

The Development of a Feedback Environment and Role Clarity Model of Job Performance

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Researchers have recently begun recognizing the impact of contextual factors on important organizational outcomes. This study, involving 170 subordinate-supervisor dyads, develops a model that demonstrates that subordinates who perceive a supportive feedback environment display increased feedback seeking, higher role clarity, and higher performance ratings. Furthermore, the results show that effort costs moderated the relationship between the coworker feedback environment and feedback seeking from coworkers. Implications are discussed.

Keywords: *feedback environment; feedback context; feedback seeking; feedback sources; job performance*

Many researchers have demonstrated that proactive *feedback seeking*, the efforts made by employees to reduce uncertainty surrounding the acceptability of their performance, is both an important individual and organizational resource (Ashford, 1986; Ashford & Cummings, 1983). In particular, research has focused on what Ashford and Cummings (1983) termed *inquiry*, the active request for feedback. This form of feedback seeking has shown clear benefits for both the individual and the organization (Hackman & Oldham, 1976; Ilgen, Fisher, & Taylor, 1979; Karan & Kopelman, 1986), and much research has accordingly focused on identifying the determinants of feedback-seeking behavior (Levy, Albright, Cawley, & Williams, 1995; Steelman, Levy, & Snell, 2004; Williams, Miller, Steelman, & Levy, 1999).

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Researchers have also tied feedback seeking to important organizational outcomes, such as job satisfaction, employee learning, and motivation (Hackman & Oldham, 1976; Mignerey, Rubin, & Gorden, 1995; Morrison, 1993; Murphy & Cleveland, 1995; Wanberg & Kammeyer-Mueller, 2000).

Because of the demonstrated importance of feedback-seeking behavior to organizations, researchers have recently made several calls to clarify poorly understood relationships in the feedback-seeking literature. First, several researchers have noted that the contextual antecedents of feedback-seeking behavior are relatively underresearched (e.g., Ashford, Blatt, & Vandewalle, 2003; Levy & Williams, 2004; Murphy & Cleveland, 1995; Steelman et al., 2004). Specifically, recent work has emphasized that employees distinguish between different sources of feedback, such as supervisors and coworkers (Morrison & Vancouver, 2000), and that contextual influences on feedback-seeking behavior may differ across these sources (e.g., Steelman et al., 2004).

Among the contextual antecedents that have been examined in past research are perceived effort costs (Ashford & Cummings, 1983) and the feedback environment (Steelman et al., 2004). *Effort costs* reflect the perceived amount of effort that employees feel they must expend when seeking feedback. Similarly, the *feedback environment* measures the extent to which characteristics of the workplace encourage the use of inquiry. Research indicates that perceived effort costs in the workplace reduce feedback-seeking behavior (Ashford, 1986; Ashford & Cummings, 1983) and that a supportive feedback environment increases feedback-seeking behavior (Steelman et al., 2004). Importantly, the feedback environment is measured across two dimensions, the supportiveness of the supervisor feedback environment and the coworker feedback environment. In contrast, little attention has been paid to differing effort cost perceptions across different feedback sources. Accordingly, the first goal of this study is to examine the extent to which feedback-seeking behavior across multiple sources is influenced by these important contextual antecedents.

A second recent call in the literature involves clarifying the relationship between feedback-seeking behavior and job performance. Ashford et al.'s (2003) recent review demonstrated that feedback yields a number of desirable outcomes for individuals, such as information about job tasks that should facilitate performance. Indeed, they stated that one of the more prevalent reasons for individuals to seek feedback was the *instrumental motive*, which encourages employees' feedback-seeking behavior based on the perceived informational value of feedback. From this perspective, feedback assists in behavioral self-regulation, and feedback seeking should result in improved performance over time.

However, despite the body of research investigating the outcomes of feedback seeking, the research that has specifically investigated the relationship between feedback seeking and job performance remains inconsistent (Ang, Cummings, Straub, & Earley, 1993; Ashford & Black, 1996; Morrison, 1993). To address this gap in the literature, researchers have recently called for studies examining the mechanisms through which feedback-seeking behavior may lead to increases in job performance (Ashford et al., 2003; Morrison, 2002; VandeWalle, 2003). Consistent with authors who have argued that the link between feedback-seeking behavior and job performance is complex and likely indirect (Ashford et al., 2003; Morrison, 2002; VandeWalle, 2003), we maintain that the ambiguous relationship between feedback seeking and job performance can be best understood from the perspective of role clarity

(Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; Sawyer, 1992) acting as a mediator between these two variables.

According to Banton (1965), a "role" is defined as a set of expectations or norms applied to the incumbent by others in the organization, and employees with high role clarity therefore possess a clearer understanding of their requirements. Interestingly, some evidence indicates that feedback-seeking behavior may increase role clarity, and subsequently job performance. For example, Kahn et al. (1964) introduced the role episode model, which demonstrated that the incumbent reciprocally interacts with others in the environment via a feedback loop in order to gain the requisite knowledge to successfully carry out organizational responsibilities. Similarly, Taylor, Fisher, and Ilgen (1984) stated that feedback seeking for instrumental reasons clarifies the set of responsibilities, duties, and performance levels stipulated by the organization, thus leading to higher levels of job performance by reducing uncertainty about what feedback information is truly relevant to performance. Whereas this body of research highlights the importance of role clarity for improving task performance, an emerging literature also suggests that role clarity may be important to facilitating contextual performance as well (Bolino & Turnley, 2005; Podsakoff, MacKenzie, & Bommer, 1996; Podsakoff, MacKenzie, Paine, & Bachrach, 2000; Salamon & Deutsch, 2006). Thus, a second objective of this study is to help explain the relationship between feedback-seeking behavior and both task and contextual performance by considering the mediating position of role clarity.

In summary, the purpose of this study is to develop and empirically test models of feedback-seeking behavior from supervisors and from coworkers with several goals in mind. First, we explore how contextual elements of the workplace, such as the feedback environment and perceptions of effort costs, direct employees' attention toward current performance and performance-related feedback, thus making the value of feedback-seeking behavior salient. Second, we investigate role clarity as a mediator of the link between feedback-seeking behavior and job performance. Specifically, on the basis of recent research indicating that job performance is a multidimensional construct (e.g., Borman & Motowidlo, 1993; Rotundo & Sackett, 2002), we examine the mediating effects of role clarity on both task and contextual performance.

The Feedback Environment

Whereas the traditional definition of feedback largely reflects the notion that feedback is a process only between a feedback sender and a recipient (Ilgen et al., 1979; Morrison & Bies, 1991), recent literature has demonstrated the influence of the context on feedback-seeking behavior (Levy, et al., 1995; Levy & Williams, 1998; Williams et al., 1999). For example, the Feedback Environment Scale (FES; Steelman et al., 2004) is a measure that assesses the extent to which characteristics of the workplace encourage the use of active inquiry. This scale measures two distinct but related dimensions, one involving feedback-related interactions with supervisors and the other involving feedback-related interactions with coworkers. The FES therefore provides a measurement of the employee's perceptions of the overall supportiveness for feedback in the workplace.

Moreover, unlike past attempts to measure the feedback context purely in terms of the provision of job performance information (e.g., Herold & Parsons, 1985), the FES measures both the supervisor and coworker feedback environments in terms of seven subfacets, namely, feedback quality, source credibility, consideration in feedback delivery, provision of favorable feedback, provision of unfavorable feedback, source availability, and promotion of feedback seeking. Higher levels of all seven dimensions contribute to an increasingly supportive feedback environment. Accordingly, past research has demonstrated that the facets of the feedback environment relate positively to inquiry and to ratings of the quality of feedback that is subsequently received (Steelman et al., 2004; Steelman & Rutkowski, 2004). Consistent with past research, we therefore hypothesize the following:

Hypothesis 1a: Perceptions of a supportive supervisor feedback environment will relate positively to feedback seeking (i.e., inquiry) from the supervisor.

Hypothesis 1b: Perceptions of a supportive coworker feedback environment will relate positively to feedback seeking (i.e., inquiry) from the coworker.

Effort Costs

Although supportive supervisors and coworkers may create an environment conducive to feedback seeking, as noted by Renn and Fedor (2001), unless employees are willing and motivated to seek feedback, it is unlikely that they will do so. Ashford and Cummings (1983) proposed that a key determinant of feedback-seeking behavior is the perception of costs associated with feedback seeking. Self-presentation costs and ego costs have been shown to affect the extent to which one actively seeks feedback (Ashford, 1986, 1988; Fedor, Rensvold, & Adams, 1992). However, little research has been devoted to exploring the impact of effort costs on feedback seeking. Effort costs are those that reflect the amount of effort that one must expend when seeking feedback (Ashford & Cummings, 1983), and they are an important determinant of feedback seeking. For example, the work of VandeWalle and colleagues (Ashford, et al., 2003; Tuckey, Brewer, & Williamson, 2002; VandeWalle, 2003; VandeWalle, Ganesan, Challagalla, & Brown, 2000) suggests that goal orientation influences effort cost perceptions, which contributes to feedback-seeking tendencies. Specifically, learning-goal-oriented individuals focus more on the expected value of feedback seeking and less on the perception of costs, whereas performance-goal-oriented individuals tend to be discouraged by cost perceptions (VandeWalle & Cummings, 1997).

Although this body of work has helped to illustrate how individual differences influence effort perceptions, little research has focused on the influence of context, such as the feedback environment. Ashford (1986) found a negative relationship between perceptions of effort cost and frequency of feedback behavior, but her measures of effort costs and feedback seeking did not distinguish between feedback source (i.e., the supervisor and the coworker). Because the feedback environment distinguishes between these separate sources (Steelman et al., 2004) and Morrision and Vancouver (2000) emphasized that employees seek feedback from different sources, we argue that perceptions of effort costs should also be examined separately.

More important, we see a distinction between the feedback environment and effort costs. Although the feedback environment provides a great deal of information about employees' perceptions of the quality and type of feedback provided, as well as the availability and supportiveness of sources, it does not speak to other organizational circumstances that could make access to that available feedback difficult. For example, a supervisor could provide extremely useful feedback, encourage feedback seeking, and remain available to provide it, yet he or she could be so busy with job demands that subordinates need to schedule meetings well in advance and wait for feedback. In this situation, subordinates might report that the feedback environment is very supportive yet also perceive that effort costs associated with accessing the feedback are high. Effort costs are therefore another important contextual antecedent to feedback-seeking behavior.

Thus, the feedback environment does not necessarily reflect the amount of effort that employees must expend to access feedback. We therefore expect that feedback seeking in a supportive environment may be hindered if effort costs are high or facilitated if effort costs are perceived as low.

Hypothesis 2a: Effort costs will moderate the relationship between the supervisor feedback environment and feedback seeking from the supervisor.

Hypothesis 2b: Effort costs will moderate the relationship between the coworker feedback environment and feedback seeking from coworkers.

Feedback-Seeking Behavior, Role Clarity, and Job Performance

Although feedback in general is largely thought to have a positive effect on task performance (Ilgen et al., 1979), Kluger and DeNisi's (1996) meta-analysis has demonstrated that the effects of feedback-based interventions vary considerably. Similarly, the findings of those studies that have been carried out investigating the relationship between feedback seeking and task performance are somewhat equivocal, with some finding effects (Morrison, 1993) and others finding no evidence for this link (Ang et al., 1993; Ashford & Black, 1996).

We see two potential reasons for these inconsistent findings. First, these studies examined only the direct links between feedback seeking and performance, thus neglecting to investigate potential mediating variables that could clarify this relationship. For example, Morrison's (2002) model of employee information seeking suggests that feedback seeking should lead to immediate decreases in uncertainty with accompanying increases in job knowledge. According to this model, the accumulated effects of reduced uncertainty should lead to positive work attitudes and higher performance. Similarly, Taylor et al. (1984) suggested that clear standards were an important intermediary between feedback and changes in performance. From this perspective, an employee with poorly understood behavioral standards could disregard important feedback because he or she does not recognize that it is relevant and useful, resulting in no improvements in performance.

Second, those studies that have examined the feedback seeking–task performance link have not differentiated between feedback seeking from different sources. For example, Renn and Fedor's (2001) measure of feedback seeking was composed of two items, one assessing

feedback seeking from the supervisor and the other from coworkers. Similarly, Ashford (1986) also used a conglomerate measure. Failing to distinguish between the sources for feedback seeking (Morrison & Vancouver, 2000) may attenuate the link between feedback seeking and task performance. For example, it is feasible that an employee could be uncomfortable seeking feedback from coworkers yet seeks sufficient feedback from a supervisor to ensure adequate role clarity and job performance.

Accordingly, the present study suggests that the uncertainty-reducing effects of role clarity should mediate the links between feedback seeking from each source (supervisor and coworkers) and task performance. Several existing studies support this perspective. In settings that provide employees with information pertaining to work performance and processes, Renn and Fedor (2001) found that goal setting mediated the feedback seeking–job performance link. Moreover, Williams and Johnson (2000) found that the use of feedback monitoring, the observation of the environment for useful information (Ashford & Cummings, 1983), was related to greater agreement between self-ratings and supervisor ratings of performance. These findings suggest that feedback seeking may bolster an employee's understanding of the expectations of his or her job as well as his or her normative performance.

Although no one has investigated role clarity as a mediator of the feedback seeking–task performance link, researchers have demonstrated relationships between feedback-seeking behavior and role clarity (Ashford & Cummings, 1985; Callister, Kramer, & Turban, 1999; Wanberg & Kammeyer-Mueller, 2000) and between role clarity and task performance (Fried, Ben-David, Tieg, Avital, & Yeverehyahu, 1998; McEnrue, 1984; Nhundu, 1992). However, despite literature suggesting that (a) feedback seeking is related to role clarity, (b) role clarity is related to task performance, and (c) feedback seeking and task performance may be linked through some mediating mechanism, the intervening influence of role clarity on the relationship between feedback seeking and task performance has yet to be investigated.

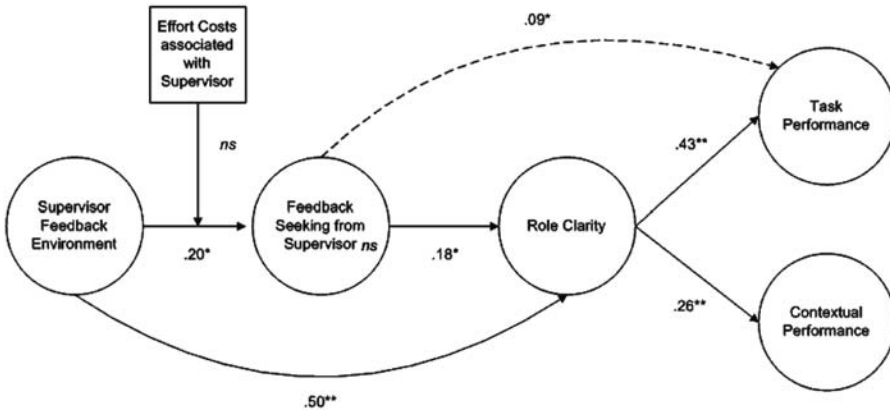
To this end, we hypothesize the following:

Hypothesis 3a: The relationship between feedback seeking from the supervisor and task performance will be fully mediated by role clarity.

Hypothesis 3b: The relationship between feedback seeking from coworkers and task performance will be fully mediated by role clarity.

Moreover, enhanced role clarity achieved as a result of feedback-seeking behavior should also increase the frequency of organizational citizenship behaviors (OCBs) or contextual performance. Recently, researchers have begun to note the costs associated with performing OCBs, including role overload, work-family conflict, and job stress (Bolino & Turnley, 2005; Salamon & Deutsch, 2006). Given increasing expectations for employees to meet high expectations for both task and contextual performance, employees face a difficult challenge in managing these disparate demands (Bond, Galinsky, & Swanberg, 1997). However, we expect that employees with enhanced role clarity should know the standards that they are expected to meet, which helps them determine when and how to perform OCBs that contribute to performance ratings without unexpected, negative outcomes. In other words, high role clarity could facilitate contextual performance by clarifying the extrarole behaviors that are valued by the organization and by giving employees a realistic sense of when OCBs can be performed without detracting from task

Figure 1
Final Path Model for the Supervisor Feedback Environment
With Standardized Path Coefficients



Note: $\chi^2(96, N = 168) = 158.41, p < .01$; Comparative Fit Index = .95; root mean square error of approximation = .08; standardized root mean square residual = .07.

* $p < .05$

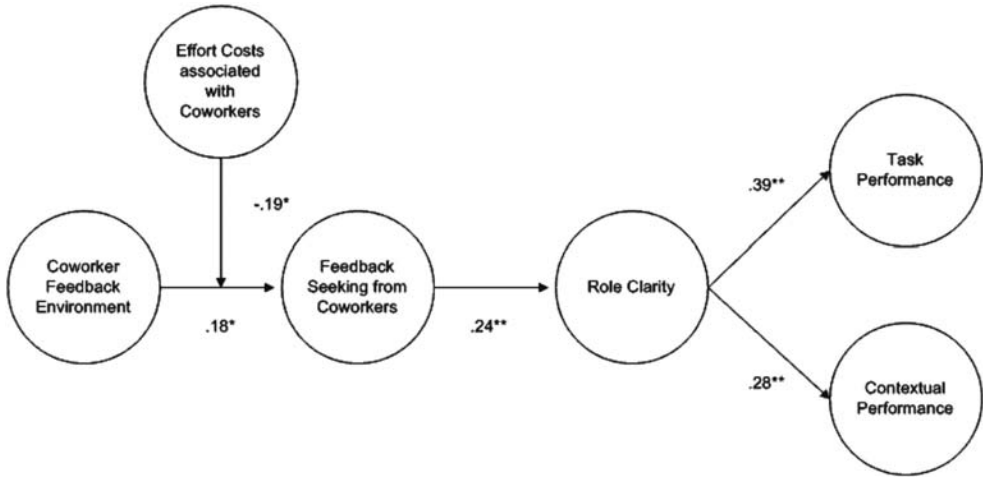
performance. Recent meta-analyses demonstrating a positive relationship between role clarity and OCBs support this relationship (Podsakoff et al., 1996; Podsakoff et al., 2000). Thus, although this mediated relationship has not been explored in past research, we expect that role clarity that develops as a result of feedback-seeking behavior should facilitate contextual performance. Thus, we hypothesize the following:

Hypothesis 4a: The relationship between feedback seeking from the supervisor and contextual performance will be fully mediated by role clarity.

Hypothesis 4b: The relationship between feedback seeking from coworkers and contextual performance will be fully mediated by role clarity.

To summarize, the present study integrates current theoretical and empirical knowledge to investigate the effects of the feedback context on feedback-seeking behavior and of feedback-seeking behavior on job performance. Specifically, we have proposed distinct supervisor and coworker models on the basis of the literature that suggests that the feedback environments are distinct (Steelman et al., 2004), that feedback is sought from different sources (Morrison & Vancouver, 2000), and that perceptions of effort costs may differ between sources. Both the supervisor model (Figure 1) and the coworker model (Figure 2), although assessed separately, illustrate that contextual antecedents, such as the feedback environment and perceived effort costs, influence feedback-seeking behavior. Furthermore, they indicate that feedback-seeking behavior will be positively related to task performance and contextual performance through the mediating effects of increased role clarity.

Figure 2
Final Path Model for the Coworker Feedback Environment
With Standardized Path Coefficients



$\chi^2(99, N = 170) = 191.98, p < .01$; Comparative Fit Index = .95; root mean square error of approximation = .07; standardized root mean square residual = .08.

* $p < .05$

** $p < .01$

Method

Participants

Participants were 252 undergraduate students from a large midwestern university working at least 20 hours per week. Participants' supervisors were contacted via mail and surveyed regarding the performance of their subordinate. Subordinates whose supervisors did not return surveys were excluded from further analysis. One hundred seventy supervisors returned the survey, yielding a response rate of 67.4%.

The mean age of the subordinates was 22.8 with an average tenure of approximately 27 months, working an average of 26.5 hours per week. The subordinate sample was 73.5% female, and 84.7% were Caucasian; 11.8% were African American; and 3.5% were categorized as either Asian, Hispanic, Native American, or Other.

The average age of the supervisors was 39.14 years, with an average of 5.92 years of management tenure and an average of 22.6 months supervising the target employee. The supervisor sample was 60.6% female, and 82.9% were Caucasian; 6.8% were African American; and 6.1% were categorized as either Asian, Hispanic, Native American, or Other.

Procedures

Subordinate participants were compensated with extra credit for their involvement. Subordinates completed measures designed to assess their perceptions of the feedback environment in the workplace, the extent to which they seek feedback, their role clarity, and effort costs in obtaining feedback. Upon survey completion, subordinates completed a consent form allowing their supervisors to be contacted regarding their work performance. Each subordinate was then instructed to give a survey to his or her supervisor. The supervisor survey assessed employee task and contextual performance, as well as the supervisor's demographic information. Supervisors then mailed the completed surveys back to the researchers.

Measures

Subordinate measures. The FES was developed by Steelman et al. (2004) as a means of assessing employee perceptions of the supervisor and coworker feedback environments. Each feedback dimension and the seven facets composing each dimension were assessed with 7-point Likert-type scales ranging from *strongly agree* to *strongly disagree*. The aim of the present study was to examine the relationship of the general supervisor and coworker feedback environments to outcomes, thus analyses were carried out on the aggregate of the Supervisor ($\alpha = .94$) and Coworker scales ($\alpha = .95$) as has been done in other studies (e.g., Norris-Watts & Levy, 2004; Rosen et al., 2006). A sample item from the Supervisor FES is "My supervisor generally encourages me to ask for feedback whenever I am uncertain about my job performance." A sample item of the Coworker FES is "My coworkers are often annoyed when I directly ask them for performance feedback (reverse-coded)."

Participants were also asked to respond to Williams and Johnson's (2000) six-item feedback-seeking measure ($\alpha = .78$) designed to tap the frequency with which they directly seek feedback (i.e., inquiry) from their supervisors (three items) and their coworkers (three items). Sample items include "How often do you ask your supervisor for information about what is required of you to function successfully on the job?" and "How often do you ask your coworkers how well you are doing performing on the job?" This scale is measured with a 6-point scale ranging from 1 (*never*) to 6 (*always*).

We used Sawyer's (1992) 10-item measure of role clarity to assess the degree of clarity with which employees understood their position ($\alpha = .91$), which was rated on a 6-point scale (1 = *very uncertain*, 6 = *very certain*). The scale measures two facets, clarity of roles and clarity of processes.

Two items developed by Ashford (1986) were used as measures of perceived effort costs from supervisors and perceived effort costs from coworkers, respectively. The items, which read "How much effort does it take for you to get useful feedback from the following sources?" are asked in respect to the supervisor and coworkers. The item referring to effort costs associated with the supervisor was used as a one-item scale assessing effort costs from the supervisor, whereas the item referring to effort costs from coworkers served as a

one-item scale tapping these perceptions from coworkers. Responses to these items are made on a 4-point Likert-type scale (1 = *quite a lot*, 2 = *some*, 3 = *very little*, 4 = *not at all*).

Supervisor measures. Supervisors were asked to complete questionnaires regarding various aspects of subordinate performance. Task performance data were collected using Williams and Anderson's (1991) seven-item measure of in-role behavior ($\alpha = .84$). Sample items from this scale include "Adequately completes assigned duties" and "Meets formal performance requirements of the job." The Organizational Citizenship Behavior–Individual (OCBI) measure (seven items) and the Organizational Citizenship Behavior–Organizational (OCBO) measure (six items) were used to tap OCBI and OCBOs, respectively (Williams & Anderson, 1991). OCBI ($\alpha = .88$) tap behaviors benefiting specific individuals in the organization (i.e., "Helps others who have been absent"), whereas OCBOs ($\alpha = .75$) tap those behaviors benefiting the organization as a whole (i.e., "Conserves and protects organizational property").

Results

The means, standard deviations, and coefficient alphas for the raw score variables are presented in Table 1, along with the latent variable correlations. Structural equation modeling using maximum likelihood estimation was employed for the purposes of testing the complete hypothesized models for the individual Supervisor and Coworker feedback environments. For both models, we followed the recommendations of Williams and Anderson (1994) and Hall, Snell, and Foust (1999) by creating parcels that share a secondary factor to serve as indicators of the latent variables. For the Supervisor Feedback Environment (SFE) model, seven parcels were created reflecting source credibility, feedback quality, feedback delivery, feedback favorability, unfavorable feedback, source availability, and the promotion of feedback seeking. Two parcels were formed for role clarity representing goal and process clarity. Two parcels each were formed for task and contextual performance. For task performance, one parcel was constructed of three items, with four items constituting the second parcel. For contextual performance, one parcel was formed using the seven items constituting the OCBI subdimension of contextual performance, and the other was constructed using the six items representing OCBO. Last, we let the three items pertaining to feedback sought from the supervisor serve as indicators of the latent supervisory feedback construct rather than form a parcel from these items. Parcel formation was identical for the Coworker Feedback Environment (CFE) model; however, the three items tapping coworkers as a source were used for this latent feedback-seeking factor.

The Supervisor Feedback Environment

The measurement model, which included five latent constructs representing SFE, feedback seeking from supervisors, role clarity, task performance, and contextual performance fit the data well after allowing covariances between four of the SFE subscale residuals,¹ $\chi^2(92, N = 168) = 150.55, p < .01$; Comparative Fit Index (CFI) = .96; root mean square error

Table 1
Means, Standard Deviations, and Correlations of All Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Supervisor feedback environment	5.37	0.98	(.96)									
2. Coworker feedback environment	4.99	1.08	.44**	(.96)								
3. Supervisor effort costs	2.33	0.90	-.27**	.002	—							
4. Coworker effort costs	2.29	0.84	-.25**	-.31**	.43**	—						
5. Supervisor feedback-seeking behavior	2.98	1.18	.35**	.25**	-.20*	-.18*	(.90)					
6. Coworker feedback-seeking behavior	2.23	1.17	.22*	.24**	-.06	-.13	.81**	(.87)				
7. Role clarity	5.14	1.01	.56**	.23**	-.16*	-.08	.36**	.34**	(.97)			
8. Task performance	6.25	0.76	.21*	.16*	-.17*	-.01	.19*	.13	.27**	(.82)		
9. Contextual performance	5.90	0.77	.16*	0.11	.03	-.03	.19*	.29**	.17*	.62**	(.89)	
10. Tenure	27.4	37.6	-.11	-.10	.03	.13	-.05	-.08	.18*	.09	.05	—

Note: Reliabilities are reported in parentheses. Tenure is reported in months. OCBI = Organizational Citizenship Behavior–Individual; OCBO = Organizational Citizenship Behavior–Organization.

* $p < .05$

** $p < .01$

Table 2
Fit Indices and Statistics for the a priori, Structural, and Modified Structural Models

	χ^2	<i>df</i>	CFI	RMSEA	SRMR
Supervisor feedback environment					
Measurement model	150.55	92	.96	.08	.06
A priori structural model	199.97	97	.93	.09	.15
Modified structural model (as shown in Figure 1)	158.41	96	.95	.08	.07
Partial mediation model (added a direct link from supervisor feedback seeking to task performance)	154.84	95	.95	.08	.07
Partial mediation model (added a direct link from supervisor feedback seeking to contextual performance)	154.12	94	.95	.07	.06
Coworker feedback environment					
Measurement model	182.51	94	.95	.07	.05
A priori structural model (as shown in Figure 2)	191.98	99	.95	.07	.08
Partial mediation model (added a direct link from supervisor feedback seeking to task performance)	192.94	98	.95	.08	.08
Partial mediation model (added a direct link from supervisor feedback seeking to contextual performance)	190.18	98	.95	.08	.08

Note: All analyses for the Supervisor Feedback Environment were carried out on $N = 168$. All analyses for the Coworker Feedback Environment were carried out on $N = 170$. CFI = Comparative Fit Index; SRMR = standardized root mean square residual; RMSEA = root mean square error of approximation.

of approximation (RMSEA) = .08; standardized root mean residual (SRMR) = .06 (Table 2). These results provide evidence that the model meets Hu and Bentler's (1999) conservative two-index presentation criteria for good model fit.

The hypothesized structural model was a mediated model consisting of paths between the SFE, supervisory feedback seeking, role clarity, task performance, and contextual performance, where the supervisor feedback environment was hypothesized to influence feedback seeking and role clarity was hypothesized to fully mediate the relationship between supervisory feedback seeking and task performance, as well as the link between supervisory feedback seeking and contextual performance. This model fit the data poorly, $\chi^2(97, N = 168) = 199.97, p < .01$; CFI = .93; RMSEA = .09; SRMR = .15, and resulted in a significant decrease in model fit, $\Delta\chi^2(5, N = 168) = 49.42, p < .01$. We then tested a revised model in which we added a direct path, based on modification indices, between the SFE and role clarity (Figure 1). Allowing this path to be freely estimated resulted in a substantial improvement in model fit according to the fit indices, $\chi^2(96, N = 168) = 158.41, p < .01$; CFI = .95; RMSEA = .08; SRMR = .07 (Table 2) and demonstrated a nonsignificant change in fit from the measurement model, $\Delta\chi^2(4, N = 168) = 7.86, p = ns$.

Following this, models were assessed that added a direct path from supervisory feedback seeking to task performance and contextual performance, respectively, to test for the partial mediation of role clarity on these relationships. This first model suggests a partial mediation effect where supervisory feedback seeking operates through and independent of role clarity to influence task performance. This model fit the data well, $\chi^2(95, N = 168) = 154.84, p < .01$;

CFI = .95; RMSEA = .08; SRMR = .07 (Table 2), and did not fit worse than the measurement model, $\Delta\chi^2(3, N = 168) = 4.29, p = ns$. Compared to the hypothesized model, adding the direct link from supervisory feedback seeking to task performance did not significantly improve model fit, $\Delta\chi^2(1, N = 168) = 3.57, p = ns$. However, inspection of the standardized path coefficients indicated that a direct effect of supervisory feedback seeking on task performance was significant, $p < .05$, indicating that role clarity partially mediated the effects of supervisory feedback seeking on task performance. The second model assessed role clarity as a mediator of the relationship between supervisory feedback seeking and contextual performance. This model also fit the data quite well, $\chi^2(94, N = 168) = 154.12, p < .01$; CFI = .95; RMSEA = .07; SRMR = .06 (Table 2), and did not worsen model fit, $\Delta\chi^2(3, N = 168) = .72, p = ns$. In this case, however, the standardized path coefficient for the supervisor feedback seeking–contextual performance link was nonsignificant, suggesting that role clarity fully mediated the effects of supervisory feedback seeking on contextual performance.

Examination of the paths in the final model demonstrated that Hypothesis 1a was fully supported; perceptions of a supportive SFE positively related to the elicitation of feedback from supervisors. Hypothesis 3a was partially supported as role clarity partially mediated the effects of supervisory feedback seeking on task performance. However, the relationship between feedback seeking from the supervisor and contextual performance was fully mediated by role clarity, supporting Hypothesis 4a.

Hypothesis 2a stated that effort costs would moderate the relationship between the SFE and supervisory feedback seeking. This hypothesis was tested using a hierarchical moderated multiple regression framework (Stone & Hollenbeck, 1984). We first entered gender, age, and tenure as control variables at Step 1 based on research indicating that these control variables can influence feedback-seeking behavior (Ashford, 1986; Miller & Karakowsky, 2005). To reduce the possibility of multicollinearity, we mean-centered our independent variables (SFE and supervisory effort costs) and entered these in Step 2 (Aiken & West, 1991). Finally, we entered the cross-product term, which we calculated as the product of the centered main effect variables. As shown in Table 3, this interaction did not significantly predict supervisory feedback seeking, thus Hypothesis 2a was not supported.

The Coworker Feedback Environment

This second model was analyzed in the same manner as the SFE model. The CFE measurement model fit the data well, according to the guidelines set by Hu and Bentler (1999), $\chi^2(94, N = 170) = 182.51, p < .01$; CFI = .95; RMSEA = .07; SRMR = .05 (Table 2). Furthermore, the hypothesized structural model (Figure 2) fit the data well, $\chi^2(99, N = 170) = 191.98, p < .01$; CFI = .95; RMSEA = .07; SRMR = .08 (Table 2).

The partial mediation model assessing the mediating effect of role clarity on the relationship between coworker feedback seeking and task performance fit the data well $\chi^2(98, N = 170) = 192.94, p < .01$; CFI = .95; RMSEA = .08; SRMR = .08. However, compared to the hypothesized structural model, adding the direct link between coworker feedback seeking and task performance did not significantly improve model fit, $\Delta\chi^2(1, N = 170) = .96, p = ns$. The standardized coefficient for this relationship was nonsignificant, $p < .05$, further

indicating that role clarity fully mediated the coworker feedback seeking–task performance link. The second partial mediation model examined the indirect effects of role clarity on the relationship between coworker feedback seeking and contextual performance. Again, model fit was acceptable, $\chi^2(98, N = 170) = 190.18, p < .01$; CFI = .95; RMSEA = .08; SRMR = .08; the direct link did not improve model fit, $\Delta\chi^2(1, N = 170) = 1.8, p = ns$; and the standardized coefficient was nonsignificant. These results indicate that role clarity fully mediated the relationship between coworker feedback seeking and contextual performance.

Figure 2 presents the standardized path coefficients for the final CFE model. These results demonstrate support for Hypotheses 1b; a coworker environment conducive to open feedback seeking was related to feedback seeking from coworkers. Hypotheses 3b and 4b were fully supported as role clarity fully mediated the link between coworker feedback seeking and job performance as well as the relationship between coworker feedback seeking and contextual performance.

Following the procedures outlined above for testing interaction effects (Stone & Hollenbeck, 1984), we found that the relationship between perceptions of the coworker feedback environment and feedback seeking was moderated by the effort costs associated with seeking feedback from coworkers, thus supporting Hypothesis 2b (Table 3). Using procedures outlined by Aiken and West (1991), the observed coworker interaction was plotted to examine the form of the moderated relationship. Figure 3 illustrates the interaction between perceptions of coworker effort costs and the coworker feedback environment on feedback-seeking behavior for values ± 1 standard deviation around the mean of the coworker feedback environment. As expected, there is a positive slope between perceptions of the coworker feedback environment and feedback seeking for those who perceive lower levels of effort costs. Conversely, the slope is flatter for those who perceive higher levels of effort costs associated with obtaining feedback from coworkers.

Supplementary Analyses

Research within the job performance domain has indicated that although task and contextual performance are conceptually distinct variables, managers integrate task and contextual performance ratings when generating an overall job performance rating (Rotundo & Sackett, 2002). On the basis of these results, we sought to supplement our focal analyses by combining the separate subdimensions of job performance and investigating the effects of feedback seeking and role clarity on a latent multidimensional performance construct.

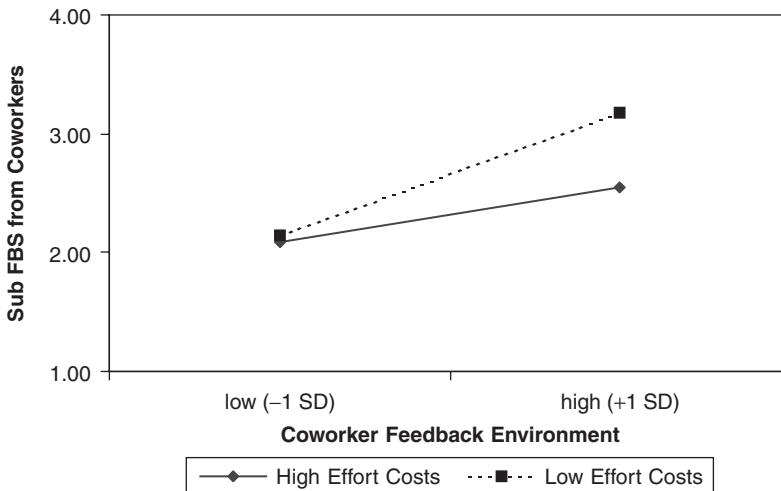
After making the measurement/structural model modifications outlined above (see Note 1), the final path model for the SFE demonstrated acceptable levels of construct validity, and all standardized path coefficients were significant, $\chi^2(84, N = 168) = 170.82, p < .01$; CFI = .95; RMSEA = .07; SRMR = .07. Furthermore, role clarity fully mediated the relationship between supervisor feedback seeking and job performance. Similarly, the measurement and structural models fit the data quite well for the CFE, $\chi^2(87, N = 170) = 188.14, p < .01$, and demonstrated significant standardized path coefficients. In addition, role clarity fully mediated the link between coworker feedback seeking and job performance for the CFE model as well.

Table 3
Results of Moderated Regression Analysis for the Supervisor and Coworker Feedback Environment

Step	Variable	β	R^2	ΔR^2
Dependent variable = supervisory feedback seeking				
Step 1	Age	-.01		
	Tenure	.14		
	Gender	.13	.04	
Step 2	SFE	.19*		
	Effort costs	-.09*	.10	.06*
Step 3	SFE \times Effort Costs	-.08	.11	.01
Dependent variable = coworker feedback seeking				
Step 1	Age	-.04		
	Tenure	.08		
	Gender	.08	.01	
Step 2	CFE	.18*		
	Effort costs	-.06	.06	.05*
Step 3	CFE \times Effort Costs	-.19*	.10	.04*

Note: SFE = supervisor feedback environment; CFE = supervisor feedback environment.
 * $p < .05$

Figure 3
Interaction of the Coworker Feedback Environment With Perceived Effort Costs From Coworkers on Feedback-Seeking Behavior From Coworkers



Discussion

Consistent with our theoretical framework, we found that (a) perceptions of a positive supervisor and coworker feedback environment both led to increased feedback-seeking behavior, (b) perceptions of additional effort costs moderated the relationship between the coworker feedback environment and feedback seeking, and (c) role clarity mediated the relationship between feedback-seeking behaviors and job performance. We also found a strong, unexpected relationship between the supervisor feedback environment and role clarity, which suggests that an open, cooperative feedback policy on the part of supervisors can lead to enhanced employee role clarity independent of active feedback seeking on the part of the employee. Although unexpected, this finding is interesting because it suggests that available, supportive supervisors may serve as salient reminders of the organization that prime employees to become self-aware (Lord & Brown, 2004) and to focus on known role information. In sum, our findings address several gaps in the literature by exploring the role of contextual antecedents of feedback-seeking behavior (Ashford et al., 2003; Levy & Williams, 2004; Murphy & Cleveland, 1995; Steelman et al., 2004) and by explaining how feedback-seeking behavior is tied to job performance through the mediation of role clarity (Ang et al., 1993; Ashford & Black, 1996; Morrison, 1993).

However, contrary to expectations, we also found that effort costs did not moderate the relationship between the supervisor feedback environment and feedback-seeking behavior from the supervisor as expected in Hypothesis 2a. In contrast, we did find the moderating effect for the coworker feedback environment, implying that effort costs may dissuade feedback seeking from coworkers, but not from supervisors. As Herold and Parsons (1985) noted, coworker feedback is clearly related to job performance, but coworkers do not have formal authority over employees. Their feedback may not be considered as important as the feedback from a supervisor (Kohli & Jaworski, 1994). The authority of supervisors stems from their provision of performance appraisals that are linked to desirable outcomes, such as pay, in a traditional performance appraisal setting (London, 2003). Coworkers are typically not a part of the performance appraisal process outside of organizations that use team settings (Reilly & McGourty, 1998) or multisource feedback (Dalessio, 1998). Thus, because supervisory feedback is more closely tied to beneficial outcomes, the perception of effort costs may not discourage feedback seeking from supervisors. In contrast, as rewards are generally not contingent on the feedback of coworkers, high effort costs in seeking feedback from coworkers may lead employees to minimize feedback-seeking behavior, even if the coworker feedback environment is supportive.

Furthermore, Hypothesis 3a was only partially supported because role clarity only partially mediated the link between feedback seeking from the supervisor and task performance. In other words, feedback-seeking behavior had a direct effect on task performance ratings in addition to the indirect effect through increased role clarity. This finding is intriguing as it suggests that supervisors may see feedback-seeking behavior as directly related to task performance. Some evidence supports this perspective. For example, Campbell, Gasser, and Oswald's (1996) taxonomy of performance includes components such as demonstration of effort and maintenance of personal discipline. Supervisors may perceive feedback-seeking

behavior as consistent with these components because it communicates a desire to maintain performance consistent with organizational standards, and accordingly, they may take feedback-seeking behavior into account when making performance evaluations.

Implications

These findings have several implications for organizations. First, whereas previous research had found inconsistent effects of feedback seeking on job performance (Ang et al., 1993; Ashford & Black, 1996; Kluger & DeNisi, 1996), the results of this study indicate that subordinate feedback seeking does result in positive supervisory evaluations of performance, consistent with the findings of Morrison (1993). Our findings are particularly robust given that performance data were gathered from supervisors who provided their perceptions of employee performance, minimizing biases associated with monosource bias and self-reported data. The mediation of role clarity clearly emphasizes the importance of providing a well-known referent standard of performance to employees, which facilitates the improvement of their performance.

In addition, the moderation of effort costs only on the relationship between the coworker feedback environment and employee feedback seeking has important implications for performance appraisal systems that use coworker input (Dalessio, 1998). Our findings suggest that employees may not be getting feedback even from supportive coworkers if considerable effort is perceived as necessary to do so. Organizations that use coworker feedback in performance appraisal systems should therefore take extra steps to remove barriers and facilitate the exchange of information between coworkers.

Our findings also have important implications for employee development. Encouraging feedback seeking by manipulating the feedback environment should result in enhanced role clarity, consistent with our findings. As Landy and Farr (1980) noted, performance appraisals are conducted in organizations infrequently, oftentimes only once or twice per year (Bernardin, Hagan, Kane, & Villanova, 1996). Therefore, promoting feedback seeking may serve to encourage employees to seek development-related feedback on a more consistent basis (London, 2003; London & Smither, 2002), yielding greater role clarity and improvements in performance.

Last, our findings have important implications for the relationship between feedback seeking, role clarity, and contextual performance. Little research has linked role clarity to contextual performance (Podsakoff et al., 1996; Podsakoff et al., 2000), but our findings suggest that feedback-seeking behavior that leads to increased role clarity can facilitate contextual performance. Specifically, our results imply that feedback-seeking behavior provides employees with an enhanced understanding of the types of contextual performance that are valued by the organization, as well as with a firmer insight into when and how OCBs can be performed without detracting from necessary task performance. Thus, role clarity may contribute to organizational effectiveness not only by improving task performance but also by increasing the ability of employees to engage in contextual performance.

Limitations and Future Research

Although our findings have helped to answer several recent calls in the feedback-seeking literature, our study did have several limitations. For example, one limitation of this study was our use of a student sample, which limits generalizability. Although our sample was composed of older student employees with more work experience than traditional college students, use of this sample may have nevertheless restricted the range on relevant variables such as demographic characteristics (i.e., gender) as well as job-related variables (i.e., hours worked per week, tenure). For example, our sample was almost three quarters female, working on average 26.5 hours per week, with an average tenure of 2 years and 3 months. Thus, if any of the constructs under study are preferentially affected by gender or require a significant amount of time on the job to form associations, our findings may be artificially enhanced or attenuated. Future researchers should attempt to replicate our results on older, full-time employees with more experience in the workforce to ensure the generalizability of our findings.

We also wish to emphasize that our hypothesis testing was conducted in a cross-sectional manner, which limits the extent that causality can be assessed. In particular, future research should focus on identifying the antecedents that contribute to the formation of a supportive feedback environment, which have received little research attention to date. Determining these antecedents would make it easier for researchers to design longitudinal studies that focus on the processes shown in our models. Eventually, interventions may be implemented designed to improve the feedback environment, resulting in more feedback seeking, role clarity, affective commitment (Norris-Watts & Levy, 2004), employee morale (Rosen, et al., 2006), and both task and contextual performance.

Another limitation involves the scope of the antecedents of feedback-seeking behavior that we considered. Our focus was on contextual antecedents of feedback seeking, such as the feedback environment, rather than individual differences. A wide body of literature has shown that individual differences such as impression management, self-esteem, and goal orientation influence feedback-seeking behavior as well (e.g., Levy et al., 1995; VandeWalle, 2003), and future research should look at the interactions of these individual and contextual variables. For example, Levy et al. (1995) demonstrated that public contexts and individual differences such as social anxiety and public self-consciousness interacted to influence feedback-seeking behavior.

Last, because of limitations in the only existing scale of effort costs (Ashford & Cummings, 1983), we measured subordinate perceptions of the effort costs required to seek feedback from the supervisor and coworkers using single-item scales. The decision to use single-item measures introduces problems with measurement reliability, raises questions regarding the extent to which we have measured the relevant construct domain, and may lead to spurious associations among the variables under study (Spector, 1992). As outlined by Sackett and Larson (1990), a single-item measure is most appropriately used in situations in which the construct of interest is sufficiently narrow in scope, unidimensional rather than multidimensional, and the item is clear to the respondents. Thus, to the extent that perceptions of supervisor and coworker effort costs are narrow and unidimensional, and the items themselves are readily interpretable by the respondents, single-item measures may suffice.

However, very little theoretical or empirical work has been carried out investigating the breadth of the effort costs construct. Future research adopting the construct of effort costs should elaborate on our findings by developing and employing a more extensive measure of effort costs to ensure adequate domain coverage.

Conclusion

Our findings have emphasized the importance of the feedback environment in organizations that seek to improve feedback-seeking behaviors. We have demonstrated that perceptions of a supportive feedback environment encourage feedback-seeking behavior, but that this relationship is moderated by effort costs for feedback seeking from coworkers. We have also shown that feedback seeking is related to task and contextual performance through the mediator of role clarity. Overall, this model provides new directions for research on feedback. Moreover, it generates useful implications for both researchers and practitioners to increase job performance through a consideration of the feedback environment, employees' perceptions of their roles, and the costs associated with clarifying them.

Note

1. In two instances, we allowed residuals to covary. Error variances were allowed to intercorrelate for the items referring to the promotion of feedback seeking and source availability. Similarly, we allowed the error variances for the items pertaining to feedback frequency and source credibility to covary.

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