© *Academy of Management Journal*
2007, Vol. 50, No. 4, 869–884.

LEADERSHIP BEHAVIOR AND EMPLOYEE VOICE: IS THE DOOR REALLY OPEN?

JAMES R. DETERT
Cornell University

ETHAN R. BURRIS
University of Texas at Austin

We investigate the relationships between two types of change-oriented leadership (transformational leadership and managerial openness) and subordinate improvement-oriented voice in a two-phase study. Findings from 3,149 employees and 223 managers in a restaurant chain indicate that openness is more consistently related to voice, given controls for numerous individual differences in subordinates' personality, satisfaction, and job demography. This relationship is shown to be mediated by subordinate perceptions of psychological safety, illustrating the importance of leaders in subordinate assessments of the risks of speaking up. Also, leadership behaviors have the strongest impact on the voice behavior of the best-performing employees.

In today's hypercompetitive business environment, employee comments and suggestions intended to improve organizational functioning are critical to performance because, as Senge wrote, it is "just not possible any longer to 'figure it out' from the top" (1990: 4; see also Morrison & Milliken, 2000). Edmondson (1999, 2003), for example, found that the willingness of all members to provide thoughts and ideas about critical work processes characterizes successful learning in various types of teams. Yet, despite this "learning imperative," many individuals do not work in environments where they perceive it as safe to speak up (Milliken, Morrison, & Hewlin, 2003; Ryan & Oestrich, 1998). This presents an unsettling state of affairs: *Voice,* which we define as the discretionary provision of information intended to improve organizational functioning to someone inside an organization with the perceived authority to act, even though such information may challenge and upset the status quo of the organization and its power holders, is critical to organizational well-being yet insufficiently provided by employees, who see the risks of speaking up as outweighing the benefits. Thus, it is important to better understand who speaks up with potentially valuable information and the organizational conditions that favor or inhibit such behavior. In this study, we seek to contribute to such understanding.

Three broad lines of research have addressed this line of inquiry to varying degrees. The most systematic research to date has focused on individual differences in personality and demographic characteristics as correlates of voice (Crant, 2003; LePine & Van Dyne, 2001). The stated or implicit reasoning in this line of work is that some individuals are simply more likely than others to "go the extra mile" in regard to speaking up. A second line of research, based on Hirschman's (1970) seminal work defining exit, voice, and loyalty as the primary options facing employees who are dissatisfied with some aspect of organizational functioning, treats employee attitudes as the primary determinant of upward voice (Rusbult, Farrell, Rogers, & Mainous, 1988; Withey & Cooper, 1989). Finally, a third research stream focuses on aspects of an organizational context that may affect employees' willingness to speak up. An implicit assumption in this view is that even the most proactive or satisfied employees are likely to "read the wind" as to whether it is safe and/or worthwhile to speak up in their particular context (Dutton, Ashford, O'Neill, Hayes, & Wierba, 1997; Edmondson, 2003; Milliken et al., 2003).

Seeking to further develop the contextual stream, we focus on the role that specific leadership behaviors play in influencing employees' decisions to voluntarily provide comments or suggestions in-

We gratefully acknowledge the useful advice received from Mike Beer, Mike Brown, Dan Chiaburu, Russ Eisenstat, Nathaniel Foote, Kelly Delaney-Klinger, Amy Edmondson, Dave Harrison, Kathleen O'Connor, Chad Proell, Steve Sauer, Melissa Thomas-Hunt, and Linda Trevino. We appreciate the support and guidance provided by the Management and Organization Department's research group at Penn State and the help of Randy and the Survey Leadership Team at "Serve-Co." We also thank Brad Kirkman and the three anonymous reviewers for their many helpful suggestions.

tended to spark organizational improvement. Qualitative research has identified a number of leader behaviors or attributes—including "approachability" (Milliken et al., 2003; Saunders, Sheppard, Knight, & Roth, 1992), "action taking" (Edmondson, 2003; Ryan & Oestreich, 1998), and "accessibility" (Edmondson, 1999)—that lead subordinates to conclude it is either safe or unsafe to speak up. However, the few quantitative studies that have assessed some aspect of leadership influence on voice have produced less conclusive results (e.g., Ashford et al., 1998). For example, Saunders and colleagues (1992) developed a measure, "supervisor as voice manager," and found it to be positively related to the likelihood of voice in two samples, but Janssen, de Vries, and Cozijnsen (1998), controlling for several individual differences, found that the supervisor as voice manager construct was not significantly related to subordinates' reported likelihood to voice novel ideas. In sum, the literature presents a troubling discrepancy: Studies with the highest face validity suggest that leadership behaviors are an important contextual antecedent of voice, but survey research has failed to replicate such findings.

The specific purpose of this study was therefore to address inconsistent findings about leadership behavior as an influence on subordinates' improvement-oriented voice. In a two-phase field study, we addressed the questions, "Is leadership behavior related to subordinate voice?" and, "If so, why and for what types of employees?" Our study extends the literature in a number of ways. First, few of the labels used to describe leadership findings in previous work correspond directly with constructs developed in the broader leadership literature. We drew upon well-established theory on leadership and power to develop predictions for how specific leader behaviors influence employee voice. Second, we controlled for many of the personality and employee attitudinal explanations found important in prior voice research but usually lacking in the leadership-focused studies. Third, we heeded calls for more precision in voice research (Van Dyne, Ang, & Botero, 2003) by limiting our voice construct to *verbal* behavior that is *improvement-oriented* and directed to a *specific target* who holds power *inside* the organization in question. Beyond advancing understanding of leadership behavior as a predictor of voice, this study also examines psychological safety as an important mediating cognition linking leadership and voice and addresses how subordinate performance level might moderate the impact of leadership behavior on voice. Collectively, this research extends understanding of the leadership-voice relationship and points to specific ways leaders can foster employee input.

LITERATURE REVIEW AND HYPOTHESES

The notion of voice stems from the idea that employees recognize some source of dissatisfaction or opportunity for improving their own and/or their organization's well-being (Hirschman, 1970). Speaking up in such situations can feel risky because they involve pointing out need for improvement in a program or policy to those who may have devised, be responsible for, or feel personally attached to the status quo. Given this, along with the reality that voice cannot be coerced or readily designed into the in-role requirements of a job (Van Dyne & LePine, 1998), an initial motivation to speak up is likely to manifest in behavior only when the net perceived benefits outweigh potential costs. Perceived potential benefits of speaking up include getting the problem solved as well as formal (e.g., money or promotion) or informal (e.g., recognition or status) rewards that might be associated with having one's ideas be well received and possibly implemented. Conversely, potential costs include "existence losses" (e.g., demotion or termination) and "relatedness losses" (e.g., humiliation or loss of social standing) (Maslow, 1943). In short, the decision to speak up results from an affect-laden expectancy-like calculus (Ashford, Rothbard, Piderit, & Dutton, 1998; Milliken et al., 2003; Withey & Cooper, 1989).

Theoretically, leadership behavior affects this voice calculus for two primary reasons, both related to the resource dependency of subordinates in hierarchical settings (Emerson, 1962; Pfeffer & Salancik, 1978). First, to speak *up*, by definition, involves sharing one's ideas with someone with the perceived power to devote organizational attention or resources to the issue raised (French & Raven, 1959). Thus, leaders are inherently important to the voice process because they are its targets. Second, leaders have the authority to administer rewards and punishments, and this power over subordinates' pay, promotions, and job assignments makes leaders' actions highly salient as cues for behavior (Depret & Fiske, 1993). Thus, when leaders send signals that they are interested in and willing to act on subordinate voice, subordinates' motivation to speak up should be maintained or enhanced; absent such leader behaviors, subordinates may see potential risks as outweighing perceived benefits.

Change-Oriented Leadership

Because voice involves suggestions to do something differently, leader behaviors signaling an openness to or appreciation for change should be a critical contextual influence on employee willingness to speak up. Descriptions from qualitative research suggest the importance of such behaviors. For example, Edmondson (2003) reported that leaders who explicitly communicated a rationale for change, explained the need for others' input, and took action on others' ideas had subordinates who were more willing to contribute to team learning despite the inherent risks of speaking up. Here, we hypothesize that two specific sets of perceived leader behaviors—management openness and transformational leadership—are particularly indicative of an orientation toward continuous improvement and should therefore be positively related to subordinates' belief that it is safe to speak up and willingness to do so.

Research on issue selling (voice regarding a specific work improvement or employee treatment topic) has identified *management openness* as a set of leader behaviors particularly relevant to subordinates' motivation to speak up (Ashford et al., 1998). Managerial openness refers to subordinates' perceptions that their boss listens to them, is interested in their ideas, gives fair consideration to the ideas presented, and at least sometimes takes action to address the matter raised. Such behaviors are significant in maintaining initial motivation to speak up (Milliken et al., 2003). More importantly, behaviors indicating openness to employee input may decrease the salience of the power differential between leaders and subordinates in such a way that employees perceive few costs from raising potentially risky ideas (Edmondson, 2003).

Like House and Rizzo's (1972) top management receptiveness concept, openness as related to issue selling has been conceived of primarily as a senior manager behavior. However, managers display these behaviors to a greater or lesser extent at all hierarchical levels. Thus, these behaviors likely influence upward communications by lower-level employees as well. Indeed, qualitative research describes managerial openness as a strong influence on employees at many organizational levels (e.g., Ryan & Oestrich, 1998; Sprague & Ruud, 1988). Therefore, we predict:

Hypothesis 1. Leaders' perceived display of openness is positively related to subordinates' improvement-oriented voice.

Transformational leaders are positively oriented toward, and more likely to initiate, change (Bass, 1985; Waldman, Javidan, & Varella, 2004). They accomplish change by encouraging employees to move beyond compliance with formal agreements and to become innovative problem solvers (Bass & Riggio, 2006). A number of specific transformational behaviors, including individualized consideration and inspirational motivation (Bass, 1985), should be related to the voice calculus. For example, individualized consideration reflects the notion that each employee has specific strengths, interests, and needs for improvement that must be attended to one-on-one rather than via formal policies or pronouncements (Bass & Avolio, 1990). Leaders demonstrating individualized consideration toward subordinates encourage two-way communication and listen effectively (Bass & Riggio, 2006). In addition, leaders use inspirational motivation to create commitment among subordinates to their organization's vision (Bass, 1985). Leaders generate such commitment via frequent public communications about the envisioned future direction and goals of the organization and consistent displays of passion about collective pursuit of the organization's purpose (Conger, 1989).

Such transformational leader behaviors lead to increased subordinate competence and commitment as well as to empowerment and felt responsibility to contribute to an organization's future (Senge, 1990; Wayne, Shore, & Liden, 1997). For example, coaching is likely to reduce the intimidation associated with raising uncomfortable topics, such as those challenging the status quo. Further, supportive coaching and vision sharing should increase initial motivation to speak up because they lead subordinates to accept more collective responsibility for performance outcomes (Bennis & Nanus, 1985). These transformational leader behaviors should inspire subordinates to believe that their bosses are oriented toward the future rather than preservation of the status quo. Consequently, subordinates should be more willing to speak up with comments aimed at organizational improvement. We therefore predict:

Hypothesis 2. Leaders' perceived transformational behaviors are positively related to subordinates' improvement-oriented voice.

Psychological Safety and Voice

In keeping with the argument that employees estimate perceived costs prior to speaking up, psychological safety (the belief that engaging in risky behaviors like voice will not lead to personal harm) has been described as a key affect-laden cognition influencing voice (Ashford et al., 1998; Edmond-

son, 1999). Put simply, employees who fear significant personal losses from speaking up (e.g., restricted career mobility, loss of support from superiors and peers) are likely to choose "defensive" silence (Van Dyne et al., 2003). Because voice often contains either implicit or explicit criticisms of the status quo and because the targets of upward voice hold reward and sanction power, leader behaviors are likely to be particularly salient cues that subordinates use in evaluating whether voicing unsolicited comments is personally dangerous (Milliken et al., 2003). After all, most employees lack the courage or commitment to challenge managers who have signaled unwillingness to accept input from below (Hornstein, 1986). Thus, when managers routinely demonstrate a personal interest, listen carefully, and take action, they demonstrate to subordinates that there is little personal risk in honest communication (Bass & Riggio, 2006; Edmondson, 2003). Such experiences should enhance perceived psychological safety.

We therefore hypothesize that psychological safety is a belief that mediates the relationship between the external stimuli provided by leader behaviors and the decision by subordinates to speak up or remain silent. This argument is consistent with the findings of Podsakoff and colleagues (Podsakoff, MacKenzie, Moorman, & Fetter, 1990) that trust in a leader (with trust defined similarly to psychological safety, as the belief that one will not be harmed by another) mediated the relationship between that leader's transformational behaviors and subordinates' provision of other (nonrisky) organizational citizenship behaviors. Specifically, we predict:

Hypothesis 3. Perceived psychological safety mediates the relationships between change-oriented leader behaviors and subordinates' improvement-oriented voice.

Subordinate Performance

As Ashford and colleagues (e.g., Ashford et al., 1998) have noted, the performance level of a subordinate may be related to his/her willingness to speak up. Better performers may believe they have more credibility and hence be more likely to see voice as a job responsibility rather than an optional citizenship behavior. This argument is consistent with prior research suggesting that employees with higher self-esteem, often a correlate of performance, are more confident of their ability to provide meaningful input, and therefore are more motivated to speak up (Brockner et al., 1998). Thus, a subordinate's performance level should be positively related to the frequency of speaking up with improvement ideas. This does not mean, however, that strong performers will be more likely than poorer performers to speak up with ideas that challenge the status quo irrespective of contextual cues. That is, the higher confidence of good performers may reflect an ability to speak up successfully *when it appears such input is desired*. Conversely, poorer performers may lack the personal confidence or job security to speak up in any context—even when leaders provide cues that such action is welcome. Poorer performers may also simply lack enough commitment to their organization to be influenced by managerial attempts to increase their provision of observations and ideas.

Additionally, strong performance, where subjectively rated, may indicate better impression management skills and a greater sensitivity to contextual cues as to what behaviors are welcomed or frowned upon by those in power (Wayne & Liden, 1995). This view is consistent with arguments that better performers are more skilled at monitoring the external environment and subsequently adapting their behaviors through self-presentation tactics (Snyder & Copeland, 1989). In short, better performers have likely been rated as performing well because they are more attuned to contextual cues about receptivity to actions like voice and more skilled at tailoring and targeting their upward communications on the basis of these cues. This analysis suggests that better performers should be even more likely than others to speak up when their bosses appear particularly interested in and concerned about subordinates and willing to act on suggestions from below. Conversely, better performers may be more likely to withhold their opinions and ideas or alter the content of messages (e.g., sugarcoat them) when cues from leaders are less welcoming or even hostile. We therefore predict:

Hypothesis 4. The relationships between leaders' change-oriented behaviors and subordinates' improvement-oriented voice is stronger for subordinates with high performance than for subordinates with low performance.

To test Hypotheses 1–4, we conducted two studies at "Serve-Co," a corporation-owned chain of casual dining restaurants. In Study 1, we tested Hypotheses 1–3 on a sample of crew members (servers, cooks, and hosts/hostesses); in Study 2, we used longitudinal data from shift managers to replicate the Study 1 findings and to test Hypothesis 4. Both crew members and shift managers interacted regularly with, and were evaluated by, their restaurant's general manager (GM).

STUDY 1

Methods

Data. We administered a self-report questionnaire to all crew members, each of whom was paid for 30 minutes of time to fill out the survey during a staff meeting. To protect confidentiality, we had all surveys mailed directly to a survey administration firm for data entry, and employees could choose to omit their employee identification number from the questionnaire. We received usable responses from 3,153 of the possible 4,998 crew members in 105 restaurants, for a 63 percent net response rate. Overall, we found nonrespondents to be slightly younger ($\bar{x}$ = 25.86, s.d. = 11.31) and of shorter tenure ($\bar{x}$ = 2.99, s.d. = 1.50) than respondents ($\bar{x}$ = 26.66, s.d. = 10.99, $t = 2.68$, $p < .01$, and $\bar{x}$ = 3.29, s.d. = 1.38, $t = 5.51$, $p < .001$, respectively).

Measures. We assessed the two facets of GM behavior with items using a five-point response scale (1, "never," to 5, "always"). *Openness* was assessed with three items from Ashford and colleagues' (1998) top management openness scale ($\alpha = .89$). We measured *transformational leadership* using three items for individualized consideration and two items for inspirational motivation (Bass & Avolio, 1990). As has prior research, we combined these two subcomponents into an overall measure of transformational leadership (five items; $\alpha = .91$).

Psychological safety was measured with three items ($\alpha = .90$) on a response scale ranging from "strongly disagree" (1) to "strongly agree" (5). We adapted items from Edmondson's (1999) psychological safety in teams measure to better tap the individual-level assessment of psychological safety in regard to speaking up; a sample item is, "It is safe for me to speak up around here."

We assessed *voice to the GM* using three items ($\alpha = .90$) answered on a five-point frequency scale (1, "almost never, to 5, "almost always"). These items were based on Van Dyne and LePine's (1998) prosocial voice measure, but we used items referencing only verbal behavior and simplified all language to a sixth-grade reading level. A sample item is, "I give suggestions [to the GM] about how to make this restaurant better."

We used a variety of controls to account for alternative explanations of employee voice. First, several studies (e.g., LePine & Van Dyne, 1998) have found that individual differences, including personality and various demographic variables, influence voice. For instance, employees with longer tenure may feel more comfortable speaking up than newcomers (Stamper & Van Dyne, 2001). Data were therefore collected on tenure, ethnicity, job type (service or production), gender, hours worked per week, and job shift. Crant (2003) identified *proactive personality* as the strongest personality correlate of voice, so we used four items to assess this construct ($\alpha = .81$). Second, previous research has shown that employee attitudes can influence employee voice (Rusbult et al., 1988), so we created a two-item scale measuring *overall satisfaction* ($\alpha = .69$). Finally, *having ideas* was assessed with two items ($\alpha = .80$). This last variable was important because, although employee silence may relate to contextual influences, it may also simply indicate a lack of specific ideas for improvement (Frese, Teng, & Wijnen, 1999). The items for proactive personality, overall satisfaction, and having ideas were rated on a five-point "strongly disagree" (1) to "strongly agree" (5) scale.

Analysis strategy. We employed multilevel analyses to be able to explicitly model nonindependence resulting from restaurant membership (Raudenbush & Byrk, 2002). Using this approach, we were able to estimate coefficients for the independent variables at the individual level while accounting for the nesting of individuals within restaurants.

Results and Discussion

Confirmatory factor analyses indicated that the hypothesized factor structure fitted these data well (e.g., RMSEA = .05, CFI = .99, GFI = .95, AGFI = .94) and better than any more parsimonious model.[1] Table 1 presents summary statistics for the Study 1 variables.

We first examined the impact of all control variables on individual-level voice in a random coefficient model. Table 2 presents the results of multilevel analyses for Study 1. As model 1 shows, several demographic variables were significantly related to voice. We entered the additional individual difference variables in model 2, and the significant change in the –2 log-likelihood statistic indicated that these variables significantly contributed to the model's explanatory potential ($\Delta\chi^2 = 576.55$, $p < .001$). Proactive personality ($t = 6.78$, $p < .001$), overall satisfaction ($t = 7.99$, $p < .001$), and having ideas ($t = 18.54$, $p < .001$) were all positively related to voice.

In model 3, we entered the leadership behaviors. In support of Hypotheses 1 and 2, both GM open-

[1] All items for the individual measures and all fit statistics and comparisons for the multiple factor analysis models are available from the authors for Studies 1 and 2.

TABLE 1
Summary Statistics and Correlations for Study 1 Variables[a]

Variables	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Tenure	3.18	1.40																
2. Hours per week	3.84	1.30	.19**															
3. Male gender	0.41	0.49	−.11**	.08**														
4. African American ethnicity	0.13	0.33	−.07**	.02	.07**													
5. Hispanic ethnicity	0.11	0.31	.00	.07**	.10**	−.14**												
6. Other ethnicity	0.08	0.27	−.01	.03	−.01	−.11**	−.10**											
7. Evening shift	0.46	0.50	−.15**	−.29**	.04*	−.04*	−.02	.00										
8. Night shift	0.13	0.34	−.04*	.19**	.07**	.04*	.00	.00	−.36**									
9. Production job	0.45	0.50	.01	.16**	.44**	.10**	.15**	.03	−.02	.02								
10. Other job type	0.05	0.21	.04*	.03	.05**	.02	.01	.05**	−.09**	.03	−.20**							
11. Proactive personality	4.27	0.71	.00	.11**	−.03	−.01	.11**	−.02	−.07**	.02	−.02	.01						
12. Overall satisfaction	3.79	1.02	−.10**	.03	.00	−.02	.08**	−.04*	−.05**	−.01	−.02	.03	.30**					
13. Having ideas	3.52	1.04	.14**	.18**	.05**	−.03	.07**	−.01	−.07**	.02	−.02	.02	.29**	.07**				
14. GM openness	3.56	1.15	−.10**	.03	−.03	−.05*	−.01	−.04*	−.03	−.01	−.02	.01	.23**	.50**	.07*			
15. GM transformational leadership	3.86	1.04	−.11**	.02	.00	−.03	.00	−.03	−.04*	−.03	.01	−.01	.24**	.52**	.07**	.79**		
16. Safety	4.04	1.00	−.04*	.02	.03	−.02	−.02	−.02	−.03	.01	.03	.00	.22*	.43**	.06**	.42**	.40**	
17. Voice	3.17	1.19	.20**	.21**	.03	−.03	−.02	−.01	−.14**	.02	−.01	.02	.25**	.18**	.39**	.31**	.30**	.27**

[a] n = 3,149.
* $p < .05$
** $p < .01$

TABLE 2
Results of Multilevel Analyses for Leadership Behaviors and Voice, Study 1[a]

Variables	Model 1: Voice	Model 2: Voice	Model 3: Voice	Model 4: Safety	Model 5: Voice	Model 6: Voice
Intercept	1.49*** (0.19)	−0.91*** (0.21)	−1.15*** (0.20)	1.52*** (0.17)	−1.30*** (0.21)	−1.40*** (0.20)
Tenure	0.14*** (0.02)	0.13*** (0.01)	0.15*** (0.01)	0.01 (0.01)	0.13*** (0.01)	0.14*** (0.01)
Hours per week	0.16*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	−0.01 (0.01)	0.09*** (0.02)	0.09*** (0.01)
Male gender	0.18*** (0.05)	0.13** (0.04)	0.14*** (0.04)	0.07* (0.04)	0.11** (0.04)	0.13*** (0.04)
African American ethnicity[b]	−0.13* (0.06)	−0.10 (0.06)	−0.06 (0.06)	−0.02 (0.05)	−0.09 (0.06)	−0.05 (0.06)
Hispanic ethnicity[b]	−0.19** (0.07)	−0.34*** (0.06)	−0.26*** (0.06)	−0.19*** (0.05)	−0.28*** (0.06)	−0.23*** (0.06)
Other ethnicity[b]	−0.08 (0.08)	−0.06 (0.07)	−0.02 (0.07)	0.00 (0.06)	−0.05 (0.07)	−0.02 (0.07)
Evening shift[b]	−0.21*** (0.05)	−0.17*** (0.04)	−0.15*** (0.04)	−0.01 (0.03)	−0.17*** (0.04)	−0.15*** (0.04)
Night shift[b]	−0.13 (0.06)	−0.09 (0.06)	−0.06 (0.06)	0.03 (0.05)	−0.09 (0.06)	−0.07 (0.06)
Production job[b]	−0.16** (0.05)	−0.07 (0.04)	−0.10* (0.04)	0.08* (0.04)	−0.10* (0.04)	−0.11** (0.04)
Other job type[b]	−0.07 (0.10)	−0.07 (0.09)	−0.05 (0.09)	−0.03 (0.08)	−0.06 (0.09)	−0.05 (0.09)
Proactive personality		0.19*** (0.03)	0.15*** (0.03)	0.12*** (0.02)	0.16*** (0.03)	0.13*** (0.03)
Overall satisfaction		0.15*** (0.02)	−0.02 (0.02)	0.25*** (0.02)	0.06** (0.02)	−0.06** (0.02)
Having ideas		0.35*** (0.02)	0.35*** (0.02)	0.00 (0.02)	0.35*** (0.02)	0.35*** (0.02)
GM openness			0.17*** (0.03)	0.18*** (0.02)		0.14*** (0.03)
GM transformational leadership			0.17*** (0.03)	0.08* (0.03)		0.16*** (0.03)
Safety					0.24*** (0.02)	0.17*** (0.02)
Restaurant unit[c]	0.03** (0.01)	0.03** (0.01)	0.02** (0.01)	0.02** (0.01)	0.03*** (0.01)	0.02** (0.01)
−2 residual log-likelihood	9,757.21	8,924.61	8,924.61	8,058.59	9,045.41	8,857.73
Δ −2 residual log-likelihood		256.05***	256.05***			66.88***
Pseudo R^2	0.08	0.24	0.30			0.32
Δ pseudo R^2		0.16	0.06			0.02

[a] n = 3,149. Unstandardized coefficients are reported, with standard errors in parentheses.
[b] Dichotomous variable (0, 1).
[c] Estimate of the random variance between restaurant units.
* $p < .05$
** $p < .01$
*** $p < .001$

ness ($t = 6.54$, $p < .001$) and GM transformational leadership ($t = 5.99$, $p < .001$) were positively related to voice. The addition of the leadership variables also produced a significant change in the –2 log-likelihood statistic ($\Delta\chi^2 = 256.05$, $p < .001$).

To test Hypothesis 3, we followed the four-step test for mediation recommended by Baron and Kenny (1986). The support found for Hypotheses 1 and 2 satisfied step 1. As required by step 2, we found in model 4 that GM openness ($t = 8.03$, $p < .001$) and GM transformational leadership ($t = 3.25$, $p < .05$) both had a significantly positive relationship with safety. Satisfying step 3, we show that safety is indeed positively related to employees' voice behavior ($t = 11.76$, $p < .001$; see model 5). Finally, we show in model 6 all leader behaviors and safety perceptions predicting voice. Psychological safety remains significant ($t = 8.23$, $p < .001$), but both GM openness ($t = 5.40$, $p < .001$) and GM transformational leadership ($t = 5.56$, $p < .001$) also remain significant, indicating partial mediation. In addition to this four-step test, we also conducted the Sobel test (Sobel, 1982) for both GM openness and GM transformational leadership. Both mediational effects were significant ($z = 6.18$, $p < .001$, and $z = 2.54$, $p < .01$, respectively). Thus, in partial support of Hypothesis 3, safety perceptions partially mediated the relationship between leader behaviors and subordinates' voice.

In sum, in Study 1 we found voice to be positively associated with both GM openness (Hypothesis 1) and transformational leadership (Hypothesis 2). Further, we found that psychological safety plays a mediating role between leader behaviors and subordinate voice (Hypothesis 3). However, Study 1 was subject to possible common method bias; we conducted a second study designed with a time lag between collection of the independent variables and voice to partially address this concern. This approach strongly reduces single-source bias (Ostroff, Kinicki, & Clark, 2002) and allows more confidence that our results reflect causation rather than correlation. Specifically, our aims in Study 2 were to replicate the Study 1 findings using longitudinal data and to test the moderating impact of performance level (Hypothesis 4).

STUDY 2

Methods

Data. We collected data on shift managers from 270 Serve-Co restaurants using two surveys (both administered as described in Study 1) and a survey of each shift manager's general manager (GM). A time 1 survey of the shift managers provided most of the independent variables, and a time 2 survey administered ten months later provided the safety and voice variables. Shift manager overall performance ratings came from a separate survey of GMs conducted one month after the time 1 shift manager survey. To be usable in the Study 2 analyses, data had to be matchable over all three surveys. Although over 80 percent of the possible 853 shift managers responded to the initial survey, we were able to match only 335 records. This was not because of low response rates for the subsequent shift manager and GM surveys (both were over 90 percent), but rather because (1) shift supervisor turnover was approximately 50 percent annually, (2) both shift managers and GMs relocated within the company, resulting in missing performance ratings, and (3) approximately 30 percent of shift managers either declined to record or incorrectly noted their ID numbers on one or both surveys. Of the 335 matched responses, a small number were unusable because respondents did not answer all questions used in the analyses, and others had to be eliminated owing to GM turnover (the GM whose leadership behaviors were rated at time 1 was not the same as the GM to whom voice was directed at time 2). Thus, the final number of surveys usable in all Study 2 analyses was 223, a net of 26 percent of the time 1 shift managers.

Measures. With the exception that an additional item was used to assess GM openness (namely, "takes action on things brought up by me"), we used the same measures of GM openness and GM transformational leadership as in Study 1. For this sample, the Cronbach's alpha reliability (α) for the four GM openness items was .94, and for the five transformational leadership items, it was .91. We created a two-item scale for *shift manager performance* comprised of the appropriate GM's rating of each manager's "overall performance" and "promotability." Cronbach's alpha for this measure, which had rating options from "weak" (1) to "very strong" (4), was .91.

Once again, we used multiple variables to control for alternative explanations of employee voice. Demographic control variables included tenure, gender, ethnicity, and job shift. We also included three personality and dispositional controls, using the same measures as in Study 1: proactive personality, four items ($\alpha = .74$); overall satisfaction, two items ($\alpha = .70$); and having ideas, two items ($\alpha = .82$). Lastly, we controlled for shift managers' self-reported time 1 voice to the GM ($\alpha = .89$).

Psychological safety (three items, $\alpha = .88$) and time 2 voice to the GM (four items, $\alpha = .87$) were also measured as described in Study 1. Time 1 and

TABLE 3
Summary Statistics and Correlations, Study 2[a]

Variables	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Tenure	3.64	1.35															
2. Male gender	0.54	0.50	−.22**														
3. African American ethnicity	0.07	0.26	.06	−.05													
4. Hispanic ethnicity	0.05	0.22	.06	.11	−.06												
5. Other ethnicity	0.04	0.19	.01	−.05	−.06	−.05											
6. Evening shift	0.52	0.50	−.01	.01	−.03	.02	.02										
7. Night shift	0.29	0.46	−.07	.08	.10	−.03	.06	−.67**									
8. Proactive personality	4.44	0.49	−.09	.02	.02	.14	.01	.02	−.14								
9. Overall satisfaction	3.84	0.96	.03	−.03	.06	.07	−.04	−.04	−.08	.29**							
10. Having ideas	4.09	0.80	−.11	.08	.01	−.01	.01	.10	−.05	.36**	.10						
11. Time 1 voice	3.95	0.86	.02	.09	.11	.04	−.01	−.04	−.08	.41**	.24**	.39**					
12. GM openness	3.72	0.99	−.02	.03	.02	.15*	−.17*	−.03	−.15*	.36**	.41**	.19**	.50**				
13. GM transformational leadership	3.87	0.90	.04	−.08	.03	.15*	−.12	.00	−.19*	.27**	.39**	.11	.38**	.75**			
14. Performance rating	2.68	0.91	.03	.04	.01	−.04	−.12	−.09	−.12	.21**	.21**	.10	.21**	.38**	.38**		
15. Safety	4.26	0.95	−.01	.06	−.03	.07	−.07	−.06	−.13	.16*	.18*	.00	.24**	.34**	.21**	.20**	
16. Time 2 voice	3.97	0.87	−.04	.02	−.01	−.05	−.02	−.07	−.04	.29**	.13	.27**	.51**	.40**	.28**	.31**	.39**

[a] $n = 223$.
* $p < .05$
** $p < .01$

TABLE 4
Results of Multilevel Analyses for Leadership Behaviors and Time-Lagged Voice, Study 2[a]

Variables	Model 1: Time 2 Voice		Model 2: Time 2 Voice		Model 3: Time 2 Voice		Model 4: Safety		Model 5: Time 2 Voice		Model 6: Time 2 Voice		Model 7: Time 2 Voice		Model 8: Time 2 Voice	
Intercept	3.23***	(0.52)	0.41	(0.70)	0.60	(0.75)	2.79**	(0.90)	−0.20	(0.72)	−0.09	(0.73)	1.25	(0.85)	1.25	(0.94)
Tenure	0.00	(0.05)	0.00	(0.04)	−0.02	(0.04)	−0.01	(0.05)	−0.02	(0.04)	−0.02	(0.04)	−0.02	(0.04)	−0.03	(0.04)
Male gender[b]	0.08	(0.13)	−0.05	(0.11)	−0.05	(0.11)	0.09	(0.14)	−0.08	(0.11)	−0.07	(0.11)	−0.07	(0.11)	−0.08	(0.11)
African American ethnicity	0.14	(0.22)	−0.06	(0.19)	−0.18	(0.21)	−0.10	(0.25)	−0.17	(0.20)	−0.16	(0.20)	−0.16	(0.20)	−0.16	(0.20)
Hispanic ethnicity[b]	−0.19	(0.29)	−0.27	(0.25	−0.40	(0.25)	0.09	(0.31)	−0.36	(0.24)	−0.42	(0.24)	−0.32	(0.24)	−0.31	(0.24)
Other ethnicity[b]	−0.23	(0.29)	−0.32	(0.25)	0.03	(0.29)	−0.06	(0.34)	−0.06	(0.27)	0.04	(0.27)	−0.03	(0.27)	−0.01	(0.27)
Evening shift[b]	−0.41*	(0.16)	−0.21	(0.14)	−0.15	(0.15)	−0.34	(0.18)	−0.08	(0.15)	−0.06	(0.15)	0.01	(0.14)	0.01	(0.14)
Night shift[b]	−0.41*	(0.18)	−0.16	(0.16)	−0.07	(0.17)	−0.44*	(0.20)	0.01	(0.16)	0.04	(0.16)	0.13	(0.16)	0.13	(0.16)
Proactive personality			0.15	(0.13)	0.12	(0.13)	0.04	(0.15)	0.14	(0.12)	0.11	(0.12)	0.10	(0.12)	0.10	(0.12)
Overall satisfaction			−0.05	(0.06)	−0.06	(0.06)	0.05	(0.08)	−0.04	(0.06)	−0.07	(0.06)	−0.07	(0.06)	−0.07	(0.06)
Having ideas			0.09	(0.07)	0.07	(0.08)	−0.13	(0.09)	0.11	(0.07)	0.11	(0.07)	0.09	(0.07)	0.08	(0.07)
Time 1 voice			0.46***	(0.07)	0.38***	(0.08)	0.14	(0.09)	0.40***	(0.07)	0.34***	(0.08)	0.36***	(0.07)	0.35***	(0.07)
GM openness					0.21*	(0.09)	0.32**	(0.11)			0.13	(0.09)	−0.23	(0.16)	0.13	(0.09)
GM transformational leadership					−0.03	(0.11)	−0.15	(0.11)			0.01	(0.09)	−0.04	(0.09)	−0.37	(0.19)
Safety									0.27***	(0.06)	0.25***	(0.06)	0.24***	(0.06)	0.24***	(0.06)
Performance													−0.42	(0.23)	−0.37	(0.27)
GM openness × performance													0.15**	(0.06)		
GM transformational leadership × performance															0.13*	(0.07)
Restaurant unit[c]	0.06	(0.08)	0.02	(0.05)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)
−2 residual log-likelihood	508.74		444.73		396.42		461.94		383.28		379.36		367.79		370.56	
Δ −2 residual log-likelihood			64.01***		48.31***						17.06***		11.57**		8.80**	
Pseudo R^2	0.04		0.30		0.32						0.38		0.42		0.41	
Δ pseudo R^2			0.26		0.02						0.06		0.04		0.03	

[a] $n = 223$. Unstandardized coefficients are reported, with standard errors in parentheses.
[b] Dichotomous variable (0, 1).
[c] Estimate of the random variance between restaurant units.
* $p < .05$
** $p < .01$
*** $p < .001$

2 measures of voice (separated by ten months) were assessed with the same items.

Results and Discussion

Confirmatory factor analyses again indicated that the hypothesized factor structure fitted these data well, better than any more parsimonious model. Table 3 presents summary statistics for Study 2.

We followed an analytic strategy similar to that of Study 1 by employing multilevel analyses. We first entered the control variables and then tested the hypotheses. Table 4 presents the results of multilevel analyses for Study 2. In model 1, we entered the demographic variables. Only evening and night job shifts surfaced as significant ($t = -2.56$, $p < .05$, and $t = -2.26$, $p < .05$, respectively). Entering the individual difference variables in model 2 significantly increased the explanatory power of the model ($\Delta\chi^2 = 64.01$, $p < .001$). However, only time 1 voice was significantly related to time 2 voice behavior ($t = 6.40$, $p < .001$).

To test Hypotheses 1 and 2, we entered GM openness and GM transformational leadership into model 3. In support of Hypothesis 1, GM openness positively influenced time 2 voice ($t = 2.31$, $p < .05$). However, GM transformational leadership was not significantly related to time 2 voice ($t = -0.32$, n.s.). To test Hypothesis 3, we again followed the steps outlined by Baron and Kenny (1986). Since only Hypothesis 1 was supported (indicating compliance with step 1), we only tested for mediation with respect to GM openness. In step 2, we found a significant relationship between GM openness and safety ($t = 2.98$, $p < .01$; see model 4). In step 3, we found a significant relationship between safety and time 2 voice behavior ($t = 4.94$, $p < .001$; see model 5). Finally, in step 4, although safety remained significantly related to time 2 voice behavior ($t = 4.23$, $p < .001$), GM openness was no longer significantly related to time 2 voice ($t = 1.45$, n.s.), indicating full mediation (see model 6). The Sobel test also indicated that psychological safety mediated the relationship between GM openness and time 2 voice behavior ($t = 2.39$, $p < .05$). Thus, in sum, we again found support for Hypothesis 1 and partial support for Hypothesis 3 but did not find support for Hypothesis 2 in this sample.

We tested each of the leadership behavior by subordinate performance moderating hypotheses (Hypothesis 4) separately because the predicted underlying relationships were similar, leading to high multicollinearity between the interaction terms. Model 7 shows the significance of the GM openness by performance interaction ($t = 2.59$, $p < .01$), and Figure 1 depicts the predicted relationships plotted using the procedures outlined in Aiken and West (1993). We found a similar pattern for the interactions between GM transformational leadership and performance ($t = 1.97$, $p < .05$; see model 8 and

FIGURE 1
Effect of Interaction between GM Openness and Subordinate Performance on Employee Voice

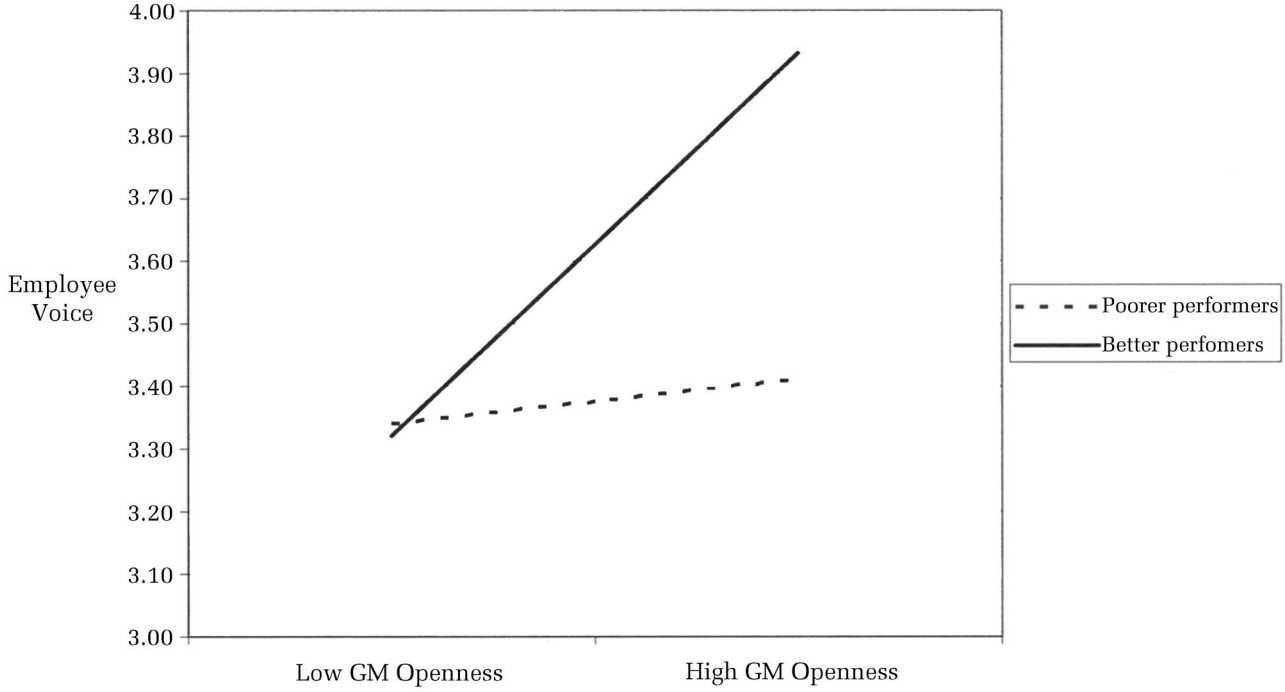


Figure 2). Thus, in support of Hypothesis 4, we found that the relationship between GM openness and GM transformational leader behaviors and time 2 voice was stronger for managers with higher performance than for managers with lower performance.

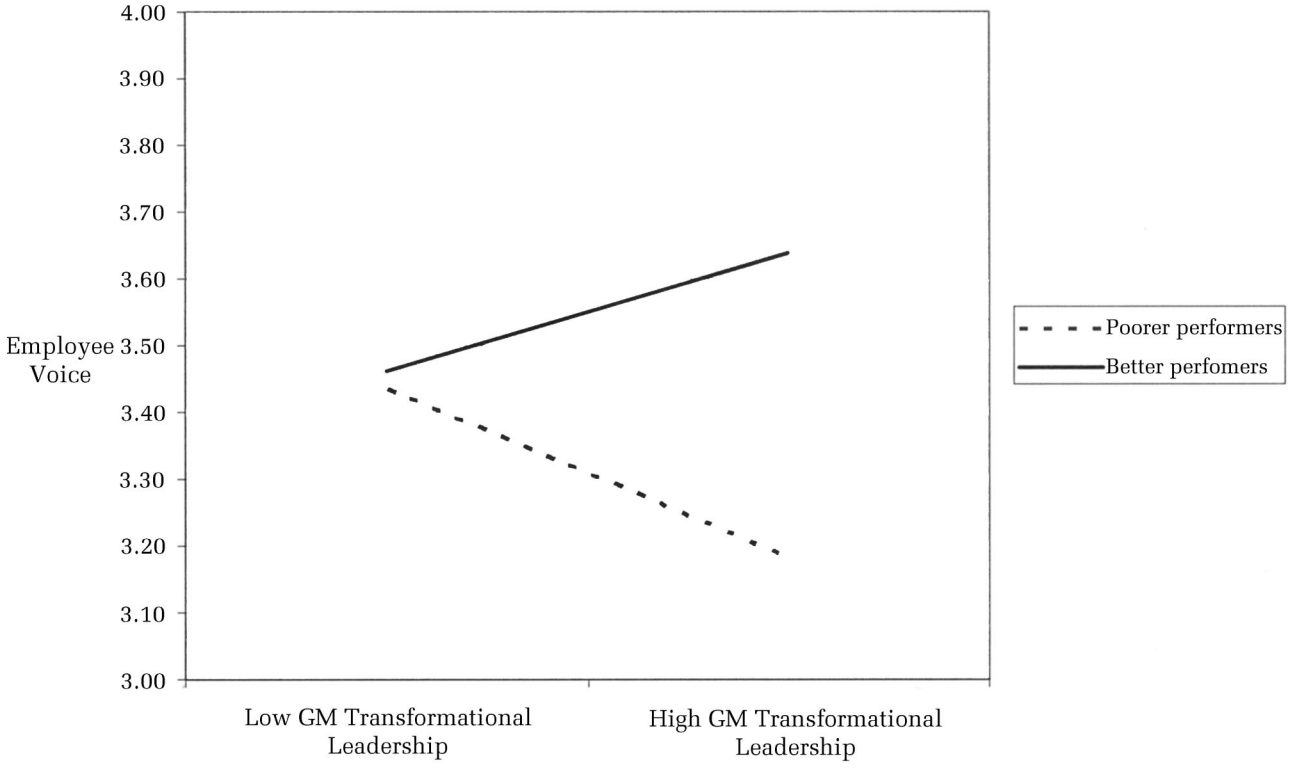
In sum, in Study 2 we introduced a time lag between measurement of the leadership variables and subordinate voice. We found that leader openness (Hypothesis 1) again positively influenced voice, even when controlling for prior level of voice, but transformational leadership (Hypothesis 2) was no longer significantly related to voice. Also, psychological safety again played a mediating role between leader openness and subordinate voice (Hypothesis 3). Finally, we found that performance level moderated the influence of leader behaviors on subsequent voice (Hypothesis 4) in such a way that the impact of leader behavior was stronger for better-performing subordinates.

GENERAL DISCUSSION

Drawing from extant leadership theory and voice research, we investigated specific leadership behaviors as a contextual influence on subordinate voice in two studies that controlled for differences in individual personality, attitudes, and job demography. The set of change-oriented leader behaviors explained an additional 6 percent of the variance in voice in Study 1 and an additional 2 percent in Study 2, where we also controlled for subordinates' previous levels of voice. The fact that employees' prior levels of voice also accounted for some influence of leadership should speak to the robustness of the influence of leadership. Indeed, if prior level of voice is removed as a control in Study 2, the leader behaviors account for 8 percent of the variance in subordinate voice.

In particular, we found management openness to be the leader behavior most consistently related to voice. We also found psychological safety to play a mediating role in the leader behavior–voice relationship and found the influence of leader behaviors on voice to be more pronounced for subordinates with high performance. Collectively, our findings suggest that understanding voice behavior requires not only an investigation of the stable individual characteristics that determine whether people speak up, but also examination of to whom they speak and why or why not they speak to that specific target.

FIGURE 2
Effect of Interaction between GM Transformational Leadership and Subordinate Performance on Employee Voice



Theoretical Implications

This study extends previous voice research in several ways. First, our results suggest that very specific leader behaviors, rather than generically positive or personalized behaviors, may be needed to stimulate routine voice from subordinates. In particular, behaviors that indicate openness to change and willingness to act on input from below may be necessary to overcome employee restraint. Conversely, even though we found significant bivariate correlations for transformational leadership in both studies, our results for transformational leadership were less consistent after we took several controls into account, suggesting that some of the behaviors comprising this construct may not present a clear signal that voice is desired. For example, some transformational leader behaviors can be perceived as both empowering and confining (Kark, Shamir, & Chen, 2003). Further, a vocal, motivational leader may be seen as egalitarian and empowering (i.e., as demonstrating socialized charisma) or as so dominant and convinced of the rightness of his/her own ideas (i.e., demonstrating personalized charisma) that others dare not offer their own (House & Howell, 1992). Thus, in both of our studies, both openness and transformational leader behaviors are consistently positively related to voice, but openness behaviors clearly send the stronger signal that voice is welcome.

Our mediation findings for psychological safety speak directly to the risk involved in challenging the status quo via improvement-oriented voice. Though a significant body of research explores the influence of leadership on other organizational citizenship behaviors, voice is unique because of the risk involved in its perceived or actual challenge to the status quo and those in power. Few authorities are likely to resist subordinates' extra-role "helping" or "sportsmanship" behaviors, but authorities may not like having "their" programs or policies challenged from below and may see employees who do so as rebellious (Frese & Fay, 2001; Van Dyne & LePine, 1998). Precisely because voice can be seen as counter-role rather than extra-role behavior (Staw & Boettger, 1990), this finding highlights the importance of leadership in creating a psychological climate of safety for voice. That is, leader behaviors are key inputs to employee assessments about potential costs and benefits of speaking up, which in turn affect ultimate voice or silence behavior (Milliken et al., 2003; Ryan & Oestreich, 1998).

In addition, our findings begin to demonstrate the differential impact of leader behaviors on voice for different types of employees. Future research might assess whether the context-dependent modulation of voice behavior found for this study's better performers is based in emotional intelligence, as recent research suggests that the abilities to read a supervisor's emotions and regulate one's own emotions may lead to higher performance (Law, Wong, & Song, 2004). Future research might also explore the types or level of solicitation needed to stimulate useful discretionary contributions from all employees, including poorer performers. Although the failure to secure the input of poorer performers may seem of minimal consequence, this view ignores the possibilities that (1) current performance problems reflect punishments for speaking up in the past, (2) performance can be improved by stimulating employee involvement, and (3) even poor performers notice problems and opportunities for improvement.

Limitations and Future Research

Several limitations of this research should be noted. First, we used perceptual data, because leader influence rests ultimately on what subordinates *perceive* their leaders to have done or been like (Bandura, 1989) even though such perceptions can be "objectively" wrong. Nonetheless, future research should investigate the relationship between leadership behaviors and subordinate voice using data from multiple sources. Second, despite the robustness of most of our findings over two samples and time periods, statements about generalizability must await the results of research in additional settings. Though in this context the effects of the leadership variables were not particularly strong beyond all the controls, our findings may actually lie near the lower bound in the range of magnitude for leadership behaviors as voice antecedents. In the low-wage service sector context we studied, where employees have limited financial investment and can readily transfer their skills to the store down the street, the effects of leadership may be low compared to other factors, such as personality, because employees are likely less concerned about the consequences of offending their bosses by speaking up. In contrast, a strong context for leadership as an influence on voice behavior could be one where employees are highly "captured"—for instance, they have high levels of firm-specific skills, or low job or geographic mobility. In these contexts, where employees likely have significantly greater job security fears, management openness may be even more important. Future research will benefit from explicit contrast of leadership's influence on voice in strong versus weak

contexts for such leadership effects (Bem & Allen, 1974).

Third, future research should also continue to explore the dynamic relationships among leader behavior, subordinate voice, and the other components of subordinate behavior that factor into a leader's overall evaluation of each subordinate. After all, a subordinate's current overall performance likely includes his/her manager's reaction to prior speaking up. To fully pinpoint causality, an ideal study might sample new employees and track leader behavior, voice, and performance data over several periods. This would be important work because it is one thing to be less interested in the comments of systematically poor performers and another altogether to be disenfranchising and punishing to the very employees who offer the best ideas for change. Finally, we note that additional contextual determinants could be integrated into future investigations of psychological safety and voice. For example, since leaders also influence subordinates indirectly through their control over organizational policies and structures and their impact on an overall culture or climate (Morrison & Milliken, 2000), research that combines dyadic direct effects with indirect leader effects would help shed light on the overall contextual influences on speaking up. Other factors to be further explored as likely influences on the decision to speak up include the nature of work or industry and the degree of demographic similarity between would-be speakers and managerial targets of voice (Dutton et al., 1997).

Managerial Implications

Our findings about the value of overt leader behavior in getting more employee ideas "on the table" have important action implications. First, such managerial behaviors should be measured, developed, and rewarded. For example, the types of behaviors found herein to influence voice could be readily incorporated into the subordinate portion of 360° feedback instruments and subsequent developmental and accountability programs. Such assessments would help companies differentiate between managers who rely primarily on formal mechanisms (e.g., suggestion systems) and espoused openness to input (e.g., an "open door" policy) and those whose behavior explicitly welcomes voice. Further, employees at all levels are likely to need training in both the delivery and receipt of upward information. Although managers are more accountable for setting the right tone for voice and therefore need practice in nondefensive listening and in communicating the rationale for (non)action in response to voice, subordinates are also partly responsible for effectively making issues known in the first place. Poorer performers may be particularly good candidates for communication skill building because they may lack self-efficacy and need to overcome management perceptions that they have little to offer. Collectively, these actions represent difficult but important steps toward helping managers receive and act on the upward feedback they need for their organizations to remain healthy.

REFERENCES

Aiken, L. S., & West, S. G. 1993. ***Multiple regression: Testing and interpreting interactions*** (3rd ed.). Newbury Park, CA: Sage.

Ashford, S. J., Rothbard, N. 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.

Bandura, A. 1989. Human agency in social cognitive theory. ***American Psychologist,*** 44: 1175–1184.

Baron, R. M., & Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. ***Journal of Personality and Social Psychology,*** 51: 1173–1182.

Bass, B. M. 1985. ***Leadership and performance beyond expectations.*** New York: Free Press.

Bass, B. M., & Avolio, B. J. 1990. ***Transformational leadership development: Manual for the Multifactor Leadership Questionnaire.*** Palo Alto, CA: Consulting Psychologist Press.

Bass, B. M., & Riggio, R. E. 2006. ***Transformational leadership*** (2nd ed.). Mahwah, NJ: Erlbaum.

Bem, D. J., & Allen, A. 1974. On predicting some of the people some of the time: The search for cross-situational consistencies in behavior. ***Psychological Review,*** 81: 506–520.

Bennis, W., & Nanus, B. 1985. ***Leaders: The strategies for taking charge.*** New York: Harper & Row.

Brockner, J., Heuer, L., Siegel, P. A., Wiesenfeld, B., Martin, C., Grover, S., Reed, T., & Bjorgvinsson, S. 1998. The moderating effect of self-esteem in reaction to voice: Converging evidence from five studies. ***Journal of Personality and Social Psychology,*** 75: 394–407.

Conger, J. A. 1989. ***The charismatic leader: Behind the mystique of exceptional leadership.*** San Francisco: Jossey-Bass.

Crant, M. J. 2003. ***Speaking up when encouraged: Predicting voice behavior in a naturally-occurring setting.*** Paper presented at the annual meeting of the Academy of Management, Seattle.

Depret, E. F., & Fiske, S. T. 1993. Social cognition and power: Some cognitive consequences of social structure as a source of control deprivation. In G. Weary, F. Gleicher, & R. Marsh (Eds.), ***Control motivation and social cognition:*** 176–202. New York: Springer Verlag.

Dutton, J. E., Ashford, S. J., O'Neill, R. M., Hayes, E., & Wierba, E. E. 1997. Reading the wind: How middle managers assess the context for selling issues to top managers. ***Strategic Management Journal,*** 18: 407–425.

Edmondson, A. 1999. Psychological safety and learning behavior in work teams. ***Administrative Science Quarterly,*** 44: 350–383.

Edmondson, A. C. 2003. Speaking up in the operating room: How team leaders promote learning in interdisciplinary action teams. ***Journal of Management Studies,*** 40: 1419–1452.

Emerson, R. M. 1962. Power-dependence relations. ***American Sociological Review,*** 27: 31–41.

French, J. R. P., & Raven, B. 1959. The bases of social power. In D. P. Cartwright (Ed.), ***Studies in social power:*** 150–167. Ann Arbor: University of Michigan.

Frese, M., & Fay, D. 2001. Personal initiative: An active performance concept for work in the 21st century. In B. M. Staw & R. I. Sutton (Eds.), ***Research in organizational behavior,*** vol. 23: 133–187. Greenwich, CT: JAI Press.

Frese, M., Teng, E., & Wijnen, C. 1999. Helping to improve suggestion systems: Predictors of making suggestions in companies. ***Journal of Organizational Behavior,*** 20: 1139–1155.

Hirschman, A. O. 1970. ***Exit, voice, and loyalty: Responses to decline in firms, organizations, and states.*** Cambridge, MA: Harvard University Press.

Hornstein, H. A. 1986. ***Managerial courage: Revitalizing your company without sacrificing your job.*** New York: Wiley.

House, R. J., & Howell, J. M. 1992. Personality and charismatic leadership. ***Leadership Quarterly,*** 3: 81–108.

House, R. J., & Rizzo, J. R. 1972. Toward the measurement of organizational practices. ***Journal of Applied Psychology,*** 56: 388–396.

Janssen, O., de Vries, T., & Cozijnsen, A. J. 1998. Voicing by adapting and innnovating employees: An empirical study on how personality and environment interact to affect voice behavior. ***Human Relations,*** 51: 945–967.

Kark, R., Shamir, B., & Chen, G. 2003. The two faces of transformational leadership: Empowerment and dependency. ***Journal of Applied Psychology,*** 88: 246–255.

Law, K. S., Wong, C., & Song, L. J. 2004. The construct and criterion validity of emotional intelligence and its potential utility for management studies. ***Journal of Applied Psychology,*** 89: 483–496.

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: 326–336.

Maslow, A. H. 1943. A theory of human motivation. ***Psychological Review,*** 50: 370–396.

Milliken, F. J., Morrison, E. W., & Hewlin, P. F. 2003. An exploratory study of employee silence: Issues that employees don't communicate upward and why. ***Journal of Management Studies,*** 40: 1453–1476.

Morrison, E. W., & Milliken, F. J. 2000. Organizational silence: A barrier to change and development in a pluralistic world. ***Academy of Management Review,*** 25: 706–725.

Ostroff, C., Kinicki, A. J., & Clark, M. A. 2002. Substantive and operational issues of response bias across levels of analysis: An example of climate-satisfaction relationships. ***Journal of Applied Psychology,*** 87: 355–368.

Pfeffer, J., & Salancik, G. 1978. ***The external control of organizations: A resource dependence perspective.*** New York: Harper & Row.

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. 1990. Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. ***Leadership Quarterly,*** 1: 107–142.

Raudenbush, S. W., & Bryk, A. S. 2002. ***Hierarchical linear models: Applications and data analysis methods.*** Thousand Oaks, CA: Sage.

Rusbult, C. E., Farrell, D., Rogers, G., & Mainous, A. G. 1988. Impact of exchange variables on exit, voice, loyalty, and neglect: An integrative model of responses to declining job satisfaction. ***Academy of Management Journal,*** 31: 599–627.

Ryan, K. D., & Oestreich, D. K. 1998. ***Driving fear out of the workplace*** (2nd ed.). San Francisco: Jossey-Bass.

Saunders, D. M., Sheppard, B. H., Knight, V., & Roth, J. 1992. Employee voice to supervisors. ***Employee Rights and Responsibilities Journal,*** 5: 241–259.

Senge, P. M. 1990. ***The fifth discipline: The art and practice of the learning organization.*** New York: Doubleday.

Snyder, M., & Copeland, J. 1989. Self-monitoring processes in organizational settings. In R. Giacalone & P. Rosenfeld (Eds.), ***Impression management in the organization:*** 7–19. Hillsdale, NJ: Erlbaum.

Sobel, M. E. 1982. Asymptotic confidence intervals for

indirect effects in structural equation models. In S. Leinhardt (Ed.), ***Sociological methodology 1982:*** 290–312. Washington, DC: American Sociological Association.

Sprague, J., & Ruud, G. L. 1988. Boat-rocking in the high-technology culture. ***American Behavioral Scientist,*** 32: 169–193.

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.

Staw, B. M., & Boettger, R. D. 1990. Task revision: A neglected form of work performance. ***Academy of Management Journal,*** 33: 534–559.

Van Dyne, L., Ang, S., & Botero, I. C. 2003. Conceptualizing employee silence and voice as multidimensional constructs. ***Journal of Management Studies,*** 40: 1359–1392.

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.

Waldman, D. A., Javidan, M., Varella, P. 2004. Charismatic leadership at the strategic level: A new application of upper echelons theory. ***Leadership Quarterly,*** 15: 355–380.

Wayne, S. J., & Liden, R.C. 1995. Effects of impression management on performance ratings: A longitudinal study. ***Academy of Management Journal,*** 38: 232–260.

Wayne, S. J., Shore, L. M., & Liden, R. C. 1997. Perceived organizational support and leader-member exchange: A social exchange perspective. ***Academy of Management Journal,*** 40: 82–111.

Withey, M. J., & Cooper, W. H. 1989. Predicting exit, voice, loyalty, and neglect. ***Administrative Science Quarterly,*** 34: 521–539.

James R. Detert (*jdetert@psu.edu*) is an assistant professor of management at the Johnson Graduate School of Management at Cornell University. He received his Ph.D. from Harvard University. His primary research interests involve employee voice, leadership, and business ethics.

Ethan R. Burris (*ethan.burris@mccombs.utexas.edu*) is an assistant professor of management at the McCombs School of Business at the University of Texas at Austin. He received his Ph.D. from Cornell University. His research focuses on employee voice behaviors, integration of knowledge and expertise in teams, and negotiation and conflict.