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Taking Your Team Behind the Curtain: The Effects of Leader Feedback-Sharing and Feedback-Seeking on Team Psychological Safety

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Abstract. Although scholars have highlighted the benefits of psychological safety, relatively few studies have examined how leaders establish it. Whereas existing research points to the importance of seeking feedback, we draw on theories of self-disclosure, trust, and implicit voice to propose that leaders can also promote psychological safety by sharing feedback—openly discussing criticisms and suggestions they have already received about their own performance. In Study 1, naturally-occurring feedback-seeking and feedback-sharing by CEOs independently predicted board member ratings of top management team psychological safety. In Study 2, a longitudinal field experiment, randomly assigning leaders to share feedback had a positive effect on team psychological safety one year later, whereas assigning leaders to seek feedback did not. In Study 3, to explore the processes through which feedback-sharing had an enduring effect but feedback-seeking did not, we conducted qualitative interviews with participating leaders and employees two years later. We found that leaders initiated vulnerability through seeking feedback, but it dissolved due to defensiveness and inaction. In contrast, sharing feedback normalized and crystallized vulnerability as leaders made a public commitment to keep sharing and employees reciprocated, which opened the door for more actionable feedback, greater accountability, and ongoing practices that allowed psychological safety to endure. Our research suggests that to achieve enduring improvements in psychological safety, it may be particularly effective for leaders to share criticism they have received—and that doing so does not jeopardize their reputations as effective and competent.

Supplemental Material: The online appendix is available at https://doi.org/10.1287/orsc.2021.1498.

Keywords: psychological safety • feedback-seeking • feedback-sharing • leader vulnerability • teams

Psychological safety is a pivotal force in organizational life (Kahn 1990). Considerable research shows that when employees believe they can take risks without being punished, they speak up more often (Detert and Burris 2007), generate more creative ideas and innovative solutions (Baer and Frese 2003), engage more in quality improvement work (Nembhard and Edmondson 2006), and face fewer injuries and accidents (Christian et al. 2009), as they are able to report and learn from mistakes (Edmondson 1996, 1999). It is no surprise that a lack of psychological safety has been implicated as a barrier to idea expression in disasters ranging from the Cuban missile crisis (Kramer et al. 1990) to the Challenger space shuttle explosion (Mulvey et al. 1996, Vaughan 1996).

Despite the importance of psychological safety, many leaders fail to establish it. When employees speak up, it often elicits insecurity on the part of leaders, who worry that it will threaten their images as competent (Tynan 2005, Fast et al. 2014) or create immediate problems and disruptions without clear solutions and benefits (Sherf et al. 2019). It is also well documented that subordinates hold back on voicing their opinions due to fear and futility: they worry that they will be punished or their ideas will fall on deaf ears (Ashford et al. 1998, Morrison and Milliken 2000, Detert and Burris 2007, Sherf et al. 2020b), even if they have no evidence that this has happened in the past (Detert and Edmondson 2011). Because leaders have an outsize influence on team psychological safety (Edmondson 1999, Nembhard and Edmondson 2006), it is critical for them to show that they are open to ideas (Morrison 2011).

For decades, scholars have recognized that leaders can signal openness by asking for feedback, which demonstrates a desire to improve (Ashford and Tsui 1991), conveys respect for employees' input (Nembhard and Edmondson 2006), and opens the door for voice (Sherf et al. 2020a). However, it is also possible that requests for feedback create anxiety in employees,

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who may be uncertain about what to say and how leaders will react (Ashford et al. 2003, 2016). Scholars have yet to theoretically develop or empirically explore these effects of leader feedback-seeking on psychological safety.

In this paper, we introduce feedback-sharing as an alternative strategy for promoting psychological safety. Whereas feedback-seeking involves making a direct request for information about how to improve (Ashford and Tsui 1991), feedback-sharing involves disclosing suggestions for improvement that one has received in the past. Building on theories of self-disclosure (Gibson 2018) as well as trust and implicit voice, we propose that when leaders openly discuss past feedback, they demonstrate that they can handle criticism, acknowledge their limitations, and establish trustworthiness, reducing uncertainty about what issues are safe to raise. Thus, although seeking and sharing feedback can both establish psychological safety, it is more likely to endure when leaders share feedback.

We test and elaborate these hypotheses across three studies with both naturally-occurring and experimentally-induced feedback-seeking and feedback-sharing. Our first study is a field study in which CEOs report their levels of feedback-seeking and feedback-sharing and independent board members rate team psychological safety. Our second study is a longitudinal field experiment with managers, randomly assigning them to ask their existing teams for feedback and/or share the development areas from their performance reviews with their teams, and inviting their direct reports to rate team psychological safety one week and one year later. Our third study is a qualitative analysis of the underlying dynamics based on interviews with participating leaders and employees from our field experiment two years after the initial intervention. We develop process models that illuminate why prompting managers to seek feedback did not have an enduring effect on team psychological safety, whereas prompting them to share feedback took longer to build psychological safety but ultimately helped it endure by creating a cycle of normalizing and crystallizing vulnerability.

Our research contributes to knowledge about how leaders build psychological safety in teams. By identifying leader actions that can promote and maintain psychological safety, we answer calls for a dynamic perspective on the emergence of psychological safety (Edmondson and Lei 2014). We also advance the feedback literature by shifting the lens from interpersonal to intrapersonal feedback, revealing that leaders may overcome some of the risks of seeking feedback (Ashford et al. 2016) by sharing criticism they have received in the past and weaknesses they hope to overcome in the future. Further, we offer a fresh perspective on the debate about whether leaders should disclose vulnerability (Gibson et al. 2018, Brooks et al. 2019), showing that it is possible for leaders to admit their shortcomings in ways that build psychological safety without undermining their images as capable and competent. Taken together, our studies suggest that reactively seeking feedback at one point in time based on organizational encouragement does not have the same impact as proactively taking the initiative to do so on an ongoing basis. If the goal is to promote and maintain psychological safety, leaders may be better off encouraging managers to share feedback than to seek it.

Leader Feedback Seeking, Feedback Sharing, and Team Psychological Safety

Team psychological safety refers to a shared belief held by members of a team that they can take risks without being penalized (Kahn 1990, Edmondson 1999). Research indicates that team psychological safety is influenced by the norms that leaders create and maintain, the behaviors they enact, and the cognitions and emotions they express (Edmondson 1999, Nembhard and Edmondson 2006, Detert and Burris 2007). Meta-analytic evidence shows that leadership is one of the strongest predictors of psychological safety (Frazier et al. 2017).

The core antecedents of team psychological safety are respect and trust (Kahn 1990; Edmondson 1999, 2003; Edmondson and Lei 2014). How leaders engage with feedback has important implications for respect and trust. Organizational scholars have long studied feedback-seeking, the act of inquiring for information about one's performance (Ashford and Cummings 1983). There is reason to believe that leader feedback-seeking will promote team psychological safety by conveying respect. According to theories of inquiry (Van Quaquebeke and Felps 2018), when leaders openly ask questions about their performance, they are signaling to employees that they value their input. This opportunity to have a say can serve both instrumental and value-expressive functions for employees (McFarlin and Sweeney 1996): it enables them to have influence in the organization and allows them to feel seen and heard. Indeed, recent experiments have shown that when people are asked questions, they feel more respected, understood, and cared about (Huang et al. 2017).

Leader feedback-seeking is an act of humble inquiry (Schein 2013) that shows interest in and grants status to employees. By engaging in inquiry, leaders make it clear to employees that they are willing to listen to and learn from them (Argyris and Schön 1978). Research shows that when employees feel listened to by leaders, they experience a stronger sense of psychological safety (Castro et al. 2018). Leader feedback-

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seeking sends a message that leaders care about treating employees fairly and understanding them personally (Sherf et al. 2020a). When leaders engage in feedback-seeking, it communicates that "the organization values their input" (Ashford et al. 2017, p. 82). Accordingly, we predict that leader feedback-seeking will enhance team psychological safety.

Hypothesis 1. *Leader feedback-seeking promotes team psychological safety.*

For psychological safety to flourish in a team, it is not enough for employees to feel respected by leaders. To feel comfortable taking risks, employees also need to believe that they can trust their leaders (Edmondson and Lei 2014). According to theories of self-disclosure (Collins and Miller 1994), trustworthiness judgments are based heavily on what individuals share about themselves. To capture self-disclosure in the context of feedback, we introduce the concept of feedback-sharing: openly discussing information on performance—including criticisms and suggestions—that one has received in the past.

Although it has garnered little attention in organizational scholarship, feedback-sharing is not uncommon among leaders. For example, marketing vice president Carolyn Everson shared her performance reviews from her boss openly with her team (Bellstrom 2015), technology CEO Brad Smith posted his 360 reviews on his office door (Cohn and Rangan 2020), and Melinda Gates (2019) read critical feedback from employees out loud for the entire Gates Foundation. In addition, various leaders in the corporate and nonprofit sectors have written "user manuals" for new employees on how to work effectively with them, incorporating past feedback from their teams (Bryant 2013).

We expect that leader feedback-sharing will promote psychological safety by building trust. Feedback-sharing is a form of self-disclosure (Collins and Miller 1994), as it involves showing vulnerability by opening up about how one has been criticized in the past and what areas of weakness one is striving to improve. A core premise of self-disclosure theories is that expressing vulnerability by sharing sensitive information with others about ourselves can increase their trust in us over time—and our trust in them (Kelly and McKillop 1996). When leaders share feedback, they are showing that they trust their employees enough to invite them backstage (Goffman 1959). By acknowledging their own weaknesses, leaders demonstrate authenticity (Diddams and Chang 2012), which allows employees to see them as more human and approachable (Bruk et al. 2018).

The act of disclosing development areas establishes trustworthiness, as leaders are proving to their employees that they have the integrity to listen to feedback and act upon it. Instead of merely claiming to be open to criticism, leaders are walking the talk by showing that they can enact the values they are espousing (Simons 2002): they have been receptive to criticism in the past and can be trusted to respond well to it in the future. In a study of hospital teams, Edmondson et al. (2001) found that in psychologically safe teams, senior leaders were comfortable sharing past criticism from more junior employees and admitting their own prior mistakes. For example, a senior nurse shared a story about a junior nurse pointing out an error she made, and a surgeon spoke openly about screwing up and having bad judgment in particular cases. As Edmondson (2004, p. 251) explains, this act of leader trustworthiness strengthened the psychological safety in the team: "By admitting mistakes himself, this surgeon signaled to the team that errors and concerns could be discussed without fear of punishment." Thus, we predict that when leaders share feedback, their teams trust them more and experience the psychological safety to take risks.

Hypothesis 2. *Leader feedback-sharing promotes team psychological safety.*

Both feedback-seeking and feedback-sharing are expressions of vulnerability. By asking for and sharing criticism, leaders are taking themselves off a pedestal, lowering power distance and demonstrating openness and inclusiveness. However, an important distinction between the two lies in the level of self-disclosure that they entail. Although seeking feedback signals respect and openness, leaders are not opening up about themselves. Theories of self-disclosure (Collins and Miller 1994) suggest that revealing personal information plays a critical role in enhancing and maintaining trust. In particular, we suggest that leader feedback-sharing will have a more enduring effect on team psychological safety than leader feedback-seeking for three reasons.

First, according to research on implicit voice theories (Detert and Edmondson 2011), employees often harbor fears that speaking up will embarrass the boss or have negative career consequences for them. A request for feedback does little to directly mitigate those fears: employees may still be uncertain about whether leaders will respond defensively or penalize them (Fast et al. 2014). The willingness to see and work on one's weaknesses does not guarantee that learning about them will not be upsetting (Howard and Van Zandt 2020). When leaders share feedback, on the other hand, they are providing proof that they can handle criticism, quelling employees' fears that giving feedback on leaders' weaknesses will backfire. The act of self-disclosure not only offers evidence that leaders have listened to feedback in the past, but also demonstrates that they are not ashamed or embarrassed to

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acknowledge it in the present. Research suggests that when individuals reveal their failures rather than only discussing their successes, they are seen as less arrogant (Brooks et al. 2019), which signals that they will not be threatened by criticism. At the same time, disclosing failures is a display of confidence (Brooks et al. 2019): it makes it clear to employees that leaders are self-assured enough to recognize and accept their own fallibility. Leaders' candor about their foibles reduces uncertainty and mitigates anxiety about how they will react to criticism, giving employees confidence that it is safe to speak up.

Second, sharing feedback also differs from seeking feedback in that it involves role modeling self-disclosure. As Edmondson (2004, p. 251) explains, "If leaders are taciturn and their behavior indicates that certain matters are best not discussed, others will follow their example. Explicitly demonstrating fallibility or vulnerability can help reduce counterproductive barriers created by status differences. Team members who hear their leader admit to the group that he or she made a mistake are likely to remember this the next time they make mistakes and feel more comfortable bringing this up." A robust finding in self-disclosure research is that disclosure begets disclosure: when individuals share something personal, they demonstrate that they are willing to be vulnerable, and the trust built tends to be reciprocated (Collins and Miller 1994). Others tend to follow suit by disclosing something personal about themselves (Dindia and Allen 1992, Aron et al. 1997). When leaders speak openly about criticism, they role model the act of self-disclosure. This can put their subordinates at ease, suggesting that the door is truly open (Edmondson 2003, Detert and Burris 2007) and making it safe for employees to reciprocate by speaking openly about their own criticisms. As leaders initiate vulnerability and employees respond in kind, a cycle of reciprocal self-disclosure is likely to continue, maintaining the psychological safety that was created.

In contrast, when leaders seek feedback, although they are acknowledging that they have ways to improve (Ashford and Tsui 1991), the dynamic of mutual self-disclosure is not activated. Because leaders have not shared specific information about themselves, they are not role modeling self-disclosure, and employees are, thus, less likely to reciprocate with their own self-disclosures. Although they may experience enough psychological safety to give feedback, their ongoing fears about the relationship and career consequences of speaking up (Detert and Edmondson 2011) are likely to limit how much they share. As a result, feedback-seeking is unlikely to spur a cycle of reciprocal vulnerability and less likely to maintain psychological safety over time.

Third, leader feedback-sharing is likely to be a more disruptive event than feedback-seeking. According to disruptive self-disclosure theory (Gibson 2018), when leaders show vulnerability by sharing sensitive information about themselves, it can catalyze shifts in their relationships with employees. However, leaders may still be reluctant to be vulnerable, either because they do not want to be reminded of their insecurities (Kim et al. 2020) or because they are concerned about maintaining their status and authority (e.g., Ely and Meyerson 2010, Fast et al. 2014, Gibson et al. 2018). Leaders are generally expected to project strength, confidence, and competence (Lord et al. 1986, Koenig et al. 2011). When leaders admit their shortcomings, employees are likely to be surprised, which triggers sensemaking (Weick 1979). The initial surprise experienced typically leads recipients of disruptive self-disclosures to pause and appraise the implications of the information shared (Smith and Kirby 2009). Following the ensuing attributional search, employees are likely to interpret this vulnerability as a leader's attempt to expand the work relationship, enhancing the quality of the connection between them (Dutton and Heaphy 2003) and sparking a positive relationship trajectory shift (Gibson 2018). Employees may conclude that speaking up is safer than they had realized. In turn, leaders are likely to take employees' vulnerability as a sign that their openness is appreciated and continue speaking candidly about their weaknesses and development goals, which will reinforce psychological safety over time.

Conversely, feedback-seeking is less likely to be a disruptive act. It is common for employees to expect their leaders to seek their feedback and give them a say (e.g., McFarlin and Sweeney 1996, Wong 2019) even in cultures with high power distance (e.g., Martin et al. 2013, Chun et al. 2018). As such, employees are less likely to be surprised when leaders seek feedback, less likely to reevaluate the level of vulnerability that is appropriate in the work relationship, and more likely to be guarded in the feedback they give. This reduces the odds of a lasting effect of leader feedback-seeking on psychological safety.

Hypothesis 3. *Leader feedback-sharing has a more enduring effect on team psychological safety than leader feedback-seeking.*

To test our hypotheses, we conducted three studies. In Study 1, we tested our first two hypotheses with a field study of naturally-occurring CEO feedback-seeking and feedback-sharing as predictors of psychological safety in top management teams. In Study 2, we tested all three hypotheses with a longitudinal field experiment in which we randomly assigned team leaders to seek and/or share feedback, and surveyed their employees on team psychological safety one week and

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one year later. In Study 3, to enrich our understanding of the processes through which the feedback-seeking and feedback-sharing effects operate, we conducted interviews with participants in the field experiment and developed process models of the vulnerability cycles that unfolded.

As an exploratory question, we examine whether feedback-seeking and feedback-sharing can promote team psychological safety without undermining perceptions of leader performance or competence. Existing research presents conflicting evidence about how expressing vulnerability affects perceptions of leaders, with some studies suggesting that it signals weakness (Gibson et al. 2018), others suggesting that it can portray confidence (Nadler et al. 2003, Ely and Meyerson 2010, Brooks et al. 2019), and some indicating that it depends on the expertise or ability of the feedback seeker or sharer (Nadler et al. 2003, Moore et al. 2017, Cojuharenco and Karelaia 2020). To examine this question, we include assessments of leader performance and competence in our studies.

Study 1 Method

Sample and Design

Our sample consisted of CEOs and their board members at portfolio companies owned by a private equity fund. The companies in our sample were all located in the United States and spanned a wide range of industries, including pharmaceuticals, healthcare, business services, technology, software, telecommunications, government services, manufacturing, and consumer products and services. The partner in charge of business development at the private equity company reached out to 136 CEOs in the fund's portfolio to invite them to complete a survey on leadership behaviors in top management teams. We surveyed CEOs on their feedback-seeking and feedback-sharing behavior, receiving completed surveys from 66 CEOs, which yielded a response rate of 48.5%. All but four of the participating CEOs were male, with an average age of 53.9 years (SD = 7.3) and average tenure of 7.6 years (SD = 7.4).

One month later, the private equity company identified a single board member from each of the 66 companies who was most familiar with each company's top management dynamics. Board members interacted with CEOs and their top management teams in person at least four times a year during quarterly board meetings as well as on weekly calls and meetings to discuss progress on operating initiatives for each portfolio company. All 66 board members completed our survey, yielding a 100% response rate. To minimize halo effects, we created temporal separation, asking the same board members to rate CEO performance another month later.

Measures

Unless otherwise indicated, all items used a seven-point Likert-type scale (1 = *never* to 7 = *always*).

Leader Feedback Seeking. CEOs reported their feedback-seeking on three items adapted from existing scales (Ashford and Cummings 1983, Ashford and Tsui 1991). The three items were "seek information about how you can improve in your job," "go to your top management team for advice," and "seek feedback on how you can become a more effective leader" (α = 0.79).

Leader Feedback Sharing. CEOs reported their feedback-sharing on three items that we developed for this study. We generated an item pool (DeVellis 1991) by asking partners in the private equity company to describe instances of CEOs discussing the feedback and criticism they had received, adapting their language and refining it based on feedback from organizational scholars. The final three items were "tell your top management team about past constructive criticism that you've received," "talk with your top management team about how you've benefited from developmental feedback before," and "tell stories about times when other people have pointed out your weaknesses" (α = 0.88).

Team Psychological Safety. One month after the CEO survey, a board member from each portfolio company rated their perceptions of the psychological safety created by the CEOs in their top management team (1 = *disagree strongly* to 7 = *agree strongly*). Evidence indicates that outsider ratings of team psychological safety significantly correlate with aggregated team member ratings (Edmondson 2004). The board members completed an abridged version of Edmondson's (1999) scale, in keeping with past research (Detert and Burris 2007): "it is safe for this CEO's top management team members to take risks as members of the team," "when this CEO's top management team members make mistakes, they are often held against them" (reverse coded), and "this CEO's top management team members are able to bring up problems and tough issues" (α = 0.83).

Leader Performance. In a separate survey administered one month after the ratings of team psychological safety, the same board member also rated the CEO's performance (1 = *significantly below expectations* to 7 = *significantly above expectations*) using three items (Black and Porter 1991): "quality of performance," "ability to get the task done on time," and "achievement of work goals" (α = 0.95).

Control Variables. We controlled for the demographic variables of CEO gender and tenure based on the

possibility that male and female leaders and leaders with varying levels of experience may create different levels of psychological safety in their top management teams, and may have different attitudes toward feedback-seeking and/or feedback-sharing. Specifically, we included gender because men and women often have different reactions to vulnerability (Ely and Meyerson 2010) and employees often have different expectations of male and female leaders (Koenig et al. 2011) with respect to displays of vulnerability (Rosette et al. 2015, Evans et al. 2019). We controlled for organizational tenure given that experience may make CEOs more confident and secure (e.g., Murphy and Ensher 1999), and thereby encourage both vulnerability and team psychological safety.

Study 1 Results

Means, standard deviations, and correlations for our variables are displayed in Table 1. To verify the independence of feedback-seeking and feedback-sharing as well as psychological safety and leader performance, we conducted a confirmatory factor analysis modeling the constructs on separate correlated latent factors. The model achieved excellent fit, x^2 (48) = 61.09, comparative fit index (CFI) = 0.97, standardized root mean square residual (SRMR) = 0.06. Factor loadings ranged from 0.55 to 0.86 for feedback-seeking, 0.78 to 0.91 for feedback-sharing, 0.73 to 0.88 for psychological safety, and 0.87 to 0.98 for leader performance. The disattenuated factor correlation between feedback-seeking and feedback-sharing was 0.39, and team psychological safety had significant positive correlations with both feedback-seeking (r = 0.35, p < 0.05) and feedback-sharing (r = 0.39, p < 0.05).

To test our first two hypotheses, we conducted ordinary least squares (OLS) regression analyses. In support of Hypotheses 1 and 2, leader feedback-seeking (b = 0.23, SE = 0.12, β = 0.24, t = 2.00, p < 0.05; see Table 2) and feedback-sharing (b = 0.23, SE = 0.12, β = 0.24, t = 2.04, p < 0.05; see Table 2) were significant independent positive predictors of team psychological safety. These results were robust when including our two predictors separately in analyses, with and without control variables. There was not a significant interaction between feedback-seeking and feedback-sharing in predicting team psychological safety.[1]

Study 1 Discussion

Although these results provide initial evidence that leader feedback-seeking and feedback-sharing are both related to higher team psychological safety, they are subject to several limitations. First, because we collected lagged data on psychological safety at one point in time, we were unable to test Hypothesis 3 about the enduring effects of feedback-seeking and feedback-sharing. Second, these data also leave important questions unanswered about the causal impact of leader feedback-seeking and feedback-sharing on team psychological safety. It is possible that omitted variables are common causes of both leader behaviors and team psychological safety. For example, high company performance may make employees more comfortable taking risks and leaders more comfortable seeking and sharing criticism. Reverse causality is also plausible: psychological safety is shaped not only by leadership, but also by peer support (Frazier et al. 2017) and organizational practices (Edmondson and Lei 2014), and it may be that psychological safety created by these forces makes leaders comfortable seeking feedback and sharing their development areas. Third, although this is not unusual for a study of CEO feedback-seeking (e.g., Ashford et al. 2017), our sample size was relatively small and heavily male. Fourth, although our scales achieved reliability and validity, we used abridged measures that involved self-reports by leaders and ratings by an outside board member.

To address these limitations, we conducted a longitudinal field experiment. To test our full set of hypotheses and support causal inferences, we randomly assigned team leaders to seek and/or share feedback and measured team psychological safety both one week and one year after the intervention. To constructively replicate our results, we conducted the experiment with a larger, more demographically diverse sample of leaders. To triangulate our results, we enlisted multiple employees inside each team to rate psychological safety on the full

Table 1. Study 1 Means, Standard Deviations, and Correlations

Variable	*M*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*
1. *Leader feedback-seeking*	4.24	1.28	(0.79)					
2. *Leader feedback-sharing*	3.11	1.28	0.31*	(0.88)				
3. *Team psychological safety*	5.30	1.23	0.28*	0.35**	(0.83)			
4. *Leader performance*	5.27	1.41	0.26*	0.38**	0.44**	(0.95)		
5. *Leader gender* (0 = male, 1 = female)	0.06	0.24	0.07	−0.04	−0.17	0.09	-	
6. *Leader tenure* (years)	7.58	7.37	0.10	−0.13	−0.24	−0.05	−0.01	-

Note. Coefficient alphas appear across the diagonal in parentheses.
*p < 0.05; **p < 0.01.

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Table 2. Study 1 Ordinary Least Squares Regression Analyses Predicting Team Psychological Safety

	Step 1				Step 2			
Variables	*b*	*s.e.*	*β*	*t*	*b*	*s.e.*	*β*	*t*
Leader feedback-seeking	0.23	0.12	0.24	2.00*	0.33	0.16	0.27	2.00
Leader feedback-sharing	0.23	0.12	0.24	2.04*	0.28	0.16	0.23	1.79
Leader gender	−0.90	0.58	−0.18	−1.57	−0.21	0.14	−0.17	−1.49
Leader tenure	−0.04	0.02	−0.23	−2.02*	−0.29	0.14	−0.24	−2.05*
Leader feedback-seeking × Leader feedback-sharing					0.09	0.19	0.06	0.49
R^2	0.24**				0.24**			
F(*df*)	4.71 (4, 61)				3.77 (5, 60)			

*$p < 0.05$; **$p < 0.01$.

scale, and tested whether the same patterns hold after objectively manipulating leader feedback-seeking and feedback-sharing.

Study 2 Method

We conducted a longitudinal field experiment across two organizations: a financial company headquartered in Virginia and a healthcare company headquartered in Seattle. These were relevant contexts for examining the effects of leader feedback-sharing and leader feedback-seeking on team psychological safety given that team leaders and members had just completed their annual performance reviews in both organizations. We operationalized feedback-sharing by inviting leaders to discuss the development areas from their most recent performance reviews verbally during a group meeting at one point in time, and operationalized feedback-seeking by inviting leaders to ask their team members verbally for feedback on their performance during a group meeting at one point in time.

Sample and Design

One hundred eleven team leaders (80 from the financial company and 31 from the healthcare company) participated in this field experiment. Of their 650 team members, we received responses from 356 (a 54.8% response rate, with an average of 3.21 respondents per team). Participating teams were embedded in a wide range of corporate functions, including human resources, marketing, customer service, and product development, and had a high degree of task interdependence, which means that they stand to benefit from psychological safety (Edmondson and Lei 2014). The gender composition of team leaders was reasonably balanced with 67 female and 44 male leaders.

The team leaders, who averaged more than eight years of tenure on the job (*SD* = 7.6) and 43.6 years of age (*SD* = 10.0), were randomly assigned to one of four conditions. Team leaders in the feedback-sharing condition ($n = 26$) held a discussion of their own development areas from their most recent performance review with their team members ($n = 79$) during a team meeting. Team leaders in the feedback-seeking condition ($n = 28$) asked their team members ($n = 85$) during a team meeting to give them feedback on their performance. We also included a combined condition ($n = 26$) in which team leaders shared past feedback with their team members first and then immediately asked for feedback ($n = 94$) during a team meeting, which allowed us to explore whether seeking and sharing feedback might be substitutes or enhancers. We approached this as an exploratory question because we did not have a strong hypothesis about whether sharing feedback would enhance the benefits of feedback-seeking or whether seeking feedback would be beneficial when leaders did not share it. Finally, team leaders in the control condition ($n = 31$) and their team members ($n = 98$) received no treatment.[2] Of the 111 leaders who participated in this experiment, we were able to collect employee survey responses on 92 of them a year after the original intervention, which represented an 82.9% retention rate.

Procedures

We conducted this longitudinal field experiment with the help of three human resources (HR) leaders: two at the financial company and one at the healthcare company. To prevent our own expectations from influencing our study results (e.g., Rosenthal 1994), we asked the three senior human resources leaders to coordinate the interventions and communicate with each team leader. The first author, who had no knowledge of any of the team leaders, randomly assigned them into one of the four conditions using the random function in Microsoft Excel.

Team leaders in all four conditions were notified of their respective conditions via email from the senior HR leaders in each organization. To help team leaders in the three treatment conditions prepare to introduce the respective manipulation to their employees during a team meeting, we provided sample conversation starters, guidance on script preparation, and suggestions on how to answer questions from team members during the team meeting. We invited all team leaders

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in the treatment conditions to mention an example of a leader who shared performance reviews, asked for ongoing feedback, or both during the team meeting. In the interest of standardization, to avoid unfair comparisons between conditions (Cooper and Richardson 1986), the conversation starters, proposed scripts, and examples were approximately of same length (see Online Appendix Figures A3 and A4 for materials shared with leaders for each condition; the combined condition received an integrated version of the materials for the feedback-seeking and feedback-sharing conditions). To minimize demand characteristics (McCambridge et al. 2012) and experimental arrangement threats (Campbell and Stanley 1966), we did not encourage leaders to mention that their act of vulnerability was part of a study.

After spending a week preparing their scripts, team leaders called a team meeting during which they introduced their respective manipulations to their team members. A week after the introduction of the manipulations, the two senior HR leaders sent survey links for team members to complete. In all four conditions, the senior HR leaders allowed team members to complete the surveys within a period of one week (T1). Ten team leaders ended up with zero team member surveys and were, thus, excluded from the analysis, and four team leaders were excluded from the study for not introducing their manipulation as instructed—they clicked on a link forwarded by another leader in one condition instead of their own links. To ensure that leaders engaged in feedback-seeking and/or feedback-sharing, we had them complete a survey before we sent out the team member surveys at T1, confirming that the leaders had held the discussion specified. HR leaders also asked one employee from each of the 111 teams whether their leader had shared and/or sought feedback, and all of them verified that their leaders had followed the relevant protocol. A year after leaders introduced their respective manipulations, we invited all of their employees to rate our key study measures for a second time (T2).

Measures

All items used a seven-point Likert-type scale (1 = *disagree strongly* to 7 = *agree strongly*).

Team Psychological Safety. One week and one year after leaders introduced their respective manipulations, we assessed team psychological safety using Edmondson's (1999) seven-item scale, which includes items such as "when I make a mistake as a member of my team, it is often held against me" (reverse coded) and "it is safe to take a risk on this team" ($\alpha_{T1} = 0.79$, $\alpha_{T2} = 0.74$).

Leader Competence. To test whether seeking and sharing feedback influenced perceptions of leader competence, we measured employees' perceptions of leader competence in T1 and T2 with three items from the Mayer and Davis (1999) ability–trustworthiness scale, including "my team leader is very capable" ($\alpha_{T1} = 0.97$, $\alpha_{T2} = 0.93$). We averaged these ratings within teams ($r_{wg(i)T1} = 0.82$, $r_{wg(i)T2} = 0.77$, $ICC(1)_{T1} = 0.35$, $ICC(2)_{T1} = 0.81$, $ICC(1)_{T2} = 0.46$, $ICC(2)_{T2} = 0.81$).

Control Variables. We controlled for the demographic variables of leader gender, race, and tenure. As discussed earlier, we expect that male and female leaders and more and less seasoned leaders may create different levels of psychological safety and may react differently to our manipulations—and that employees may hold different expectations of these leaders. Given our more diverse sample, we included race in light of evidence that white leaders are more likely to be assumed competent (e.g., Rosette et al. 2008). Finally, we included company as a control variable because the two organizations might have had different norms and practices around feedback and different levels of psychological safety at the time of the field experiment. Unless otherwise indicated, the pattern of results remains unchanged with and without controls.

Justification for Aggregation. Because employees were nested within leadership teams and leaders introduced their manipulation at the team level, following other field experiments with leaders randomly assigned to treatment conditions with multiple employees per unit providing ratings (Martin et al. 2013), we analyzed all key variables at the unit level of analysis. The intraclass correlation coefficient (ICC) and within-unit agreement ($r_{wgs(i)}$) values justify aggregation to the unit level. For psychological safety, ICC(1) values were 0.32 at T1 and 0.27 at T2, and ICC(2) values were 0.77 at T1 and 0.73 at T2, and within-unit agreement values based on agreement against the uniform null distribution were 0.79 for T1 and T2, indicating strong agreement (LeBreton and Senter 2008). ICC(1) values for leader competence were 0.35 at T1 and 0.46 in T2; ICC(2) values were 0.81 at T1 and 0.81 at T2; and within-unit agreement values based on agreement against the uniform null distribution were 0.82 at T1 and 0.77 at T2. Thus, team psychological safety ratings and leader competence ratings were averaged across all employees in a given team.

Study 2 Results

Study means and standard deviations by condition are displayed in Table 3, and means, standard deviations, and correlations for our variables across conditions are displayed in Table 4. To assess the factor structure of the time 1 variables, we conducted a

Table 3. Study 2 Means and Standard Deviations by Condition

Condition	Leader *n*		Psychological safety (T1)	Psychological safety (T2)	Leader competence (T1)	Leader competence (T2)
	T1	T2				
Leader feedback-sharing	26	19	5.55_a (0.63)	5.90_b (0.66)	5.97_a (1.02)	5.91_a (1.09)
Leader feedback-seeking	28	25	5.76_a (0.61)	5.68_a (0.76)	6.11_a (1.04)	6.18_a (0.87)
Combined	26	22	5.66_a (0.70)	5.44_a (0.73)	6.23_a (0.70)	5.76_a (1.19)
Control	31	26	5.51_a (0.73)	5.55_a (0.79)	6.18_a (0.60)	5.74_a (0.84)

Notes. Standard deviations are in parentheses. Means with different subscripts in the same column are statistically different at $p < 0.05$.

confirmatory factor analysis modeling psychological safety and leader competence as latent factors. The model fit the data well, $x^2(34) = 77.50$, CFI = 0.98, SRMR = 0.042. Factor loadings ranged from 0.44 to 0.71 for psychological safety and 0.90 to 0.96 for leader competence.[3]

To test our hypotheses, we conducted OLS regression analyses. Because we did not have pretest data on team psychological safety, any effects at T1 should be interpreted with caution, as random assignment may have resulted in preexisting differences between conditions. Thus, the most stringent test of our hypotheses involves T2 team psychological safety, where we can control for T1 levels of team psychological safety and isolate the lasting effects of the interventions.

Hypothesis Tests for Feedback-Seeking and Feedback-Sharing

At T1, there were no significant effects of feedback-seeking or feedback-sharing on team psychological safety (see Table 5). At T2, feedback-seeking did not have a significant effect on team psychological safety, but feedback-sharing did have a significant positive effect ($b = 0.42$, $SE = 0.21$, $\beta = 0.28$, $t = 2.01$, $p < 0.05$; see Table 6). This is inconsistent with Hypothesis 1 but supportive of Hypothesis 2.

Because feedback-sharing increased team psychological safety one year later but feedback-seeking did not, these results suggest that feedback-sharing had a more enduring effect. We also conducted an additional regression analysis directly comparing the effects of the feedback-seeking and feedback-sharing conditions on team psychological safety at T2, controlling for team psychological safety at T1. In line with Hypothesis 3, feedback-sharing had a significantly stronger effect than feedback-seeking on T2 team psychological safety ($b = 0.48$, $SE = 0.23$, $\beta = 0.34$, $t = 2.06$, $p < 0.05$).[4]

Exploratory Analyses

Interactive Effects of Seeking and Sharing Feedback.

We were surprised to see a significant negative effect of the combination of feedback-seeking and feedback-sharing on T2 team psychological safety ($b = -0.66$, SE

Table 4. Study 2 Means, Standard Deviations, and Correlations

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13
1. *Team psychological safety* (T1)	5.62	0.67	(0.79)												
2. *Team psychological safety* (T2)	5.63	0.75	0.27**	(0.74)											
3. *Leader competence (T1)*	6.13	0.85	0.45**	0.15	(0.97)										
4. *Leader competence (T2)*	5.90	0.99	0.01	0.53**	0.26*	(0.93)									
5. *Leader gender* (0 = male, 1 = female)	0.60	0.49	0.13	−0.18	0.14	−0.06	—								
6. *Leader Asian* (0 = no, 1 = yes)	0.06	0.24	−0.04	0.15	0.11	0.06	−0.02	—							
7. *Leader Black* (0 = no, 1 = yes)	0.03	0.16	−0.02	0.02	0.08	0.06	0.02	−0.04	—						
8. *Leader Caucasian* (0 = no, 1 = yes)	0.87	0.33	−0.05	−0.13	−0.18	−0.08	−0.03	−0.68**	−0.44**	—					
9. *Leader Hispanic* (0 = no, 1 = yes)	0.03	0.16	0.13	0.02	0.07	0.01	0.02	−0.04	−0.03	−0.44**	—				
10. *Leader tenure* (years)	8.35	7.57	−0.06	−0.10	−0.14	0.00	−0.03	−0.12	0.11	−0.04	0.18	—			
11. *Company*	0.72	0.45	−0.15	−0.15	−0.11	-0.05	−0.30**	0.08	−0.02	0.01	−0.02	0.28**	—		
12. *Leader feedback-seeking* (0 = no, 1 = yes)	0.49	0.50	0.14	−0.09	0.05	0.09	−0.13	−0.03	−0.05	−0.07	0.17	0.16	0.00	—	
13. *Leader feedback-sharing* (0 = no, 1 = yes)	0.47	0.50	−0.02	0.03	−0.03	-0.06	−0.05	0.05	0.07	−0.02	−0.05	−0.03	0.06	0.03	—

Notes. Coefficient alphas appear across the diagonal in parentheses.
*$p < 0.05$; **$p < 0.01$.

Table 5. Study 2 Ordinary Least Squares Regression Analyses Predicting Team Psychological Safety (T1)

Variables	*b*	*s.e.*	*β*	*t*	*b*	*s.e.*	*β*	*t*
Leader feedback-sharing	0.04	0.18	0.03	0.20	0.03	0.18	0.02	0.16
Leader feedback-seeking	0.25	0.18	0.19	1.43	0.22	0.18	0.17	1.23
Leader feedback-sharing × *Leader feedback-seeking*	−0.14	0.26	−0.09	−0.56	−0.08	0.26	−0.05	−0.30
Leader gender					0.15	0.14	0.11	1.09
Leader Asian					−0.32	0.75	−0.12	−0.44
Leader Black					−0.25	0.80	−0.06	−0.31
Leader Caucasian					−0.25	0.70	−0.12	−0.36
Leader Hispanic					0.22	0.79	0.05	0.27
Leader tenure					−0.01	0.01	−0.08	−0.71
Company					−0.12	0.16	−0.08	−0.76
R^2		0.02				0.07		
F(*df*)		0.81 (3, 107)				0.75 (10, 110)		

*$p < 0.05$; **$p < 0.01$.

= 0.29, $\beta = -0.38$, $t = -2.27$, $p < 0.05$; see Table 6). Simple effects suggested that feedback-sharing was effective in the absence of feedback-seeking: feedback-sharing had a positive effect on T2 psychological safety when feedback-seeking was low, $F(1, 89) = 4.42$, $p < 0.05$, but not high, $F(1, 89) = 0.79$, *n.s.* These results suggest that both sharing and seeking feedback in the same meeting does not promote lasting gains in team psychological safety.

Effects on Leader Competence. As displayed in Online Appendix Table A3, there were no significant effects on perceived leader competence at T1 or T2. Further, we did not find any consistent evidence that T1 perceptions of leader competence moderated the effects of seeking or sharing feedback on psychological safety at either time—or on T2 perceptions of leader competence. Consistent with Study 1, these results suggest that sharing feedback can promote team psychological safety without undermining perceptions of leader competence.

Leader Demographics. Leader gender, race, and tenure did not moderate the effects of feedback-seeking or feedback-sharing on T1 or T2 psychological safety or on T1 or T2 perceived leader competence. These results suggest that the benefits of feedback-seeking and feedback-sharing are not limited to particular groups of leaders in our sample.[5]

Study 2 Discussion

These results provide convergent support for the effect of leader feedback-sharing on team psychological safety and demonstrate that, as hypothesized, it can have a more enduring effect than leader feedback-seeking. They also reinforce that these psychological safety benefits occur across demographic groups without competence costs. However, we were surprised that leader feedback-seeking did not have a significant impact on team psychological safety, especially at T1. It is unclear whether leader feedback-seeking failed to have any enduring effects or whether our lack of pretest data masked a more fleeting effect at T1. Similar ambiguity exists around the impact of leader feedback-sharing given the lack of observable effects at T1: did it only have a delayed impact on team psychological safety at T2?

Table 6. Study 2 Ordinary Least Squares Regression Analyses Predicting Team Psychological Safety (T2)

Variables	*b*	*s.e.*	*β*	*t*	*b*	*s.e.*	*β*	*t*
Leader feedback-sharing	0.45	0.22	0.30	2.09*	0.42	0.21	0.28	2.01*
Leader feedback-seeking	0.10	0.20	0.06	0.48	0.03	0.20	0.02	0.14
Leader feedback-sharing × *Leader feedback-seeking*	−0.66	0.30	−0.38	−2.22*	−0.66	0.29	−0.38	−2.27*
Team psychological safety (T1)	0.36	0.12	0.32	3.14**	0.37	0.12	0.32	3.20**
Leader gender					−0.42	0.16	−0.27	−2.65**
Leader Asian					0.38	0.49	0.12	0.79
Leader Caucasian					−0.09	0.37	−0.03	−0.23
Leader tenure					0.00	0.01	0.02	0.21
Company					−0.28	0.18	−0.17	−1.59
R^2		0.14**				0.24**		
F(*df*)		3.67 (4, 87)				2.94 (9, 82)		

Note. Based on the reduction in sample size at T2 due to nonresponse, only three racial categories are sufficiently represented. We report the analyses controlling for Asian and Caucasian leader demographics because these are the two most common groups in the sample, and they are also the two demographics most strongly correlated with T2 psychological safety.

*$p < 0.05$; **$p < 0.01$.

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To explore the underlying dynamics of sharing and seeking feedback—and potential explanations for the lack of feedback-seeking effects and delay in the feedback-sharing effect—we conducted a qualitative study, which can be a rich source of information about unexpected results (Sutton and Rafaeli 1988). Two years after the original interventions, we contacted the participating organizations to arrange interviews with a random subset of leaders and employees. Our goal was to develop process models of how the feedback-seeking and feedback-sharing interventions influenced team psychological safety.

Study 3 Method

Sample

We conducted semi-structured interviews with a random sample of leaders (n = 12) and team members (n = 10) from the feedback-sharing (n = 15) and feedback-seeking (n = 7) conditions in our field experiment (15 female, 7 male). The interviews took place two years after the leader intervention (one year after we collected our final measure of team psychological safety). For the leader interviews, we started by asking them to walk us through their experiences seeking or sharing feedback, their team members' reactions, and any subsequent changes they observed in their team dynamics. Similarly, our interviews with employees involved asking them to walk us through what it was like to see their leader seek or share feedback, their own reactions to these acts, and any observable changes in their team dynamics afterward. To ensure no oversights, following guidelines for field and quasi-experiments (Grant and Wall 2009), we posed a final question to leaders and employees: we briefly summarized our Study 2 results and asked how they would explain the patterns. We developed our process models without coding the responses to this question—only consulting them to assess consistency with our models.

Data Analysis

We adopted an inductive approach to our analysis, iterating back and forth between the data we collected prior to sharing our findings, relevant literature, and an emerging set of theoretical concepts (Strauss and Corbin 1990, Gioia et al. 1994, Miles and Huberman 1994). In the first phase of data analysis, both authors independently read through all of the transcripts and made a list of the thoughts, feelings, actions, and interactions that emerged after leader feedback-sharing and feedback-seeking. We each generated first-order categories, also known as open codes, in the language used by participants. To classify these codes, we grouped them into larger categories around second-order themes. We then abstracted the second-order themes into overarching constructs. From there, we sought to elaborate our theory by creating process models that captured how leader feedback-sharing and feedback-seeking operated differently in teams. Through a series of discussions, we compared and contrasted the key themes in the two conditions, eventually arriving at a common understanding.

We used the qualitative data from leaders and employees to triangulate perspectives on the effects of feedback-seeking and feedback-sharing on key constructs, such as psychological safety. We relied primarily on leader interviews for a window into leader psychological and behavioral responses and on employee interviews for employee psychological and behavioral reactions. A core insight was that the act of leader feedback-sharing initiated a cycle in which vulnerability was normalized and eventually crystallized, whereas the act of feedback-seeking initiated vulnerability but gave rise to processes that dissolved it. Online Appendix Figures A1 and A2 display our progression from first-order categories to second-order themes to overarching constructs, and Online Appendix Tables A4 and A5 show illustrative quotes for each overarching construct.

Study 3 Results

Feedback-Sharing Effects

Our interviews with leaders and employees suggested that feedback-sharing did not necessarily have an immediate impact on team psychological safety. Initially, many leaders found the vulnerability associated with sharing feedback as anxiety-provoking in anticipation and awkward in the moment. Some employees were surprised and experienced discomfort; others were skeptical or even suspicious of leaders' intentions. These emotions, coupled with uncertainty about how to respond to leaders in front of the whole team, led employees to stay silent. However, in the ensuing weeks and months, a cycle of building psychological safety began: feedback-sharing served as an act of disruptive self-disclosure (Gibson 2018) that signaled trust, normalized vulnerability in the team, and led leaders to continue sharing feedback. This happened because of heightened commitment among leaders, who felt that publicly sharing feedback made them accountable for staying open to input. It was also fueled by reciprocity by employees, who responded to leaders' displays of vulnerability by sharing their own struggles.

Once psychological safety was built, it endured through practices that crystallized the norm of vulnerability within the team. Many leaders blocked out "vulnerability time" in their one-on-one and team meetings. As leaders continued to share their development goals and ongoing efforts to achieve them,

employees gave more actionable feedback, as they had clear guidelines about the areas of growth that were a priority for leaders and fell within their spans of control. The psychological safety established also led employees to become comfortable holding leaders accountable for continuing to make progress. The result was a deviation-amplifying loop (Weick 1979) or virtuous cycle in which sharing feedback built a level of psychological safety that normalized vulnerability, and subsequently encouraged the routinization of feedback-sharing, which, in turn, crystallized this norm and allowed the psychological safety that had been created to endure. Our process model for feedback-sharing is displayed in Figure 1.

Phase 1: Initiation of Vulnerability. When leaders shared feedback, the dominant reaction from employees was silence. "There wasn't much engagement when she shared her development areas," E12 noted. Leaders remembered the silence vividly. "It was mostly crickets," L10 lamented. "I looked around the room and everyone was quiet," L4 recalled. L2 added, "They didn't speak up."

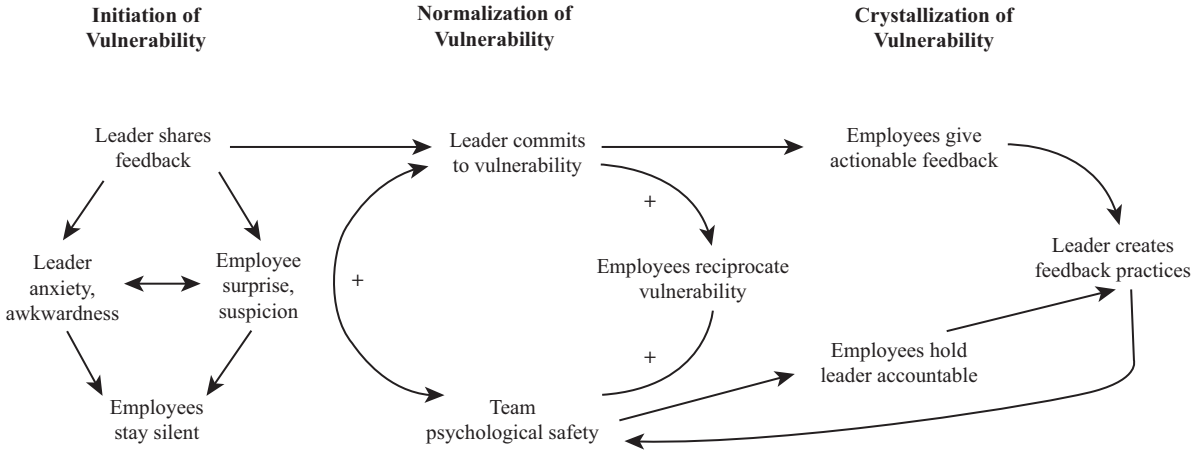
When we asked leaders how they felt about feedback-sharing, they recalled experiencing two dominant emotions: anxiety and awkwardness. Many leaders reported feeling butterflies before the session. As L4 said, "I was a bit fearful about doing that, even though I am an open book generally." They were anxious about undermining employees' perceptions of their competence and confidence. "I was a little nervous about sharing development areas … This reinforced all of my insecurities that I have had over my career … I have always had impostor syndrome. I do not feel good enough," L10 reflected. "I had a very good performance review that year, so of course I am happy to share *that* [laughter]."

As leaders shared their feedback, their anticipatory anxieties often spilled over into feelings of awkwardness in the moment. As L2 said, "My desire as a leader is to be perfect for my team and do the best for everyone. It is a little disappointing that you are brought down a few pegs by sharing weakness areas, it is humbling, uncomfortable." Those who did not recall feeling anxious still experienced awkwardness. Some leaders felt that sharing feedback was outside the norm of typical professional interaction: "It felt a little awkward because it came out of the blue a bit and because we don't talk very often about things like this," L3 noted. Other leaders were more at ease sharing feedback, but were caught off guard by the silence from employees in response. "At first it was uncomfortable," L7 commented. "I read through the guidelines several times to think about how I would take it if I was hearing this as a team member, as if I was in their shoes. When I told my team members in the meeting, there was a little 'deer in the headlights' look—'why are you doing this?' looks."

Employees volunteered two key explanations for their silence: surprise and suspicion. Many employees simply did not expect their leaders to open up about weaknesses and lacked a social script to guide them on how to respond. As E4 summed it up, "When L4 introduced her development areas, I was surprised." For some employees, the surprise was compounded by suspicion about whether leaders had been forthcoming with the development areas they shared. As E12 explained, "L12 doesn't typically show emotion. She doesn't share anything typically, so it was a surprise seeing her share the feedback. But it felt like she was cherry-picking from her development areas."

Although feedback-sharing initiated vulnerability, the anxiety and awkwardness experienced by leaders—coupled with the surprise and suspicion that left employees silent—appeared to delay the development

Figure 1. Process Model for Leader Feedback Sharing



Note. Relationships with positive signs represent deviation-amplifying loops (Weick 1979).

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of psychological safety. As employees stayed silent, they did not initially have a chance to test whether leaders had been forthcoming—or whether they would be penalized for speaking up.

Phase 2: Normalization of Vulnerability. Although acts of feedback-sharing were often met with crickets in the moment, both leaders and employees noticed that over time these acts helped to normalize vulnerability. Feedback-sharing motivated leaders to maintain a commitment to sharing and employees to reciprocate with their own struggles. Those interactions and conversations between leaders and employees built psychological safety by normalizing vulnerability, making leaders feel more comfortable opening up and employees more comfortable speaking up. As E10 described, "Her sharing led to … a more sloped improvement of our relationship trajectory. It feels good to share; you become more comfortable with sharing feedback, more confident. L10's initial sharing of getting better at managing up opened the door for more feedback and broader sharing … My giving her feedback opened it even more, and then over time, the comfort level from both of us on discussing professional vulnerabilities increased."

At first, L8 found it odd to share feedback, but over time, her experience of vulnerability changed: "This was a little out of the norm. This has become a bigger part of our conversations with my team members, but it wasn't at all in the beginning before I shared my weakness areas. I have grown as a leader and gotten much better at this … I am WAY past … always projecting confidence."

E8 saw it happen: "Over time, she started becoming even more open with us. She worked on this over time. She would blow up as well when corporate changes were nonsensical. She would keep saying that she is not perfect, it really humanized her to hear her share her weaknesses. There is this conception here that leaders have it always together; they put it off when their emotional reaction is not OK. But seeing L8 more open about her struggles with dealing with change normalized it. She took herself off the pedestal."

We identified two core processes that contributed to this normalization of vulnerability: leader commitment and employee reciprocity.

Leaders reported that opening up about their development areas constituted a public commitment to improving. As a result, they felt it was their responsibility to stay open to input. As L2 articulated, "I have grown and tailored myself to the team more after sharing past feedback. I have worked on the areas I communicated as development areas: being more aware that I am not communicating as effectively, explaining to them my intentions, not making any assumptions about what they already know … Saying my development areas out loud made me feel accountable. My team members are watching. I changed my behavior because of it."

As leaders publicly described their own weaknesses and development goals, they engaged in self-persuasion (Aronson 1999), convincing themselves that it was safe to be vulnerable and holding themselves accountable for continuing to do so. As L10 summarized, "By saying it out loud I committed myself to improve on these areas." L3 elaborated:

> I have been referring back to it in my conversations with team members: "You know this is what I have been working on." Making my areas public has helped me refer back to them in conversations … over time after sharing once, I became more intentional about it … about focusing on the growth of my team members. I ask them how I can help; I give them more feedback … It became a pattern because I shared feedback once; then I was more open as a result and more willing to share my weaknesses and goals over time because I did it once.

E3 observed the change: "L3 used to be more plan-focused, more like a benevolent dictator, making more top-down decisions. But, over time, she has become a lot more democratic on big team decisions … She is very honest, a great listener, and takes input from everyone on the team. She has become very good at synthesizing everyone's inputs, everyone gets a voice now … She has followed through on creating a plan/vision that comes from all of us."

To follow through on their commitments, some leaders ended up scheduling one-on-one meetings with employees to get their reactions to the feedback shared. As L12 described, employees were more comfortable responding when it was not in front of a group: "I try to be transparent, but being really specific about it was different. I specifically shared what I was working on. They were receptive in giving me feedback. Maybe they were a little surprised. I did it in a team meeting and gave them the option to discuss in one-on-ones if they had feedback for me. I ended up getting a lot of feedback over time like … 'I have seen you improve on this, but here is where you can improve more on.'"

After sharing feedback, L7 kept referring back to this public commitment in conversations with employees: "I felt like I changed my behavior: I micromanaged my team members less and was more strategic … I continue to work on this every day." E7 took note:

> I did not think of him as a micromanager, but he became even less so after he shared his development areas … Seeing a leader share feedback over and over again helps build this consistency … The feedback he shared with us from his higher-ups was that he was

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> too tactical, so he started letting us come up with strategies from the bottom-up, doing brainstorming sessions on our own and then bringing ideas to him. For instance, we were looking to create new strategies for recruiting in specific schools, and in the past, he might have been in those meetings, but now he wasn't. He was instead looking to be more strategic.

As leaders made good on their commitments to keep sharing feedback and working to improve, they started to feel less anxious and awkward. This normalized the experience of being vulnerable, making it more familiar and even pleasant. "It took one person—me—to be vulnerable for the cycle to start," L9 said. "My action softened the hierarchy—it helped mute that a bit … When I transitioned to a new team, I decided to do this vulnerability exercise again with my new team members." Likewise, L4 discussed how she came to see vulnerability as part of normal work life: "In the one-on-ones that followed, I shared with a subordinate that I had received 'Limited' in my performance review a few years ago … to show that person that I used to be in the same boat … I would have never shared previously that I had gotten a 'Limited' in my performance review with a subordinate because I consider myself a perfectionist, but I felt more comfortable after I originally shared my weakness areas."

L2 described a similar change in attitudes toward vulnerability: "As a leader, you want to be like Superman. You need to keep it all together, but you really don't know what to do sometimes—that's how I feel. You are afraid to be vulnerable to call out a deficit. I used to believe that, but now, after sharing past feedback, I am feeling more comfortable changing my opinion."

In the eyes of employees, leader feedback-sharing was an act of disruptive self-disclosure. Although they were unsure of how to process the surprise initially, as employees saw leaders open up repeatedly, it became part of how they expected their leaders to behave. As leaders followed through on their commitment to feedback-sharing and made progress on their development areas, employees started to perceive their leaders as more human and more trustworthy. "It felt good for me to understand her like that," E10 reflected. "She opened the kimono. I took a full step behind the curtain with this information she shared." This level of vulnerability signaled that leaders trusted employees—and could be trusted.

It was not only leader commitment that helped to normalize vulnerability. In the weeks and months after leaders shared feedback, employees reciprocated by opening up about their own imperfections and struggles. As E3 reflected, "When L3 was vulnerable with me, me and my team members started to be vulnerable as well because we were modeling our behavior after her." L2 divulged, "In one conversation with a team member about nine months after I shared past feedback, she described how she had impostor syndrome as a new leader and that she struggled with this. I gave her some opportunities to work on, offered her resources, and reminded her that I was in her shoes some years ago." L2 had a similar experience when one of her employees opened up on the personal front: "It takes time to reciprocate with vulnerability. One month after I shared feedback, I was approached by one of my team members. She told me she was going through some very difficult times in her personal life … Her personal difficulties were impacting her work … I was surprised that she was so honest with me about personal life details since she hadn't been open like this prior to … my sharing of weakness areas."

Employees viewed feedback-sharing as a signal of trust. E2 elaborated on how seeing her leader open up made her comfortable reciprocating, quelling fears that giving feedback on weaknesses would backfire:

> The weakness area that L2 mentioned was that she wasn't as available to her team members and didn't have as open communication with us. This is a particular challenge in our team because we all work remote. It was the first time she was so open with us about that weakness area, and it made a difference … I also got a lot more comfortable sharing personal issues I was dealing with L2 because she was so available to me and supportive. My workflow and productivity dipped, and she helped support me through it … I think sharing makes the leaders more human and also helps us build trust with them … it makes them more vulnerable … They have things they are working on like us, there is a give and take, she will support me and I support her … Her consistency building trust with me and me with her helped our relationship evolve. We are open and available to each other. She always follows through and gets back to me when I share a concern with her.

The mutual vulnerability that ensued changed the dynamic of the relationship. As E10 summarized, "There was a virtuous cycle, which kicked off with L10's initial sharing of feedback and reinforced by the door opening and sharing from both sides over time." L10 elaborated that despite the initial discomfort, feedback-sharing normalized vulnerability and built psychological safety:

> This reinforced all of my insecurities that I have had over my career, but a few folks reacted in time because they viewed this as an act of openness. A team member engaged with me in two ways: one, made observations about how I can develop … and two, opened up conversations about his areas as well. It felt safer for them to speak up … they felt elevated by my decision to share my development areas with them. They thought I was looking to them as a

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> partner, they felt more valued when viewed as a partner. They thought I viewed them as a trusted partner … they showed me empathy, which helped build a feeling of connection between us.

These connections created space for leaders and employees to have deeper conversations without the feelings of risk normally associated with vulnerability. As E8 described it,

> To be very transparent and open, to communicate when she is not perfect and does not have all the answers—I have adopted this same behavior because of L8 … When L8 mentioned she was struggling with how to communicate, I reciprocated with something I was struggling with as well … I told her that I was also struggling to communicate well with others and find the words in difficult conversations … L8 then would check in with me on a daily basis. That meant the world to me. We had this aha moment together about how we were both there for each other … In professional environments, your issues are exposed to the leader, but team members do not get reciprocated, meaning that team members know of their own downfalls, but they don't know the leader's … I can say OK, I can trust this person because she shows her issues to me now as well … This is just one example of a virtuous circle between me and her of forming an even stronger bond over time.

As employees responded in kind, it reinforced to leaders that it was safe to keep opening up. Per L3, "I shared the following areas of improvement: be more intentional about the growth of my team members, be a better work leader, be more open to feedback, and encourage voicing of opinions from others … I received a single response from a team member: 'A couple of your goals are the same as mine' … We now think of our conversations as a safe space to share insecurities with each other. I am vulnerable with her, and she is with me."

As leaders shared feedback and employees reciprocated, the psychological safety that developed was not limited to dyads; it started to spread through teams. "One of my team members came to me and shared that she was diagnosed with PTSD. She was comfortable sharing that with me, and it took some time to get there. She trusts me now. She gets upset about company-level decisions, she distrusts 'the man.' She has become more open to me over time in our one-on-ones," L8 reflected. One day, L8 saw E8 experience enough psychological safety to voice some concerns: "She felt very comfortable being so open … In a town hall, she submitted an anonymous complaint about the change in compensation, but in a group setting … she felt comfortable speaking her mind and being honest. A year ago, prior to me sharing my weakness areas, she would have never done this … She changed her behavior towards me in that she acknowledged that, when she made a mistake, it wasn't the end of the world."

Phase 3: Crystallization of Vulnerability. As commitment by leaders and reciprocity by employees normalized vulnerability, teams gained a greater sense of psychological safety. However, they did not stop there. Leaders and employees worked together to crystallize the norm of vulnerability in the team, which allowed psychological safety to endure. Crystallization refers to the extent to which team members perceive the team culture similarly (Chatman 1989). Leaders created practices to promote the ongoing enactment of vulnerability in the team's culture.

After sharing their own feedback, many leaders began to feel that the traditional cycles of performance reviews that occur annually, semiannually, or quarterly were not enough, and decided to establish their own regular channels for feedback exchange. They created routines for their teams to share feedback regularly. For example, L8 "instituted these 'ask me anything' coffee chats for my team members to share and ask anything." Similarly, L2 "introduced a team process of a weekly checkpoint" for employees to offer input. L3 broadened her weekly one-on-one meetings to create space for sharing concerns and suggestions: "The initial topics we would talk about were: How are your projects going? What challenges are you facing? Here is some feedback I have for you," and over time, they evolved to personal questions like "what she wants to do next" and "what concerns she has." E3 conveyed how useful this was for crystallizing the culture and maintaining psychological safety: "Following her sharing her development areas, we created a new ritual in our virtual one-on-ones every week. For the first five minutes of every one-on-one, we would give feedback to one another. This was the best ritual ever for me as someone who is looking to grow … What this ritual did was routinize the giving of feedback to one another, making it less scary. When you do it all the time, it becomes a lot easier to do."

Some leaders went further, creating forums for the entire team to share what development areas they were working on. L9 illustrated this vividly: "As a result of that initial sharing of feedback, I created these vulnerability monthly meetings … I set the tone because I went first. After sharing a development area, I asked them whether they would be comfortable sharing at least one area they are each working on. They ended up sharing so many, more than one each … These vulnerability meetings made development a team effort rather than an individual effort."

Why did leaders and employees work to crystallize this newfound level of psychological safety? Our

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interviews revealed that subsequent feedback quality and leader accountability were contributing factors.

First, both leaders and employees reported that leader feedback-sharing improved the quality of feedback that employees subsequently gave. By sharing feedback on their own development areas, leaders were not merely role modeling that it was safe to speak up; they were also role modeling how to give constructive feedback. Instead of making suggestions on areas that might be distractions or beyond leaders' control, employees were able to focus on areas in which improvement was a priority for leaders, and they were able to act on it. As E3 explained,

> I felt so appreciated that she would share those areas of improvement with me. It showed to me that she is increasing her level of vulnerability in our interactions, that she is making an effort. I felt like wanting to help her grow, give her even better feedback because she told me the areas she was working on. I was able to give her more targeted feedback going forward. For instance, I told her to be more focused on sticking up for her team members when other groups criticize our work. I recall a meeting we had where someone from the design team (a different department) criticized our team's work product, and L3 missed an opportunity to stick up for our team. Ever since she shared feedback, she has changed her behavior on this.

Rather than feeling constrained, employees appreciated having guidelines around what feedback to give. They also started noticing areas in which they could give helpful feedback as E10 illuminated: "It also gave me the opportunity to help her in the areas she shared. This allowed us to have a different type of conversation on how I can help. It helped me give her better feedback on what to focus on. For instance, I told her at the time that she tends to dominate conversations with senior leaders, and this is something she should work on so she does not come across that way. Her sharing also gave me permission to help her on her broader areas of development, which I had no clue about."

As leaders received useful feedback, they were more likely to keep seeking it and less likely to be defensive about it. As L9 recalled, "They could make those connections to the areas of improvement and give me higher quality feedback, which I was more receptive to … One of my team members three months later told me that in a presentation I lost track of the messaging and gave me detailed feedback on how to improve. My sharing of feedback grounded them."

Second, feedback-sharing also created accountability for leaders. After leaders made a commitment to working on their development areas, employees felt safer holding them responsible for following through. Some leaders explicitly invited their teams to keep them on track. "I also made it about them, asking them to hold me accountable," L8 divulged. "I actually got much better and have grown as a leader because of that decision I made to share my development areas." L7 expanded, "I did feel like my sharing of development areas would help my team members get better at holding me accountable over time. If I was slipping in some ways, I wanted to know, and that is what I communicated to them … The development area I shared that I received from my supervisor was to try to get out of the weeds and be more strategic in my interactions with business partners. So I spoke to my team members in the coming months that if I am getting too much into their stuff to let me know."

Employees were grateful to have permission from leaders to keep them honest, as E4 conveys: "L4 has been trying to improve ever since. She still admits things she is still learning; she keeps asking us to hold her accountable … I feel sometimes that I have to wear gloves with some people. Not with my manager … I also emulate her behavior by challenging her to improve on mentoring us and keeping her accountable … I would remind her to make progress: 'Oh, did you do that?'"

In other cases, employees took matters into their own hands, taking their own initiative to hold leaders accountable, aided by their team's enhanced psychological safety. Looking back, L10 says, "One team member noticed that I wasn't getting my point of view across with a senior leader (this is one of the development areas I shared) … and he kept me accountable for getting my viewpoint across … my team members played the role of accountability buddies." Accordingly, following acts of feedback-sharing by leaders, employees offered useful feedback and held leaders accountable for improving, leaders reciprocated by continuing to improve and creating practices for the entire team to exchange ongoing feedback that crystallized the norm of vulnerability, and psychological safety endured.

Feedback-Seeking Effects

Our interviews with leaders and employees shed light on why feedback-seeking did not have effects on team psychological safety. When leaders sought feedback, employees took it as a sign of openness and worth and spoke up. However, employees' expectations were left unfulfilled as some leaders responded defensively to the feedback: they had not made the same level of public commitment to being open about their development areas, and employees did not reciprocate by making themselves vulnerable as well. This discouraged leaders from seeking further feedback and employees from offering it, thwarting psychological safety. Even when leaders were not defensive, they often found the feedback useless or felt helpless

to address it. Because they did not provide direction on what type of feedback would be beneficial, employees often commented on areas that were not important to leaders or beyond their spans of control. This created a sense of futility on the part of both leaders and employees, who were not motivated to continue seeking or giving feedback. Thus, although feedback-seeking had the potential to build psychological safety, a deviation-counteracting loop (Weick 1979) prevented it from persisting. Unlike feedback-sharing, feedback-seeking did not appear to build psychological safety through strengthening trust between leaders and followers—references to trust were absent from our interviews in the feedback-seeking condition. Our process model for feedback-seeking is displayed in Figure 2.

Phase 1: Initiation of Vulnerability. Unlike with feedback-sharing, leaders did not report feeling anxious or awkward about seeking feedback, and employees did not respond with silence. In the moment, employees felt that leader feedback-seeking enhanced psychological safety. As E6 put it, "There was a general climate at the time of not feeling safe to speak up … so I appreciated how fearless and genuine L6 was in asking for feedback."

The psychological safety came from two signals that feedback-seeking carried: that leaders were open and employees were valued. Employees felt that by making a request for feedback, leaders displayed receptivity to ideas and appreciation for employees. As E11 explained, "When L11 asked for my feedback, it made me feel valued in that management to direct report relationship we had … It showed an openness on her part as a leader, taking into account the perspectives of team members … She was looking for ways to improve … It felt like it opened the door."

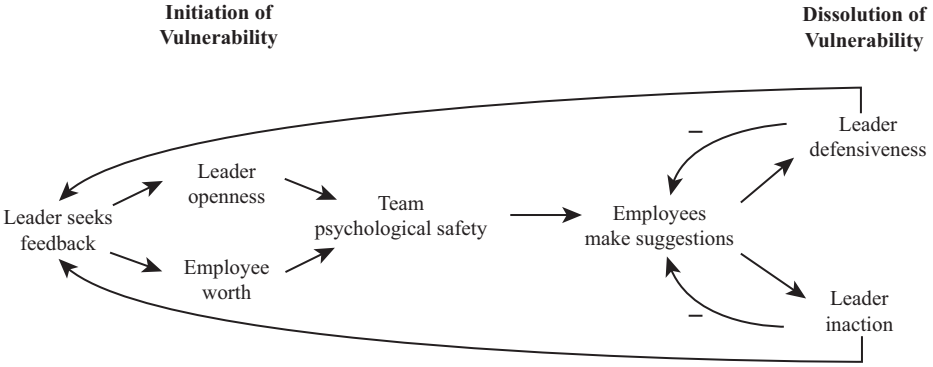
When L1 sought feedback, "I told them I was looking to grow, to improve, just like everyone else here. 'I work for you in some ways, you are the customer.'" For E1, this conveyed openness and worth: "When my leader asked in that one instance for feedback on how to improve as a leader, I felt valued and appreciated … My leader was open to hearing my feedback on how she can improve."

Whereas leaders felt anxious and awkward about sharing feedback, leaders were generally comfortable seeking feedback. Instead of feeling surprised or suspicious, employees perceived feedback-seeking as sincere. Employees felt that it was both safe and worthwhile to speak up (Detert and Burris 2007), and some gave leaders the developmental feedback they requested. "My team members were initially open to give me feedback," L5 noted. "One associate, for example, told me that I tend to talk too much and talk over people." Similarly, L6 reflected on the developmental feedback he had received: "One of my team members said, 'No, no, you are fine.' Another, 'Keep doing what you are doing,' but then they both gave me the feedback that sometimes it is OK to let a meeting go/evolve. They said that I try to bring everything back to the topic at hand or agenda, and it could be better sometimes to let the team explore a topic."

Phase 2: Dissolution of Vulnerability. Despite the initial exchange of feedback, employees described how vulnerability was not normalized and feedback did not become crystallized in the team culture. "No one on the team asks for feedback on how to improve. This is not a team practice, it is not a common occurrence," E1 observed. Employees reported that when they offered feedback later, leaders tended to give lip service to it rather than taking the time to listen to it and act on it. As E6 described, "L6 is very focused on goals instead. In a two-hour team meeting, he will spend the first 10 minutes asking for concerns and inviting us to voice them, but he flips a switch quickly so we all focus on what has to be done rather than give feedback."

We identified two sets of processes that prevented feedback-seeking from leading to enduring

Figure 2. Process Model for Leader Feedback Seeking



Note. Relationships with negative signs represent deviation-counteracting loops (Weick 1979).

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improvements in psychological safety. First, leaders often reacted defensively, which led them to stop asking for feedback and employees to stop giving it. Several leaders acknowledged that they felt defensive in the months following their initial act of feedback-seeking. "When he gave me more feedback months later, I was biting my tongue during it, trying not to be defensive because I disagreed with this feedback," L5 reflected. "I have a bad habit of not being in receiving mode at times."

This defensiveness was mitigated when leaders shared feedback instead, as their public commitment to working on their weaknesses made them aware that they would be judged harshly if they failed to follow through. In contrast, when leaders sought feedback, they did not make any promises to act upon it and did not feel the same accountability for enacting vulnerability going forward. Feedback-seeking also failed to create mutual vulnerability: because leaders were not role modeling self-disclosure, employees raised problems and suggestions but did not open up about their own struggles, making leaders feel like they were being judged as opposed to helped and supported. Further, whereas feedback-sharing tended to guide employees to focus on ways to improve in the future, feedback-seeking led employees to make comments about what leaders had done wrong in the past.

As employees saw these defensive responses from leaders, they did not experience enough psychological safety to hold leaders accountable for improving. Not feeling valued for their input, some employees concluded that they had been wrong about the level of psychological safety that existed in their teams. "What's interesting is that over time I have seen her focus more on asking me how she can help me improve as opposed to asking me how I can help her improve as a leader," E1 noted. "'What are your suggestions to help me improve as a leader?' isn't something my leader has asked me over time."

Second, leaders questioned the value of feedback-seeking because they did not find the information actionable. "They did not give me useful feedback for my own development," L1 commented. When leaders shared feedback, they provided clarity about which development areas were a priority. When leaders sought feedback, the request was open-ended, leaving employees to their own devices to decide on what to focus. This meant that employees made observations and suggestions that were not a priority for or of particular value to leaders. As L6 admitted with chagrin, "I was a little disappointed by that feedback because it wasn't earth-shattering. The quality of the feedback was low and it wasn't actionable. I like feedback, but I couldn't do much with the feedback I got … I stopped asking for feedback going forward. There are a number of formal channels for team members to give me feedback electronically (180s, mid-year reviews), so I decided to rely on those … I got some but it wasn't as insightful."

The lack of actionable suggestions may have discouraged leaders from seeking further feedback by leaving leaders confident that they did not need it (Sherf and Morrison 2020). Because leaders who sought feedback tended to receive less constructive suggestions, they did not see ongoing dialogue as sufficiently urgent or important to supersede other responsibilities. Following a reorganization of their team, E6 reflected on not "feeling safe to speak up" when L6 gave her the "shushy, just do your work" line: "I was told to stay at the same part of the org and report to a new manager … Once I tried to appeal to the VP about his decision … I was given an ultimatum and had to go along with it … Feedback is something that is invited in theory, but in practice, the higher-ups say, 'We are going to do it our own way.'"

The psychological safety initiated by the feedback request had unintended consequences. Employees did not only give feedback to leaders about how they could improve personally; they also exercised voice about how company policies and practices could improve. Whereas feedback-sharing guided employees' attention to changes that were within leaders' spans of control, many of the problems and solutions that employees voiced in response to feedback-seeking were beyond leaders' spans of control. This led to a sense of futility and frustration among leaders (who were unable to meet employee expectations) and employees (who stopped speaking up after nothing changed). As L1 lamented,

> I received a lot of feedback on company policies, team processes after I asked for feedback … I listened but knew that I could not wave a wand to change things. I did not have perfect control over it … There was a definite uptick with voicing their concerns about the company and improving processes in the weeks after I sought feedback. They were more vocal about these as opposed to giving me developmental feedback. But I could not change many of the things they were asking me to do, so it fizzled out when they did not see any changes happening on the key concerns they raised.

Similarly, L11 recalled, "In my weekly one-on-ones and weekly team meetings, my team members voiced frustrations about being understaffed." L11 was unable to solve this problem, and employees interpreted the inaction as a lack of openness and worth. E11 described how his suggestions to improve workloads did not have an impact, creating unfulfilled expectations:

> We spoke to her about our negative thoughts towards the changes, but most of what we suggested got

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> rejected. We mentioned issues and potential solutions about how we were being completely overrun, but there were no changes made … L11 was going through a lot … she kept her anxieties to herself, so she closed herself off … There were a number of areas of concern … that we saw and knew would never change irrespective of how much we brought up. L11 kept telling us, "I don't have an answer right now" or "We do not have capacity to add more people or give work to other groups so that you are not as overwhelmed" … We stopped raising it because no changes were made … I felt like I was pushed aside.

When he saw his suggestions ignored, E11 felt let down by his leader and skip-level leader, and stopped speaking up. As leaders stopped seeking feedback, employees noticed that it was not a high priority. E11 described how an act of feedback-seeking was not enough to effect enduring behavior change: "L11 asked for feedback once, but didn't really do that again because she fell into old habits, and it wasn't her priority given everything that was going on. We were all being pushed to deliver … no time to add to other topics like learning from feedback and being open with one another. Asking for feedback once wasn't enough."

Accordingly, initial acts of feedback-seeking by leaders created deviation-counteracting loops in which employees either offered threatening, low-quality, or nonactionable feedback leaders stopped seeking feedback and employees stopped giving it, and psychological safety dissipated over time.

Because a process model is probabilistic rather than deterministic, our analysis points to a series of turning points at which the dissolution of vulnerability could be prevented under feedback-seeking. To shed light on these dynamics, we revisited our process model with teams in the leader feedback-seeking condition that did gain psychological safety. Our interviews included two teams that showed marked increases in psychological safety under leader feedback-seeking.

Leaders in the feedback-seeking condition whose teams gained psychological safety worked to overcome their defensiveness and were not discouraged by the lack of actionable suggestions early on. L5 described making feedback-seeking into a regular routine rather than a one-time inquiry: "I tried to get into a routine of asking the following questions: Is there anything I can work on? Is there anything I can do better on? I was much more intentional about spending less time dancing around topics and being more direct about asking for and giving feedback."

Leaders also prevented the dissolution of vulnerability by experimenting with new ways of inviting feedback. After being frustrated with a variety of complaints about company policies, L1 eventually tried different ways of seeking specific feedback: "How to ask the question becomes more important: Is there anything I can do to make your job easier? Something I can take off your plate? I had changed my behavior over time to make a point of asking these types of questions. Still thinking about what is the right way to ask this."

By routinizing and experimenting with feedback-seeking, leaders signaled to employees that they were serious about being open to improving.

This habit of inquiring for information led to a surprising development after the experiment was completed. Both of the leaders in the feedback-seeking condition whose teams gained psychological safety mentioned that following the conclusion of our year-long study, they had heard from colleagues about the impact of feedback-sharing, and decided to give it a try in the winter of 2020. "I shared my entire performance review with a subordinate, and it really made an impression on her," L1 said. "People do not pull out their annual review ever to show subordinates … - That act leaves an impression, sharing development areas is so out of the norm, makes a big mark … it takes time to sync in and for team members to reciprocate by having an open communication. I have become more comfortable being vulnerable and sharing development areas after doing that and my subordinate has grown closer to me."

Similarly, L5 noted, "After I transitioned to a new team as their leader a few months ago in early 2020, I created a user manual with my command philosophy. I used to be in the military. I added a section on feedback to acknowledge that I can come across as angry when I am actually trying to seek feedback. I wish I had done that with my older team … I shared my manual again a few weeks ago with my new team."

Study 3 Discussion

Our analysis helps to shed light on the delayed impact of feedback-sharing and the lack of enduring effects of feedback-seeking. Our process models suggest that although it may involve initial anxiety and awkwardness, sharing feedback normalized vulnerability by promoting commitment from leaders and reciprocity from employees, eliciting more actionable feedback. The ensuing psychological safety encouraged accountability and motivated leaders to create ongoing feedback practices—some quickly, others more gradually—that crystallized vulnerability over time. Meanwhile, although seeking feedback initiated vulnerability by signaling leader openness and employee worth, this vulnerability tended to dissolve as leaders responded defensively or failed to act on suggestions, which discouraged leaders from continuing to ask.

The contrast between the feedback-seeking and feedback-sharing dynamics reveals an interesting

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paradox: opening the door too widely at the beginning ended up closing it. Seeking feedback created a wide funnel that invited comments and suggestions on a wide range of issues, undermining the efficacy of both leaders and employees. Sharing feedback created a filter, helping employees to concentrate on issues that were important and controllable for leaders. Over time, as they made changes, both leaders and employees gained efficacy and increased vulnerability, gradually opening the door to voice on a broader set of problems and solutions. Because employees had more clarity on where leaders had control, they were able to make more targeted suggestions. When change was not possible, leaders and employees did not feel frustrated or discouraged, as they had already made progress together. Ironically, starting with a more bounded feedback request ultimately served to welcome broader voice.

Our findings regarding feedback-seeking are consistent with evidence that employees are often skeptical of managers pretending to be interested in their input (De Vries et al. 2012), that those who do solicit information experience interpersonal costs when they are perceived as ignoring advice (Blunden et al. 2019), and that leaders who lack the authority to make changes tend to be reluctant to seek employee feedback (Sherf et al. 2019). However, our data from the feedback-seeking teams that did gain psychological safety suggest that leaders may continue seeking and using feedback when they are intrinsically motivated to learn and able to elicit actionable suggestions. By creating an ongoing routine of asking questions and experimenting with different techniques for obtaining useful responses, leaders were able to circumvent these challenges of seeking feedback and build psychological safety over time.

General Discussion

Across a field study and a field experiment, we found that teams had heightened psychological safety when leaders shared feedback about their own weaknesses and development areas. This pattern was robust across naturally-occurring, ongoing behaviors and an experimentally-induced act of leader feedback-sharing, and occurred without compromising perceptions of leader performance and competence. Our qualitative process model suggested that leader feedback-sharing initiated a cycle of events that helped to normalize vulnerability through public commitment and reciprocity and then crystallized vulnerability through practices that promoted feedback quality and accountability. However, although leader feedback-seeking predicted team psychological safety in the field study, it did not have an effect in the field experiment. Our process model revealed that although asking for feedback appeared to initiate vulnerability, it dissolved as leaders responded defensively or did not take action on the suggestions, which discouraged employees from continuing to give them and leaders from continuing to seek them. These findings offer implications for theory and research on psychological safety, feedback, and vulnerability in leadership.

Theoretical and Empirical Contributions

Our research introduces feedback-sharing as a novel leadership behavior that can have an enduring impact on psychological safety in teams. Traditionally, organizational scholars have focused on how leaders build psychological safety through showing openness and inclusiveness (Nembhard and Edmondson 2006, Detert and Burris 2007, Frazier et al. 2017). A common thread underlying these behaviors is leaders issuing invitations for employees to share concerns and suggestions. Our research suggests that what leaders offer about themselves is also consequential in shaping interpersonal risk-taking in teams. We highlight the importance of leaders showing vulnerability in enhancing psychological safety.

In doing so, our research advances toward a more dynamic understanding of how psychological safety emerges in teams. Existing studies have primarily taken a static, top-down approach, using correlational designs to investigate why some leaders create more psychological safety in teams than others (Edmondson 1999, Frazier et al. 2017). A key discovery is that psychological safety is shaped by mutual vulnerability. This perspective reveals that vulnerability is not merely a property of leaders; it is co-constructed by leaders and employees in double interact loops (Weick 1979). The early process of building psychological safety is fragile, and when leaders make gestures to welcome feedback, employees can stabilize the dynamic by showing their own vulnerability—not merely criticizing leaders—as well as by striving to give feedback that is useful and actionable. Our qualitative data suggest that although leaders can initiate cycles of vulnerability, how employees respond can affect whether leaders continue to open the door to ideas and suggestions or slam it shut. Our research thereby addresses exhortations to recognize the bottom-up influence of employees on leaders (Uhl-Bien et al. 2014) and on the evolution and crystallization of norms in work teams (DeCelles and Aquino 2020).

Our studies have meaningful implications for understanding feedback. Although existing research has largely identified benefits of feedback-seeking (Ashford et al. 2016), we were surprised to see that these benefits emerged in our field study but not in our field experiment. A key distinction may lie in whether leaders take the initiative to seek feedback or do so in

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response to organizational encouragement. Interestingly, the majority of feedback-seeking research has adopted a proactive lens (Ashford et al. 2003), which raises unanswered questions about the effectiveness of organizational interventions to promote feedback-seeking. Leader feedback-seeking is a complicated act (Ashford et al. 2016), and our field experiment draws attention to the possibility that a half-hearted or superficial inquiry is not likely to have the intended impact. In contrast, the organizational intervention to promote leader feedback-sharing did ultimately produce an effect on team psychological safety. Our qualitative analysis suggests that even if the initial act of sharing is prompted externally, the accountability and reciprocity dynamics that emerge may still serve to normalize and crystallize vulnerability. It appears that organizational interventions to promote leader feedback-sharing may overcome some of the challenges of encouraging feedback-seeking. Instead of building psychological safety by encouraging leaders to espouse openness through seeking feedback, organizations may be better off encouraging them to enact openness through sharing it.

Our focus on feedback-sharing represents a fresh direction for feedback research. The predominant emphasis has been on interpersonal feedback with individuals receiving information from others (Kluger and DeNisi 1996) or seeking it from others (Ashford et al. 2003). By introducing the construct of feedback-sharing, we shift the focus to intrapersonal feedback, underscoring how what leaders share about their own evaluations can have consequences for the dynamics that unfold in their teams. There is some evidence that in formal upward feedback programs, ratings of managers improve when they discuss the prior year's feedback (Walker and Smither 1999), but researchers had yet to explore the consequences for leaders of disclosing feedback in informal settings outside official channels and performance review cycles (Anseel and Brutus 2019). Further, recent studies suggest that feedback conversations about the past tend to elicit defensiveness, as receivers tend to focus on justifying their past actions and intentions (Gnepp et al. 2020). However, our research suggests that this may depend on who initiates the discussion of the past. If feedback receivers rather than feedback givers share information about their prior shortcomings, the risk of defensiveness may be ameliorated. Leaders may become more open to receiving criticism from others when they criticize themselves aloud first.

Further, our research takes steps toward theoretically and empirically integrating the largely disparate literatures on feedback-seeking, voice, and psychological safety. Feedback-seeking research has typically concentrated on employees requesting it proactively from leaders, largely overlooking the effects of leaders seeking feedback from employees (Ashford et al. 2016). Meanwhile, voice research has identified feelings of uselessness and helplessness among employees, who are known to stay silent because they believe speaking up is an exercise in futility or they lack the efficacy to advance change (e.g., Dutton et al. 1997, Detert and Burris 2007, Morrison 2011, Sherf et al. 2020b). We reverse the lens on these feelings, showing that leaders are also prone to experience uselessness and helplessness when they receive feedback from below. They may stop asking for feedback because they believe the input is not worthwhile or they are powerless to act on it. Our research thus broadens understandings of why it is so rare for leaders to seek feedback and solicit voice from below.

Finally, our research offers novel insights about leader vulnerability. As noted previously, past studies have revealed conflicting evidence about the effects of leader vulnerability, with some studies suggesting that it can signal confidence (Nadler et al. 2003, Ely and Meyerson 2010, Brooks et al. 2019), others indicating that displaying weakness can compromise status (Gibson et al. 2018), and some identifying contingencies (Nadler et al. 2003, Moore et al. 2017, Cojuharenco and Karelaia 2020). We find that when it comes to acknowledging one's limitations and development areas, showing vulnerability can build psychological safety without undermining perceptions of performance or competence. Importantly, even though leaders were randomly assigned to show vulnerability by sharing feedback rather than doing so of their own volition, it had no competence costs for women, racial minorities, or more junior leaders. Taken together, these findings suggest that disclosing weakness does not necessarily backfire for leaders.

Limitations and Future Directions

Our studies are subject to a number of important limitations that point toward avenues for future research. First, our studies only allowed us to examine the roles of leader feedback-seeking and feedback-sharing in team psychological safety, overlooking downstream behaviors like employee voice and learning or outcomes, such as innovation and error rates. This limitation is partially offset by our findings that CEO feedback-seeking and feedback-sharing predicted lagged ratings of team psychological safety and that the effect of a brief leader feedback-sharing intervention on team psychological safety was visible a full year after the manipulation was introduced. Nevertheless, further research will be instrumental in revealing whether feedback-sharing and feedback-seeking influence these downstream behaviors and outcomes through their impact on psychological safety.

Second, in our field experiment, we were only able to collect survey data from teams at two points in time after leaders sought and shared feedback, which

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prevented us from evaluating changes in psychological safety tracing back to before the experiment started and at intervals between one week and one year. As such, it remains unclear whether the feedback-sharing intervention had an immediate or delayed effect on team psychological safety and whether the feedback-seeking intervention had an initial effect that had faded by the one-year mark. Although we developed theory about the lasting effects of feedback-sharing in our qualitative study, the process model awaits quantitative tests. In particular, future research should evaluate how quickly feedback-sharing dynamics can ensue without being restricted to leader actions alone; it is important to evaluate how employee acts have a reciprocal effect on leader behaviors and, thus, on the emergence of psychological safety over time. Although selecting a random sample of teams to interview is a limitation, our qualitative interviews do shed some light on how employees experienced and reacted to leader feedback-seeking and feedback-sharing. But more research is needed to explore employee responses to leader expressions of vulnerability, and how those affect the time and rate of psychological safety emergence.

Third, a potential confound in our field experiment lies in the fact that the feedback-seeking condition involved an open request for feedback whereas the feedback-sharing condition concentrated on targeted areas for development. This evokes curiosity about whether feedback-seeking interventions would be more effective if leaders inquired about specific development areas rather than posing a general question. Although we encourage future research to revisit this possibility, our data cast some doubt on it: in the combined condition, leaders shared specific development areas along with seeking feedback, but it did not increase psychological safety; it actually had the opposite effect. This suggests that in the context of organizational encouragement in a single meeting, seeking specific feedback may not be sufficient to promote enduring increases in psychological safety.

That said, our data do not illuminate why the combination of seeking and sharing feedback was less effective than sharing feedback alone or why the combination backfired at time 2. We had originally tested this combined condition to explore whether the two behaviors were substitutes or enhancers, and did not anticipate that doing both might be counterproductive. One possibility is that being tasked with two vulnerable behaviors may have heightened impression management and ego concerns, causing leaders to shift into performance-prove or performance-avoid rather than learning orientations (VandeWalle et al. 2001). The combined task may have also raised cognitive load, leading to anxiety and a more stilted, awkward delivery (Coté 2005). Another plausible explanation is that the combination of self-disclosure and feedback-seeking may have been too disruptive, opening the floodgates too quickly rather than opening the door more gradually, as is common in research on the generation of interpersonal closeness (Aron et al. 1997). Alternatively, when leaders both shared and sought feedback, they may have felt that they had already checked the box of opening the door, which left them with a sense of closure (Klinger and Cox 2004) and prevented them from following up.

Fourth, because we only focused on sharing or seeking constructive criticism and developmental feedback, future research should explore the effects of leader feedback-seeking and feedback-sharing when feedback valence varies. For instance, in light of research on the image costs of seeking praise (Ashford and Tsui 1991), we expect that employees would be even more suspicious of leaders who shared only positive feedback, judging them as insecure and arrogant. However, it is possible that this backlash will be mitigated if leaders share both positive and negative feedback. By receiving knowledge about both areas of leader strengths and developmental opportunities, employees may have even more direction to give useful feedback, such as on whether leaders overuse their strengths (Kaiser and Hogan 2011).

Finally, we hope to see further studies explore when it is beneficial versus detrimental for leaders to disclose their weaknesses in order to better understand how leaders can acknowledge their limitations without casting doubt on their performance and competence. Classic research on the pratfall effect (Aronson et al. 1966) and evidence on self-verification striving (Moore et al. 2017) suggest that leaders will be better off showing vulnerability once they have established their competence. However, in our field experiment, we did not find that the effects of sharing or seeking feedback varied as a function of perceived leader competence. It is possible that the results would differ based on leader status (Gibson et al. 2018) or the content of feedback that leaders share or the way they seek it (Ashford et al. 2003).

Practical Implications and Conclusion

Our research offers practical implications for leaders and their employees. Rather than encouraging leaders and managers to seek feedback, it may be more effective to build enduring levels of psychological safety by inviting them to share the criticism they have previously received. Whereas leaders often seek to prove themselves by expressing strength and confidence, our research suggests that showing vulnerability—a topic that has attracted extensive interest in recent years (Brown 2015)—is an important avenue for building an environment in which employees feel comfortable raising concerns and suggestions. As such, leaders and managers may find value in being

more forthcoming about their shortcomings and creating team practices and routines that reinforce the importance of vulnerability. For example, leaders may institute regular vulnerability meetings in which they share their own performance reviews and development goals, and help one another prioritize which are most important for team performance. In addition, managers may consider creating and sharing their own user manuals as a way to signal to their colleagues that they are looking to grow and are receptive to their feedback. In conclusion, our findings reveal that by inviting employees backstage behind the curtain, leaders can build team psychological safety without undermining their images as effective and competent.

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Endnotes

[1] In an OLS regression analysis, leader feedback-seeking was not a significant predictor of leader performance ($b = 0.17$, $SE = 0.14$, $\beta = 0.15$, $t = 1.22$, n.s.; see Online Appendix Table A1), and leader feedback-sharing was a significant positive predictor of leader performance ($b = 0.37$, $SE = 0.14$, $\beta = 0.34$, $t = 2.70$, $p < 0.01$; see Online Appendix Table A1). There was not a significant interaction between feedback-seeking and feedback-sharing in predicting leader performance. Thus, neither feedback-seeking nor feedback-sharing compromised leader performance.

[2] There were no significant differences by condition in response rates at T1, $F(3, 106) = 1.69$, $p = 0.17$, or T2, $F(3, 106) = 0.87$, $p = 0.46$. To assess nonresponse bias, we conducted a wave analysis (Rogelberg and Stanton 2007). Time stamps for survey completion did not correlate significantly with psychological safety at T1 or T2 ($r = 0.07$ and -0.08).

[3] To test measurement invariance in psychological safety across the two points in time, we conducted multigroup confirmatory factor analyses (see Online Appendix Table A2). The configural model achieved good fit with the data, $x^2(28) = 52.60$, CFI = 0.95, SRMR = 0.057. As we constrained factor loadings, factor variances, error variances, intercepts, and factor means to equality at the two points in time, each successive model fit no worse than the previous model (see Online Appendix Table A2). These results meet the key criteria for measurement invariance (Vandenberg and Lance 2000).

[4] Given the longitudinal measurement of team psychological safety, we also conducted a repeated-measures ANOVA. There was a significant time-condition interaction, $F(3, 88) = 3.42$, $p < 0.05$. The effect of feedback-seeking on team psychological safety did not vary significantly over time, $F(1, 88) = 0.02$, *n.s.*, but the effect of feedback-sharing did, $F(1, 88) = 6.56$, $p = 0.01$. Team psychological safety increased significantly over time in the feedback-sharing condition, $t(18) = 2.56$, $p < 0.05$, but not in the feedback-seeking condition, $t(24) = -0.74$, *n.s.*, the control condition, $t(25) = -0.69$, *n.s.*, or the combined condition, $t(21) = -1.47$, *n.s.*

[5] We were surprised that teams with female leaders reported lower psychological safety at T2 ($b = -0.42$, $SE = 0.16$, $t = -2.65$, $p < 0.01$; see Table 6) but not at T1 ($b = 0.15$, $SE = 0.14$, $t = 1.09$, *ns*; see Table 5). We did not identify any variables that correlated with leader gender and psychological safety. Because our data cannot shed light on omitted variables or mediators of this effect, we encourage future research to explore it further.

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