23***		
R ² for the equation	.01	.13***	.28***	.29*	.04	.15***	.25***	.30***		
		Help-O					Voice-O			
Organization Dummy1 ^a	-.01	-.02	.00	.01	-.07	-.08	-.07	-.08		
Organization Dummy2 ^a	.04	.03	.02	.03	-.01	-.02	-.02	.00		
Gender ^b	-.02	-.04	.00	.00	-.03	-.04	-.04	-.05		
Work experience	-.11*	-.10*	-.11*	-.10	.03	.04	.04	.04		
LMX		.34***	.18**	.17**		.27***	.16*	.19**		
RPs ^c			.48***	.46***			.28***	.32***		
LMX × RP				-.13*				.23***		
R ² for the equation	.02	.14***	.34***	.36***	.01	.08***	.15***	.19***		

Note. N = 234. Results are standardized regression weights. Help-S = helping aimed at the supervisor; Voice-S = voice aimed at the supervisor; LMX = leader-member exchange; RP = role perception; Help-O = helping aimed at the organization; Voice-O = voice aimed at the organization.

^a Organization: Three categories represented by two dummies variables (Organization Dummy 1: Bank A coded as 1, and other banks as 0; Organization Dummy 2: Bank B coded as 1, and other banks as 0). ^bGender: 0 = female, 1 = male. ^cRPs: Higher scores = more in-role behavior; the helping equation includes role perceptions for helping, and the voice equation includes role perceptions for voice.

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

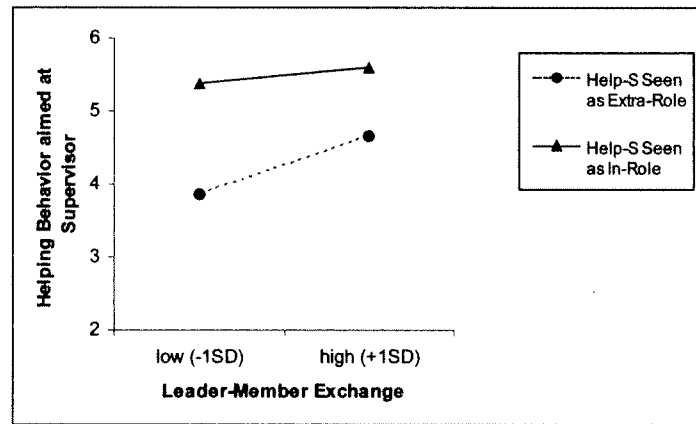


Figure 4. Study 2 interaction between leader–member exchange and role perceptions in predicting helping aimed at the supervisor (Help-S).

Study 1, we display the interactions for Help-S and Voice-O in Figures 4 and 5, respectively.⁴ Importantly, the nature of these respective interactions was identical for Help-O and Voice-S.

As shown in Figure 4, the interaction for helping again revealed support for Hypothesis 3: LMX was positively related to helping when helping was viewed as ERB (Help-S: $\beta = .27, p < .001$; Help-O: $\beta = .30, p < .001$) but not when it was viewed as IRB (Help-S: $\beta = .07, ns$; Help-O: $\beta = .08, ns$), and helping was lower only when LMX was low and employees perceived helping as ERB. As shown in Figure 5, the nature of the interaction for voice again supported Hypothesis 4: LMX did not predict voice when voice was viewed as ERB (Voice-S: $\beta = .06, ns$; Voice-O: $\beta = .02, ns$) but did predict voice when voice was perceived as IRB (Voice-S: $\beta = .50, p < .001$; Voice-O: $\beta = .40, p < .001$). Also consistent with Study 1, voice was higher only when LMX was high and employees viewed voice as IRB.

Study 2 Discussion

One of our primary goals in Study 2 was to determine whether the differential interactions in Study 1 (for Help-S and Voice-O) were attributable to fundamental differences between the two types of behavior (helping vs. voice) or, rather, were attributable to differences between the two types of targets (supervisors vs. organization). By assessing helping and voice toward both the supervisor and the organization, we were able to disentangle the Study 1 confound between type of behavior and type of target. Results of Study 2 perfectly replicate those found in Study 1. In sum, the results show that employees are more likely to engage in helping (toward supervisors and the organization) and voice (toward supervisors and the organization) when they have a high-quality LMX relationship with their supervisor and when they believe helping and voice are IRB. In line with Study 1, the results also show contrasting interactions for helping and voice, regardless of the target (supervisor vs. organization). As such, the contrasting interactions appear to be because of fundamental differences between helping and voice rather than because of differences between supervisors and the organization. In addition to addressing the confound in Study 1, Study 2 demonstrated that our earlier results generalize to a sample from a different culture and organi-

zational setting (bank support staff in Singapore compared with engineers in India). On the whole, results provide additional support for our four key hypotheses concerning the main and interactive effects of LMX and role perceptions on helping and voice.

General Discussion

The present studies make two important contributions to work on LMX and OCB. First, we extend past research on LMX and affiliative forms of OCB by demonstrating positive relationships between LMX and voice (change-oriented OCB). Second, we complement past OCB research on the interaction between procedural justice and role perceptions (Kamdar et al., 2006; McAllister et al., 2007; Tepper et al., 2001; Tepper & Taylor, 2003; Zellars et al., 2002) by assessing the interaction between LMX and role perceptions in predicting helping and voice. In line with McAllister et al.'s (2007) work, our results indicate that in-role perceptions substitute for low-quality LMX in predicting helping, and they enhance the positive impact of high-quality LMX on voice. Below, we consider the theoretical and practical implications of our findings, discuss the strengths and limitations of our work, and outline several directions for future research.

Theoretical Implications

The present work has several important theoretical implications. First, our results expand the nomological network of LMX and OCB by specifying role perceptions as an important moderator of LMX–OCB relationships. Thus, even though Organ (1988) defined OCB as “not directly or explicitly recognized by the formal reward system” (p. 4), and even though the boundary between ERB and IRB may be blurred (Morrison, 1994), OCB research should include employee views of their roles to avoid underspecified models. In other words, we need to consider whether employ-

⁴ The other Study 2 interactions predicting helping aimed at the organization and voice aimed at the supervisor are similar to the plots reported in these figures. Thus, they are not illustrated but can be obtained from Linn Van Dyne.

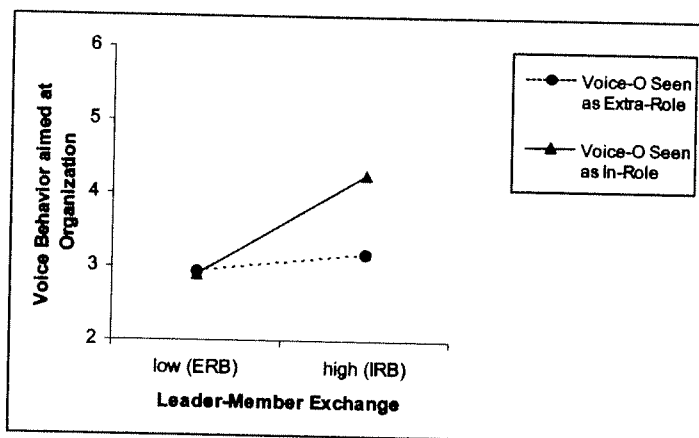


Figure 5. Study 2 interaction between leader-member exchange and role perceptions in predicting voice aimed at the organization (Voice-O). ERB = extra-role behavior; IRB = in-role behavior.

ees view specific types of OCB as a part of their job, and we should consider how role perceptions might moderate the relationship between other forms of social exchange and OCB. This could include perceived organizational support, trust in the organization, trust in the supervisor, interactional justice, and team-member exchange. Including role perceptions in other social exchange-OCB models would allow scholars to ascertain whether the role perceptions construct functions as a broad-reaching boundary condition that applies to social exchange relationships in general or whether it has unique relevance to relatively proximal aspects of social exchange, such as procedural justice and LMX (Masterson et al., 2000).

A second theoretical implication is the importance of being explicit in the specification of OCB. In their recent meta-analysis, LePine, Erez, and Johnson (2002) did not find meaningful differences in predictors of the most commonly researched forms of citizenship, suggesting that it might be useful to collapse across the different forms of OCBs. Our results suggest that such a move may be premature. This is because results across the two samples consistently demonstrate that whereas in-role perceptions operate as a substitute for LMX in influencing helping, they function as an enhancer of LMX in influencing voice. Thus, we respond to Podsakoff, MacKenzie, Paine, and Bachrach (2000), who argued "Regardless of whether OCBs are in-role or extra-role, what really matters is whether these forms of behavior have independent effects on organizational performance and whether they have different antecedents" (p. 549). Our interaction results, in combination with those reported by McAllister et al. (2007), suggest that helping and voice are likely to be driven by different processes. Future research exploring these differences could yield valuable insights into the conditions under which employees are willing to help one another and voice their opinions for constructive change.

Finally, our results for helping contribute to the literature on the substitutes for leadership model (Howell et al., 1986; Kerr & Jermier, 1978), which suggests that features of the person, situation, or context moderate the relationship between leadership variables and employee attitudes and behaviors. Despite its wide appeal, many studies have failed to support the model's basic

moderation hypothesis, although studies do suggest that the variables thought to act as substitutes show reliable (main effect) relationships with relevant employee attitudes and behaviors (for reviews, see Podsakoff & MacKenzie, 1997; Podsakoff, MacKenzie, Ahearne, & Bommer, 1995; Podsakoff et al., 1996). In the present study, we assumed that in-role perceptions would serve to substitute for low-quality LMX relationships, such that even when LMX was low, helping would remain high as long as employees viewed helping as in-role. Both studies clearly supported that prediction, providing some much needed support for the moderation hypothesis in the substitutes for leadership model (cf. de Vries, Roe, & Taillieu, 2002, for additional support). In light of our findings and those of McAllister et al. (2007), future studies exploring the substitutes model might benefit by incorporating employee role perceptions as a potential moderator of the relationship between leadership and employee behaviors.

Practical Implications

Our findings also have important practical implications. In particular, our interaction results suggest that managers and practitioners will be more effective in anticipating and influencing employee OCB if they consider the joint effects of LMX and employee role perceptions. If managers wish to increase employee helping, our results suggest that they can emphasize high-quality LMX or in-role perceptions for helping, because either is associated with high levels of helping. This is because role perceptions function as a substitute for low-quality LMX. Our interaction results for helping also provide insights into how managers can elicit helping from members of the out-group (those with whom supervisors have a low LMX relationship). Here, managers should explicitly communicate expectations for helping because in-role expectations can substitute for low-quality LMX. The managerial implications for voice differ from those for helping because in-role perceptions enhanced the effects of LMX on voice. Here, managers seeking to encourage voice must reinforce strong LMX relationships while simultaneously communicating that voice is part of an employee's job.

Strengths, Limitations, and Directions for Future Research

The present studies have two major strengths. To begin, by using multiple sources of data (employee and supervisor ratings), we minimized common method variance. Second, by replicating our findings across different samples, we were able to demonstrate the generalizability of our findings in two different cultures and organizational settings.

Despite these strengths, the studies also have at least two limitations that should be addressed in future research. First, although we extended prior research on procedural justice, role definitions, and OCB to include LMX, role perceptions, and four more refined conceptualizations of OCB, we designed our study and collected data prior to McAllister et al.'s (2007) study. Thus, as noted in the introduction, our measures of role perceptions are not as nuanced as McAllister et al.'s study because they combine role breadth and role instrumentality. It is worth noting that the contrasting forms of our helping and voice interactions paralleled those demonstrated by McAllister et al. for role breadth. McAllister et al., however, did not report interaction effects for role instrumentality. Thus, we do not know whether our findings were driven primarily by role breadth or whether role instrumentality would produce a similar type of interaction. Future research should continue to disentangle effects of specific aspects of role perceptions. Second, we note that, although we demonstrated the same pattern of interactions in two samples of respondents in different jobs and different organizations, our design is cross-sectional. Thus, we cannot draw firm conclusions about causality. Future longitudinal research could help address this issue and explore how these relationships unfold over time.

Future research could also examine other indicators of relationship quality. For example, team-leader exchange may be more salient than LMX in predicting OCB targeted at coworkers. Consistent with this, Kamdar and Van Dyne (2007) showed that team-member exchange (TMX) predicted helping aimed at coworkers (but not at supervisors), whereas LMX predicted helping aimed at supervisors (but not at coworkers). Future research is also needed on the psychological processes that influence role perceptions. For example, empathic concern, agreeableness, and perspective-taking may predict role perceptions for helping, whereas conscientiousness, emotional stability, and extraversion may predict role perceptions for voice. Lastly, the results suggest that it may be more important to differentiate type of OCB (helping vs. voice) than target of OCB (supervisor vs. organization). Because this is the first study to include two types of OCB and two targets of OCB, it will be important to replicate these results in future studies.

Conclusion

In conclusion, results of two field studies show that in-role perceptions substituted for low LMX in predicting helping, and they enhanced the relationship between LMX and voice. Because these differences applied regardless of target of OCB (supervisor or organization), we recommend that future research continue to contrast affiliative behaviors (such as helping) with change-oriented behaviors (such as voice) in an effort to better understand the unique processes that encourage employees to help one another and voice suggestions for constructive change.

References

- Ashford, S. J., Rothbard, J. P., Piderit, S. K., & Dutton, J. E. (1998). Out on a limb: The role of context and impression management in selling gender-equity issues. *Administrative Science Quarterly*, *43*, 23–57.
- Blau, P. (1964). *Exchange and power in social life*. New York: Wiley.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Erlbaum.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice literature. *Journal of Applied Psychology*, *86*, 425–445.
- Coyle-Shapiro, J. A., & Kessler, I. (2002). Exploring reciprocity through the lens of the psychological contract: Employee and employer perspectives. *European Journal of Work and Organizational Psychology*, *1*, 69–86.
- Coyle-Shapiro, J. A., Kessler, I., & Purcell, J. (2004). Exploring organizationally directed citizenship behavior: Reciprocity or "it's my job"? *Journal of Management Studies*, *41*, 85–106.
- Dansereau, F., Alutto, J. A., & Yammarino, F. J. (1984). *Theory testing in organizational behavior: The variant approach*. Englewood Cliffs, NJ: Prentice Hall.
- Dansereau, F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations. *Organizational Behavior and Human Performance*, *13*, 46–78.
- Detert, J. R., & Burris, E. R. (2007). Leadership behavior and employee voice: Is the door really open? *Academy of Management Journal*, *50*, 869–884.
- de Vries, R. E., Roe, R. A., & Taillieu, T. C. B. (2002). Need for leadership as a moderator of the relationships between leadership and individual outcomes. *Leadership Quarterly*, *13*, 121–137.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, *44*, 350–383.
- Erdogan, B., & Enders, J. (2007). Support from the top: Supervisor perceived organizational support as a moderator of leader-member exchange to satisfaction and performance relationships. *Journal of Applied Psychology*, *92*, 321–330.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *28*, 39–50.
- Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, *82*, 827–844.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, *25*, 161–178.
- Graen, G. B. (1976). Role making processors within complex organizations. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1201–1245). Chicago: Rand McNally.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory. *Leadership Quarterly*, *6*, 219–247.
- Graham, J. W., & Van Dyne, L. (2006). Gathering information and exercising influence: Two forms of civic virtue organizational citizenship behavior. *Employee Responsibilities and Rights Journal*, *18*, 89–109.
- Hofmann, D. A., Morgeson, F. P., & Gerras, S. J. (2003). Climate as a moderator of the relationship between leader-member exchange and content specific citizenship: Safety climate as an exemplar. *Journal of Applied Psychology*, *88*, 170–178.
- Howell, J. P., Dorfman, P. W., & Kerr, S. (1986). Moderator variables in leadership research. *Academy of Management Review*, *11*, 88–102.
- Ilies, R., Nahrgang, J. D., & Morgeson, F. P. (2007). Leader-member

- exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 92, 269–277.
- Kamdar, D., McAllister, D. J., & Turban, D. B. (2006). "All in a day's work": How follower individual differences and justice perceptions predict OCB role definitions and behavior. *Journal of Applied Psychology*, 91, 841–855.
- Kamdar, D., & Van Dyne, L. (2007). The joint effects of personality and workplace social exchange in predicting OCB and task performance. *Journal of Applied Psychology*, 92, 1286–1298.
- Katz, D., & Kahn, R. L. (1966). *The social psychology of organizations*. New York: Wiley.
- Kerr, S., & Jermier, J. (1978). Substitutes for leadership: Their meaning and measurement. *Organizational Behavior and Human Performance*, 22, 375–403.
- Lam, S. S. K., Hui, C., & Law, K. S. (1999). Organizational citizenship behavior: Comparing perspectives of supervisors and subordinates across four international samples. *Journal of Applied Psychology*, 84, 594–601.
- LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, 87, 52–65.
- LePine, J. A., & Van Dyne, L. (1998). Predicting voice behavior in work groups. *Journal of Applied Psychology*, 83, 853–868.
- LePine, J. A., & Van Dyne, L. (2001). Voice and cooperative behavior as contrasting forms of contextual performance: Evidence of differential relationships with Big Five personality characteristics and cognitive ability. *Journal of Applied Psychology*, 86, 325–336.
- Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. *Journal of Management*, 24, 43–72.
- Liden, R. C., Sparrowe, R. T., & Wayne, S. J. (1997). Leader-member exchange theory: The past and potential for the future. *Research in Personnel and Human Resources Management*, 15, 47–119.
- MacKenzie, S. B., Podsakoff, P. M., & Paine, J. B. (1999). Do citizenship behaviors matter more for managers than for salespeople? *Journal of the Academy of Marketing Science*, 27, 396–410.
- Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, 43, 738–749.
- McAllister, D. J., Kamdar, D., Morrison, E. W., & Turban, D. B. (2007). Disentangling role perceptions: How perceived role breadth, discretion, instrumentality, and efficacy relate to helping and taking charge. *Journal of Applied Psychology*, 92, 1200–1211.
- Morrison, E. W. (1994). Role definitions and organizational citizenship behavior: The importance of the employee's perspective. *Academy of Management Journal*, 37, 1543–1567.
- Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of Management Journal*, 42, 403–419.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature, antecedents, and consequences*. Thousand Oaks, CA: Sage.
- Podsakoff, P. M., & MacKenzie, S. B. (1997). Kerr and Jermier's substitutes for leadership model: Background, empirical assessment, and suggestions for future research. *Leadership Quarterly*, 8, 117–125.
- Podsakoff, P. M., MacKenzie, S. B., Ahearne, M., & Bommer, W. H. (1995). Searching for a needle in a haystack: Trying to identify the illusive moderators of leadership behaviors. *Journal of Management*, 21, 422–470.
- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Meta-analysis of the relationships between Kerr and Jermier's substitutes for leadership and employee job attitudes, role perceptions, and performance. *Journal of Applied Psychology*, 81, 380–399.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26, 513–563.
- Robinson, S. R., & Morrison, E. W. (1995). Psychological contracts and OCB: The effect of unfulfilled obligations on civic virtue behavior. *Journal of Organizational Behavior*, 16, 289–298.
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23, 224–253.
- Stamper, C. L., & Van Dyne, L. (2001). Work status and organizational citizenship behavior: A field study of restaurant employees. *Journal of Organizational Behavior*, 22, 517–536.
- Tepper, B. J., Lockhart, D., & Hoobler, J. (2001). Justice, citizenship, and role definition effects. *Journal of Applied Psychology*, 86, 789–796.
- Tepper, B. J., & Taylor, E. C. (2003). Relationships among supervisors' and subordinates' procedural justice perceptions and organizational citizenship behaviors. *Academy of Management Journal*, 46, 97–105.
- Van Dyne, L., Cummings, L. L., & McLean Parks, J. (1995). Extra-role behaviors: In pursuit of construct and definitional clarity (A bridge over muddied waters). *Research in Organizational Behavior*, 17, 215–330.
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal*, 41, 108–119.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Journal*, 26, 179–201.
- Zellars, K. L., Tepper, B. J., & Duffy, M. K. (2002). Abusive supervision and subordinates' organizational citizenship behavior. *Journal of Applied Psychology*, 87, 1068–1076.

Received June 9, 2007

Revision received March 16, 2008

Accepted March 31, 2008 ■