# ARTICLES

# An Integrative Model Linking Feedback Environment and Organizational Citizenship Behavior

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ABSTRACT. Past empirical evidence has suggested that a positive supervisor feedback environment may enhance employees' organizational citizenship behavior (OCB). In this study, we aim to extend previous research by proposing and testing an integrative model that examines the mediating processes underlying the relationship between supervisor feedback environment and employee OCB. Data were collected from 259 subordinate-supervisor dyads across a variety of organizations in Taiwan. We used structural equation modeling to test our hypotheses. The results demonstrated that supervisor feedback environment influenced employees' OCB indirectly through (1) both positive affective-cognition and positive attitude (i.e., person-organization fit and organizational commitment), and (2) both negative affective-cognition and negative attitude (i.e., role stressors and job burnout). Theoretical and practical implications are discussed.

Keywords: burnout, feedback environment, person-organization fit, organizational citizenship behavior, organizational commitment

*FEEDBACK ENVIRONMENT* is defined in relation to "the contextual aspects of day-to-day supervisor-subordinate and coworker-coworker feedback processes rather than to the formal appraisal feedback session." (Steelman, Levy, & Snell, 2004, p. 166). In the last decade, feedback environment has received much attention from scholars in organizational psychology and performance appraisal

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research. Research has suggested that feedback environment may have important effects on employees' task performance and organizational citizenship behavior (OCB) (e.g., Kluger & Denisi, 1996; Norris-Watts & Levy, 2004; Rosen, Levy, & Hall, 2006; Steelman et al., 2004; Whitaker, Dahling, & Levy, 2007). *OCB* can be defined as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization" (Organ, Podsakoff, & MacKenzie, 2006, p 3). Empirical research shows that employees' expression of organizational citizenship behavior can aid in effective productivity-enhancing use of resources, can serve as a medium that coordinates colleagues and team members, and can positively affect organizational performance (Podsakoff, Ahearne, & MacKenzie, 1997). Thus when OCB is important for effective organizational functioning, researchers should investigate how work environments (e.g., feedback environment) may shape OCB in ways that promote employees' display of OCB.

Regarding the linkage between feedback environment and OCB, scholars have demonstrated that through the mediating mechanisms of affective commitment, job satisfaction, or role clarity, supervisors' provision of an advantageous feedback environment would enhance employees' OCB (Norris-Watts & Levy, 2004; Rosen et al., 2006; Whitaker et al., 2007). Studies by the aforementioned scholars tend to assert that supervisors who provide a relatively advantageous feedback environment can enhance employees' expression of organizational citizenship behavior through the intermediary mechanism of positive affective cognition and positive attitude. Generally, explanations of the functioning process of this intermediary mechanism arise from the principle of reciprocity in social exchange theory and fairness theory (Norris-Watts & Levy, 2004). This means that employees who perceive that their organization provides a relatively advantageous feedback environment may perceive that the organization values them, and this second perception may inspire the employees to repay the organization through behaviors that are beneficial to the organization. Additionally, the study by Anseel and Lievens (2007) found that there is a positive relationship between supervisor feedback environment and employee job satisfaction; the relationship has the leader-member exchange as the complete mediating effect. The study by Muchinsky and Monahan (1987) found that there is a positive relationship between transformational leadership and person-organization fit. On the basis of the above research stream, in this study, we treat the affective and attitudinal variables of person-organization fit and commitment as positive intermediary processes in order to explore whether supervisor feedback environment increases the positive affective-cognition (person-organization fit) and the positive attitude (commitment) of employees and in turn, increases the expression of employee citizenship behavior.

In contrast to the abundant literature on positive intermediary processes, prior studies tended to neglect the possibility that employee negative

affective-cognition and attitudes are underlying mechanisms linking the feedback environment and OCB to each other. Thus, in its construction of a negative intermediary process, this study is also grounded in views from social information processing theory (Salancik & Pfeffer, 1978), conservation of resources theory (Leiter & Maslach, 2005), and social exchange theory (Cropanzano, Rupp, & Byrne, 2003). According to the social information processing approach, employees use information they obtain directly from their work environments to interpret events, develop suitable attitudes, and understand behavior relating to themselves and expectations for the results (Salancik & Pfeffer, 1978). In organizations, supervisors tend to be a salient part of the work environment; thus, they easily affect employee interpretations of organizational regulations. If supervisors provide advantageous feedback information (reliable, high quality, available, appropriate, and encouraging feedback) to employees, employees can better clarify performance standards regarding the organization and can exhibit less uncertainty and ambiguity—outcomes that, in turn lower work stress. Conservation resource theory addresses the effects of job demands and job resources on burnout. The theory states that job demands and job resources are latent sources of job stress.If employees face various stresses relating to jobs, and if the employees make unsuccessful (i.e., unsatisfactory) physical or psychological efforts (obtaining job resources) to meet or resolve job demands, employee burnout can arise. However, the social exchange relationship suggests that employees tend to exchange socio-emotional benefits with the organization; these are personal attachments and unlimited obligations. In general, employees form social exchange relationships to the extent that the employees gain worthwhile, equitably distributed benefits from the organization. However, according to the views of Cropanzano, Rupp, Mohler, and Schminke (2001), work-related burnout based on the following reasons seems to violate these conditions. First, employee burnout is seen as the qualification of values and benefits received through employment. Second, employees who perceive that their burnout arises from unfair actions of the organization leading to overwork are likely to resent the organization. Therefore, an employee who exhibits job burnout lacks a social exchange relationship with the organization and provides less OCB benefit to the organization. Through a theoretical analysis of the above-mentioned themes, we hope that supervisors' provision of an advantageous feedback environment may decrease employee negative affective-cognition (e.g., role stressors) and negative attitude (e.g., job burnout) and, in turn, may enhance the employees' OCB.
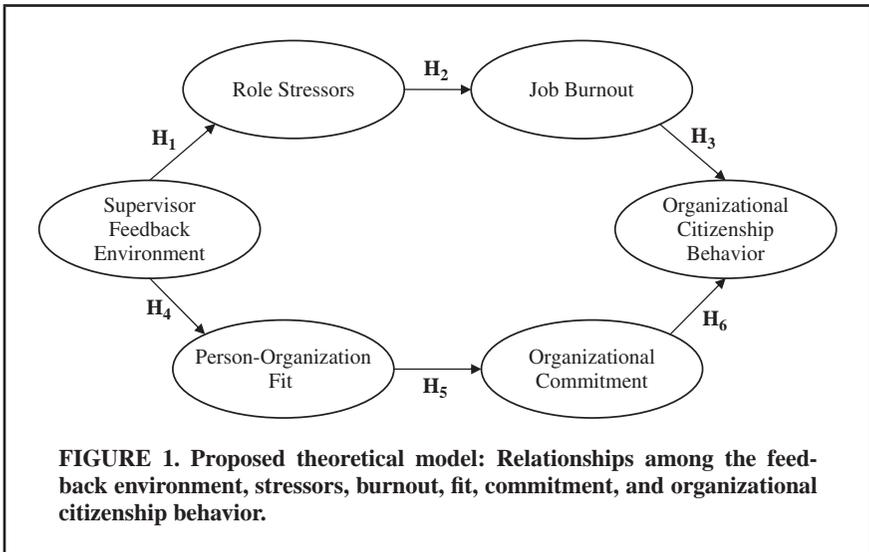
In sum, on the basis of the above literature and theory review, the present study proposes an integrated model to simultaneously explore whether the positive and negative affective perception and attitude variables play a crucial mediating role between supervisor feedback environment and OCB. Previous studies found that there is a positive relationship between psychological attachment and OCB (e.g., helping) (e.g., Organ & Ryan, 1995). Psychology detachment is negatively related to OCBs (e.g., Lo & Aryee, 2003). However,

Burris, Detert, and Chiaburu (2008) found that employee psychological attachment and detachment have an asymmetric mechanism relative to discretionary behavior. In particular, they discovered that attachment (affective commitment) does not have an intermediary effect on the relationship between perceived leadership quality (LMX and abusive supervision) and pro-social voice, while detachment (intention to leave) has an intermediary effect. Therefore, the integrated model of the present study serves to simultaneously explore whether (1) positive and negative affective-cognition variables and (2) positive and negative attitude variables are key intermediary mechanisms between supervisor feedback environment and OCB. This will be a contribution to the empirical literature on whether positive and negative intermediary processes contain an asymmetric mechanism of mediating effects.

This study has three primary contributions to the business literature. First, after testing the theoretical model and accounting for all other effects of the variables, we should have a more comprehensive and a more precise understanding of the intricacies embedded within the mediating mechanisms. As stated by Colquitt and Zapata-Phelan (2007), research that can introduce a new mediator belonging to an existing relationship or process may also contribute to the formation of rigorous, useful theory. Second, if supervisors can learn to provide high-quality feedback and feedback-transmission methods and techniques, such as those encouraging employees to proactively seek feedback, then these skills would help subordinates develop positive perceptions of supervisor feedback environments. These positive perceptions would enhance employee motivation, affect, attitude, and performance (OCB). These kinds of feedback processes also mean that a supervisor who has knowledge of feedback-environment integration through organizational training can harness a feedback-transmission process that would powerfully strengthen his or her communication and leadership skills, and this newfound strength can ultimately enhance overall organizational functioning. Third, if the employee can receive suitable feedback from the supervisor, the employee can easily identify expectations of the supervisor or of other members, and can easily understand the organizational standards governing one's own behavior in the workplace. These facets of feedback not only help employees understand their own level of capabilities and their own actual work-performance blueprint, but they also enable employees to evaluate their own behavior efficiency, to rapidly adjust their own inadequate workplace behaviors, and to move in a correct, positive direction. Such actions of employees can help prevent work problems and can enhance both employees' own productivity and organizational productivity. The theoretical model of this study is shown in Figure 1.

*The Nature of Feedback Environment*

Unlike the formal performance evaluation processes of the organizations, feedback environment reflects the daily interactions among organization members

**FIGURE 1. Proposed theoretical model: Relationships among the feedback environment, stressors, burnout, fit, commitment, and organizational citizenship behavior.**

regarding how they provide, receive, and use feedback (Steelman et al., 2004). The feedback environment can be seen as a useful aggregation of information provided to employees and can either encourage the intrinsic work motivation of employees or signal appropriate regulation of employee behavior. Employees can use this signal to adjust their own behavior in accordance with the work target, to enhance personal ability, and in turn, to enhance personal work performance.

Since the fields that explore leadership effectiveness have also found that transformational leadership, supervisor support, and leader-member exchange (LMX) are positively related to employee citizenship behavior (Podsakoff, MacKenzie, & Bommer, 1996a, 1996b; Ilies, Nahrgang, & Morgeson, 2007), clarification of the difference between Steelman et al.'s (2004) conceptualization of the feedback environment and these three constructs will enhance researchers' understanding of two fundamental topics: the role of supervisor feedback environments in the leadership realm, and the ways and the processes in which supervisor feedback environments influences employees' work attitude and performance.

The idea of transformational leadership emphasizes the position that the leader must occupy to establish visions and to exhibit some charisma. Supervisor support is seen as being closer to emotion-focused coping strategy (Cohen & Wills, 1985) when the supervisor support is seen as a resource that the employee can use in controlling personal feelings. Some research argues that the elements of LMX correspond to employees' cognition perspectives and that the elements represent neither supervisors' real measures nor supervisors' real leadership behaviors (Wayne, Shore, & Liden, 1997). Conversely, supervisor feedback environment is an informal performance evaluation perspective and reflects the

organization's situational characteristics and the social milieu of daily feedback transmission and reception. The underlying goal of this construct is that supervisors' use of this kind of feedback process strengthens employees' beliefs and behaviors in support of the organization.

Many recent studies have used the Feedback Environment Scale as a tool for measuring the feedback environment (Norris-Watts & Levy, 2004; Whitaker et al., 2007; Rosen et al., 2006). The scale of feedback environment relies on supervisors and coworkers as information sources. In the present study, we focus only on the supervisor-feedback environment, similar to earlier studies (Anseel & Lievens, 2007; Norris-Watts & Levy, 2004). The primary reason for this focus is that the supervisor role is a communication platform for the organization and subordinates, involving many opportunities for organizational intervention. In addition, supervisors have much influence and power with which to distribute organizational rewards and punishments. In the following section, we propose positive and negative affective and attitude mechanisms that link supervisor feedback environment and OCB with each other.

*Supervisor Feedback Environment → Role Stressors*

Owing to rapid changes both internal and external to the organizational environment, the work environment of employees becomes even more competitive and complex. In highly competitive and complex work environments, employees tend to experience job stress. Job stress negatively influences the workplace behavior of employees: For example, there can be less work effort and more personal aggression, hostility, and abusive behavior (Penney & Spector, 2005). Previous studies assert that situational stressors (e.g., role ambiguity, conflict, and overload) are the primary causes of stress as perceived by employees. According to job demand-resource theory (Bakker, Demerouti, & Verbeke, 2004), these sources of stress are demands of workload exhibited by the work environments and are what causes employee work stress. If job resources are consistent with job demands, employees would either have the ability to dispel work stress or have the adaptive ability to shift work stress. In this study, we see role stressors as the sources of the stress of job demands, and we see supervisor feedback environment as a job resource (Bakker, Demerouti, & Euwema, 2005). In other words, we believe that if employees have the job resource of a high quality, available, and favorable feedback environment, role stress of employees created by job demands would greatly decrease. Role stressors surface when an individual exhibits internal instability due to outside forces, so that the individual cannot express appropriate role behaviors within a social structure. Two important types of role stressors are role ambiguity and role conflict. Role ambiguity refers to a person's lack of clarity about the outcomes of his or her behavior. Role conflict occurs when a difference exists between a perceived role and an actual role, or when a person simultaneously plays two roles.

According to "social information processing theory," the extent to which particular social environments influence personal attitude and behavior relies on the extent to which the individual and the social environment have shared beliefs. Thus, in the organization, if the supervisor provides the crucial social information to employees, this could shape the :"employees"' beliefs, attitudes, and behaviors (Salancik & Pfeffer, 1978). In other words, in the workplace, if the supervisor informs employees about which behavior is desirable and which behavior is discouraged (according to organizational regulations in one's immediate environment), employees would have a clear understanding of their roles and performance standards. In turn, employees have a greater sense of control with regard to the organization, lowering employee job stress. Based on this view, this study argues that a supervisor who either issues praise (i.e., favorable feedback) to an employee regarding his or her outstanding performance, or issues clear criticisms (i.e., unfavorable feedback) to an employee regarding his or her failure to reach a performance standard, and who provides valuable and useful feedback (i.e., feedback quality) to the employee, is a supervisor who, in essence, provides the employee with supportive feedback that can help the employee to understand the proper behavior corresponding to his or her work responsibilities (Podsakoff, Todor, Grover, & Huber, 1984). If the employee understands his or her own behavior, responsibilities, organizational policies, and performance standards, his or her role conflict and role ambiguity can decrease. Conversely, if a supervisor does not support an employee (i.e., does not provide a favorable feedback environment), then the employee is less likely to clearly understand performance expectations, approaches to task completion, or important affairs in daily life; these outcomes would heighten the employee's sense of role ambiguity (Rizzo, House, & Lirtzman, 1970). Andrews and Kacmar (2001) found that employees receiving feedback that comes from supervisors and that is high in amount, usefulness, and consistency have less job stress. Empirically, Whitaker et al. (2007) found a positive relationship between supervisor feedback environment and employee role clarity ($\beta = .50, p < .01$). On the basis of the aforementioned theoretical and empirical research, we propose the following hypothesis:

> *Hypothesis 1:* Supervisor feedback environment will be negatively associated with role stressors (i.e., role ambiguity, role conflict).

### Role Stressors → Burnout

In situations where individuals face job stress but are unable to take suitable coping measures, job burnout is one of the most common outcomes. Stress and burnout tend to confuse many people. Stress refers to psychological, physical, and behavioral responses to work-related demands over a limited period (Dollard, Winefield, & Winefield, 2003). Burnout is a form of chronic strain that develops over time in response to prolonged periods of high stress (Maslach, Schaufeli, &

Leiter, 2001). Burnout could be said to be the final step in a progression of unsuccessful attempts to cope with a variety of negative stress conditions. Generally, burnout refers to a decrease in work enthusiasm due to a long-term expenditure of energy that in turn, triggers both apathy for the people being served and negative attitudes toward the work; and the definition of job burnout rests on three dimensions: emotional exhaustion, which refers to the draining of emotional resources; cynicism, which refers to various levels of indifference towards work in general; and professional efficacy, which encompasses both social and non-social aspects of occupational accomplishments (Maslach, Jackson, & Leiter, 1996).

In this study, we use conservation of resources (COR) theory to explore the impact of role stress on burnout. COR theory suggests that burnout occurs when employees perceive that they lack resources (e.g., social support, job enhancement opportunities, participation in decision making, autonomy) to perform their work (Halbesleben & Buckley, 2004). When employees believe that work resources are insufficient to meet job demands (e.g., role ambiguity, role conflict, pressure), or when they devote precious resources to meeting or resolving job demands and yet are unable to receive expected returns, employee burnout can arise(Lee & Ashforth, 1996). In addition, Rizzo et al. (1970) argued that workers who are unaware of both the scope of their responsibility and how they should complete tasks are facing powerful uncertainties that contribute to the workers' anxiety and weariness. Cordes and Dougherty (1993) pointed out that when an individual encounters different and conflicting role expectations and is unable to adjust, the individual would exhaust almost all his or her emotional resources (i.e., the emotional exhaustion dimension of burnout).

In recent years, many empirical studies have demonstrated a positive relationship between role stressors and employees' job burnout. For example, King and Sethi (1997) demonstrated a positive correlation between role stressors (i.e., role ambiguity, role conflict) and burnout. In a cross-national study of job stress in nine nations, Perrewé et al. (2002) found that, except in France, role ambiguity had a positive relationship to burnout and that role conflict also had a positive relationship to burnout for the sampled employees in a number of nations, such as the United States, Israel, and Fiji. On the basis of the aforementioned theoretical empirical research, we propose the following hypothesis:

>   *Hypothesis 2:* Role stressors (i.e., role ambiguity, role conflict) will be positively associated with burnout.

*Burnout → Organizational Citizenship Behavior*

To date, few studies have demonstrated burnout to be an important predictor of OCB. The empirical research by Cropanzano et al. (2003) showed that emotional exhaustion had a negative correlation to OCB directed toward the organization and supervisor ($\beta = -.15, p < .01, \beta = -.12, p < .05$, respectively).

With a paired sample study of 48 supervisors and 296 employees in 12 hotels and restaurants, Chiu and Tsai (2006) found that both emotional exhaustion and diminished personal accomplishment had a negative relationship with OCB ($\beta = -.19$, $\beta = -.55$, respectively, all $p < .001$). Unfortunately, few theories directly address the relationship between burnout and OCB. Empirical research on this issue often relies on both the perspective of social exchange theory and the assumption that burnout would lead to negative job attitudes (job dissatisfaction or lower organizational commitment), which lead to less OCB (Cropanzano et al., 2003). And we propose other viewpoints—that is, viewpoints in addition to those concerning the social exchange relationship—to explore the relationship between burnout and OCB.

Previous research suggests that work stress tends to lower an individual's ability to exert control over his or her work environment, thus adversely affecting his or her ability to function effectively (Bakker et al., 2004). Furthermore, the meta-analysis of Podsakoff et al. (1996a), reveals a significant negative correlation between role stressors (role ambiguity, role conflict) and OCB. However, from the viewpoint of stress-strain, burnout may mediate this relationship, since burnout is conceptualized as the depletion of individual coping and energy resources. Thus, an employee with a high level of burnout may not have sufficient resources to effectively cope with work demands, leading to a weakening of task performance and OCB. Furthermore, according to the Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1996), a fatigued individual is unable and unwilling to expend effort on work and exhibits the tendency of depersonalization in work motivation (Taris, 2006). If the individual has a psychological retreat due to emotional exhaustion (i.e., one dimension of burnout), he or she would become passive or unwilling to complete work tasks effectively. This situation would create a mental wall for the individual and might prevent the individual from expending energy. This in turn, results in lower task performance and lower OCB. As for the ways in which diminished personal accomplishment (i.e., one dimension of burnout) may influence an employee's OCB, we argue here that an individual who loses confidence in his or her ability to complete a certain task successfully (i.e., diminished personal accomplishment) is likely to become passive and, therefore, would exhibit lower work motivation and OCB. On the basis of the aforementioned perspectives and empirical research, we propose the following hypothesis:

*Hypothesis 3:* Burnout will be negatively associated with OCB.

*Supervisor Feedback Environment → Person-Organization Fit*

Person-organization fit (P-O fit) refers to the degree of fit between personal characteristics and organizational culture (O'Reilly, Chatman, & Caldwell, 1991). Supervisors are usually responsible for their organization in terms of

leading and measuring employee performance; for this reason, previous studies point out that if work-performance evaluations fail to inform employees about work-related expectations and about past mistakes in work performance, and if employees receive relatively little direct feedback from supervisors regarding employee-behavior adjustment guidelines, then it is relatively unlikely that there will be congruence between employees' values and supervisors' values (Lovelace & Rosen, 1996). Thus, when a supervisor provides a subordinate with supportive performance feedback that helps the subordinate reach goals and connect goal achievement to personal gains, the supportive behavior will provide a match between the subordinate's personal values and the organization's values. The literature on P-O fit emphasizes the congruence of personal values and organizational values as the main element of fit (Cable & DeRue, 2002). When supervisors provide a highly supportive feedback environment to employees, the latter will be relatively likely to perceive the environment as an expression of supportive organizational values. As a consequence, employees are more likely to accept such values and internalize them (Jung & Avolio, 2000), which in turn, may enhance the employees' sense of P-O fit. In a similar vein, feedback is often involved in interactions between supervisors and subordinates, and leader behavior emphasizing interaction is one of the most relevant leadership theories for P-O fit (Meglino, Ravlin, & Adkins, 1991). In a study that cited Chinese cultural values to evaluate the relationship between leader behavior and P-O fit, Li (2006) found that when a leader exhibited so-called feminine leadership behavior (emphasized interactive behavior, shared information, enhanced employees' self-worth, and got others excited about their work), employees would exhibit a higher level of P-O fit. On the basis of these theoretical perspectives and research findings, we propose the following hypothesis:

*Hypothesis 4:* Supervisor feedback environment will be positively associated with P-O fit

*Person-Organization Fit → Organizational Commitment*

Organizational commitment is defined as the relative strength of an individual's identification with and involvement in an organization (Mowday, Porter, & Steers, 1982). Prior research has suggested that there is a positive relationship between P-O fit and organizational commitment (Cable & Judge, 1996). High P-O fit means that personal goals and values are congruent with organizational goals and values. P-O fit would promote employees' organizational commitment. There are at least two reasons for arriving at this assertion. First, when employees' perception of P-O fit is high, an organization would have been providing opportunities to the employees so that they could fulfill their own needs (Rounds, Dawis, & Lofquist, 1987), and need fulfillment would improve employees' attitudes (i.e., organizational commitment). Second, social-identity

theory posits that individuals define themselves according to their social environment and particularly to their similarities to the group (Tajfel, 1982). Thus, employees possessing values similar to those of their organization would exhibit effective mutual behaviors such as communication and trust, which in turn, would result in positive attitudes toward the organization (e.g., organizational commitment).

Significant empirical evidence supports the assertion that a positive relationship between P-O fit and organizational commitment exists. For example, in a study on 122 salespersons across 35 different companies, Vilela, González, and Ferrín (2008) found a positive correlation between the P-O fit perceived by salespersons and organizational commitment ($r = .59$, $p < .001$). Additionally, in a meta-analysis, Verquer, Beehr, and Wagner (2003) found a positive correlation between P-O fit and organizational commitment ($\rho = .31$). On the basis of the above research findings, we propose the following hypothesis:

> *Hypothesis 5:* Person-organization fit will be positively associated with organizational commitment.

*Organizational Commitment → Organizational Citizenship Behavior*

Organizational commitment has long been regarded as a significant predictor of OCB (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Scholl (1981) and Weiner (1982) have provided theoretical support for the organizational commitment-OCB relationship. For example, Weiner (1982) posited that commitment is responsible for behaviors that do not depend primarily on reinforcement or punishment. OCB, which represents a personal involvement in the organization or reflects personal self-sacrifice for the benefit of the organization, is assumed to be affected by commitment. Furthermore, Mowday et al. (1982) believe that people possessing organizational commitment exhibit the following characteristics: (1) considerable trust in organizational goals and values; (2) a willingness to work hard for the organization; and (3) a willingness to continue to be a member of the organization. These features imply that if organization members identify with and trust the organization, then they would hope to play proactive roles in the organization and be willing to devote more energy than required by the job description and behave in ways beneficial to the organization. An employee with a sense of commitment to the organization would have greater willingness to accept organizational values and goals and would be willing to work to achieve organizational goals. These views have received support in later research by Kristof (1996), who found that employees with high consistency between their own personal values and organizational values are more likely to exhibit pro-social behaviors (e.g., OCB).

Abundant empirical research has supported the assertion that there is a positive connection between organizational commitment and OCB. For example,

a meta-analysis by Podsakoff et al. (1996a) demonstrated a significant positive correlation between employee organizational commitment and various dimensions of OCB ($r = .13 \sim .22$ after being corrected for attenuation, all $p$'s $< .01$). Thus, we propose the following hypothesis:

> *Hypothesis 6:* Organizational commitment will be positively associated with OCB.

## Method

### Participants and Procedures

Participants were 380 employed business-management students who attended weekend classes offered by a college for advanced studies in Taiwan. The classes were scheduled for Saturdays and Sundays. The participants worked as full-time professionals on the weekdays and came from a variety of organizations. We conducted the questionnaire surveys in the participants' classes. Subordinate participants, who volunteered to take part in the research project, completed measures designed to assess the participants' perceptions of the work-based feedback environment, role stressors, and job burnout. We then asked the participants to give us permission to contact their immediate supervisors. Questionnaires were mailed directly to the participants' supervisors. The supervisor survey assessed employee OCB as well as supervisor job-tenure information. Supervisors mailed completed surveys directly to the researchers. A total of 259 supervisors returned the surveys, yielding a response rate of 68%. After deleting unmatched samples, we had a sample size of 259 subordinate-supervisor dyads.

The average age of the subordinates was 31.9, with an average tenure of 5.4 years (SD = 4.1 years). Women made up 58% of the samples. Of the industrial types, 71% were in the service industry and 29% were in the manufacturing industry. On average, the supervisors had been at their current management position for 9.8 years. Regarding gender, approximately 86% of the supervisors were male.

### Measures

The measure items used in the present study were originally developed in English; thus, to ensure cross-linguistic equivalence, we translated all scale items into Chinese and then translated them back into English by means of two bilingual (English-Chinese) professional translators (Brislin, 1980). Unless noted otherwise, all measures used 5-point Likert-scale response options with anchors ranging from 1 (strongly disagree) to 5 (strongly agree).

*Supervisor feedback environment.* We measured supervisor feedback environment by using Steelman et al.'s (2004) 32-item scale. The construct of supervisor

feedback environment is composed of seven facets: (1) Source Credibility: This facet refers to the credibility and the reliability of a feedback source. A sample item is, "I have confidence in the feedback my supervisor gives me." (2) Feedback Quality: This facet refers to the consistency and usefulness of feedback messages. A sample item is, "My supervisor gives me useful feedback about my job performance." (3) Feedback Delivery: This facet refers to the comprehensiveness and the detail that characterize the transmission of information. A sample item is, "My supervisor is supportive when giving me feedback about my job performance." (4) Favorable Feedback and (5) Unfavorable Feedback: These two facets refer to whether or not feedback can genuinely and consistently reflect the employee's own conceptualization of his or her work performance. A sample item for the former facet is, "I frequently receive positive feedback from my supervisor," and a sample item for the latter facet is, "My supervisor tells me when my work performance does not meet organizational standards." (6) Feedback Availability: This facet refers to the degrees of availability that characterize the possibility of receiving feedback. A sample item is "My supervisor is usually available when I want performance information." (7) Promotes Feedback Seeking: This facet refers to the extent of environmental support to which the receiver has access when seeking feedback. A sample item is, "My supervisor encourages me to ask for feedback whenever I am uncertain about my job performance." Because hypotheses in this study operate at the construct level, our analyses used a composite score of the feedback environment rather than a score based on the individual facets. The Cronbach's $\alpha$ for the measure of supervisor feedback environment was .93.

*Role stressors.*  Role stressors included role ambiguity and role conflict. We used Rizzo et al.'s (1970) 14-item scale to measure the two role stressors. Role ambiguity (6 items) assesses perceived clarity regarding job responsibilities. A sample item is "I know what my responsibilities are" (reverse-coded). Role conflict (8 items) assesses the degree to which respondents perceive incongruity between job demands and job-related expectations. The items include "I receive incompatible requests from two or more people." Because we had developed role stressors hypothesized at the construct level in our theoretical argument, a higher-order confirmatory factor analysis (CFA) was performed in which a second-order latent factor predicted two first-order latent factors (i.e., the two types of role stressors) with paths estimated to the respective scale items. The fit indexes for the higher-order model provide an acceptable fit to the data $\chi^2 = 311.51$, $df = 75$, $p = .00$; comparative-fit index (CFI) = .93, incremental fit index (IFI) = .93, normed fit index (NFI) = .91, standardized root mean square residual (SRMR) = .08 Therefore, we formed a composite score of role ambiguity and role conflict to represent the latent construct of role stressors. The Cronbach's $\alpha$ for the 14-item role stressors was .88.

*Burnout.* We used Maslach Burnout Inventory: General Survey (MBI-GS) developed by Schaufeli, Leiter, Maslach, and Jackson (1996) to measure burnout. The construct of burnout has three facets: (1) Exhaustion: The employee has exhausted work resources, resulting in lack of energy, psychological and physical fatigue, and general non-accommodation of work demands. This facet is composed of 5 items, including, "I feel used up at the end of the workday." (2) Cynicism (analogous to depersonalization): The employee has a cold, uncaring, or aloof attitude toward work. This facet is composed of 5 items, including, "I have become less enthusiastic about my work." (3) Professional Efficacy (analogous to diminished personal accomplishment): The employees evaluate their positive attitude toward their work efficacy and assess their expectations for future work results. This facet comprises 6 reversed items, including, "In my opinion, I am good at my job." We formed a composite score of exhaustion, cynicism, and professional efficacy to represent the latent construct of burnout. The Cronbach's $\alpha$ for burnout was .89. For these particular facets, response options ranged from 1 to 5 (1 = "never," 2 = "rarely," 3 = "sometimes," 4 = "often," and 5 = "always."). A high score represents a high degree of employee burnout.

*P-O fit.* We used Cable and DeRue's (2002) 9-item scale to measure P-O fit. The construct of P-O fit has three facets: (1) Supplementary fit (3 items) refers to the consistency between individual values and organizational values. The items include, "My personal values match my organization's values and culture." (2) Demand-ability fit (3 items) refers to the extent of the fit between an employee's perception of his or her abilities and organizational work requirements. A sample item is, "The match is very good between the demands of my job and my personal skills." (3) Supply-needs fit (3 items) refers to the degree to which organizational supply meets individual needs. A sample item is, "There is a good fit between what my job offers me and what I am looking for in a job." We formed a composite score of supplementary fit, demand-ability fit, and supply-needs fit to represent the latent construct of P-O fit. The Cronbach's $\alpha$ for P-O fit was .85.

*Organizational commitment.* We follow the view of Bozeman and Perrewé (2001) and use the Organizational Commitment Questionnaire (OCQ) developed by Mowday, Porter, and Steers (1982), which includes two pertinent facets: (1) belief in and acceptance of the values and goals of the organization (6 items) and (2) willingness to exert effort for the organization (3 items). By focusing on these two elements, we sought to measure organizational commitment. Sample items are, "I really care about the fate of this organization," and "I would accept almost any type of job assignment in order to keep working for the organization." Likewise, organizational commitment was hypothesized at the

construct level. We used a composite score of the two facets to represent the latent construct of organizational commitment in the analysis. The fit indexes for the higher-order model provide an acceptable fit to the data ($\chi^2 = 136.99$, $df = 25$, $p = .00$; CFI = .93, IFI = .93, NFI = .92, SRMR = .083). The Cronbach's $\alpha$ for the 9-item organizational commitment was .87.

*OCB.*    We used Farh, Earley, and Lin's (1997) 20-item scale to measure OCB. The construct of OCB can be divided into organizational citizenship behavior directed toward the organization (OCBO) and organizational citizenship behavior directed toward individuals (OCBI) (Farh, Zhong, & Organ, 2004). OCBI comprises two facets: altruism toward colleagues and interpersonal harmony. Two sample items are, "Willing to help colleagues solve work-related problems," and "Uses position of power to pursue selfish personal gains" (reverse-scored). OCBO comprises three facets: identification with company, conscientiousness, and protective of company resources. Sample items are, "Makes constructive suggestions that can improve the functional operation of the company," "Takes his or her job seriously and rarely makes mistakes," and "Uses company resources to do personal business" (reverse-scored). At the construct level in our theoretical argument, we hypothesize regarding OCB. We averaged the 20 items in our analysis to form a composite score that would represent the latent construct of OCB (LePine, Erez, & Johnson, 2002). A higher-order confirmatory factor analysis showed that a second-order latent factor predicted two first-order latent factors (i.e., the two types of OCB) with paths estimated to the respective scale items. The fit indexes for the higher-order model provide an acceptable fit to the data ($\chi^2 = 724.62$, $df = 168$, $p = .00$; CFI = .91, IFI = .91, NFI = .89, SRMR = .072). The Cronbach's $\alpha$ for the 20-item OCB was .85.

### Analytic Procedures

In testing our theoretical model, we used LISREL 8 (Joreskog & Sorbom, 1996) to estimate the pertinent maximum-likelihood parameters. Following Rosen's (2006) procedures, we used multiple-item composites as indicators. Specifically, indicators for the "supervisor feedback environment" constructs consisted of the seven relevant "supervisor feedback environment" subscale scores. Indicators for the stressor construct consisted of the two role-stressor subscale scores. Indicators for the burnout construct consisted of the three relevant MBI-GS subscale scores. Indicators for the fit construct consisted of the three relevant "person-organization fit" subscale scores. Indicators for the commitment construct consisted of the two value-commitment subscale scores. Finally, the citizenship behavior construct had two indicators, the former consisting of the scale scores for OCBI and the latter consisting of the scale scores for OCBO.

**TABLE 1. Comparison of Measurement Models**

| Models | $\chi^2$ | df | $\Delta\chi^2$ | $\Delta df$ | TLI | CFI | GFI | RMSEA |
|---|---|---|---|---|---|---|---|---|
| Baseline model | 296.45 | 139 | | | .96 | .97 | .89 | .067 |
| Model 1 (one-factor) | 1085.11 | 152 | 788.66** | 13 | .85 | .86 | .69 | .154 |
| Model 2 (four-factor) | 358.47 | 146 | 62.02** | 7 | .95 | .95 | .86 | .080 |
| Model 3 (five-factor) | 373.29 | 142 | 76.84** | 3 | .95 | .96 | .87 | .079 |
| Model 4 (five-factor) | 312.35 | 142 | 15.90** | 3 | .96 | .97 | .89 | .068 |

*Note.* In the baseline model, six constructs were treated as six independent factors. In model 1, all studied variables were combined into one factor. In model 2, role stressors and burnout were combined into one factor; person-organization fit and organizational commitment were combined into another factor. In model 3, only role stressors and burnout were combined into one factor. In model 4, only person-organization fit and organizational commitment were combined into one factor.
**$p < .01$. $n = 259$.

## Results

*Confirmatory Factor Analyses*

Table 1 presents the CFA results. As shown, the baseline six-factor model provided an acceptable fit to the data in the context of the fit statistics, $\chi^2$ (139, N = 259) = 296.45, $p = .00$; the goodness of fit index (GFI) = .89; CFI = .97; Tucker-Lewis index (TLI = .96); and the root mean square error of approximation (RMSEA) = .067. Against this baseline six-factor model, we tested four alternative models: Model 1 was a five-factor model with role stressors merged with burnout to form a single factor; model 2 was another five-factor model with P-O fit merged with organizational commitment to form a single factor; model 3 was a four-factor model, with role stressors merged with burnout to form a single factor, and P-O fit merged with organizational commitment to form another single factor; and model 4 was a one-factor model. All studied variables were loaded onto one factor. As Table 1 shows, the fit indexes support the theoretical six-factor model, providing evidence of the construct-related distinctiveness of our six study variables.

*Descriptive Statistics*

Table 2 shows the correlations, descriptive statistics, and coefficient alphas for the study variables. As shown in that table, the correlations among the six latent constructs are consistent with the expected pattern of results (all are significant at $p < .01$).

**TABLE 2. Means, Standard Deviations, and Correlations among Variables**

| Variable | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|
| 1. Supervisor feedback environment | 3.46 | .454 | (.93) | | | | | |
| 2. Person-organization fit | 3.26 | .470 | .38** | (.85) | | | | |
| 3. Organizational commitment | 3.30 | .602 | .54** | .61** | (.87) | | | |
| 4. Role stressors | 2.88 | .633 | −.54** | −.34** | −.50** | (.88) | | |
| 5. Burnout | 2.62 | .576 | −.47** | −.38** | −.47** | .48** | (.89) | |
| 6. Organizational citizenship behavior | 3.59 | .421 | .25** | .39** | .47** | −.20** | −.41** | (.85) |

*Note.* The reliability coefficients are reported in parentheses on the diagonal.
**$p < .01$. $n = 259$.

**TABLE 3. Comparison of Structural Equation Models**

| Model | $\chi^2$ | df | $\Delta\chi^2$ | GFI | CFI | TLI | RMSEA |
|---|---|---|---|---|---|---|---|
| Model 1: Full mediation model | 339.93 | 146 | | .88 | .97 | .96 | .072 |
| Model 2: Partial mediation model | 338.88 | 145 | 1.05 | .88 | .97 | .96 | .072 |
| Model 3: Non-mediation model | 534.92 | 148 | 194.99** | .82 | .90 | .92 | .100 |
| Model 4: Reverse mediation model | 349.04 | 146 | | .86 | .93 | .93 | .083 |

*Note.* **$p < .01$.

*Hypothesis Tests*

The theoretical mediated model, our baseline model, represents a fully mediating model. We specified two intermediary paths from supervisor feedback environment to OCB. One path is the intermediary mechanism from negative affective-cognition variables (role stressors) and negative attitude (burnout); the other path is the intermediary mechanism from positive affective-cognition variables (P-O fit) and positive attitude (commitment). This model does not have direct paths from supervisor feedback environment to OCB. As Table 3 shows, all fit indexes showed an acceptable fit ($\chi^2 = 178.88$, $df = 146$, $p = .00$; GFI = .88, CFI = .97, TLI = .96, and RMSEA = .072).

Against our baseline model, we tested two alternatively nested structural models (Kelloway, 1998). To model 2, we added a direct path that extended from supervisor feedback environment to OCB and that tested a partially mediated model. Model 3 was a non-mediated model, which encompassed the partially mediated model, but in the absence of both the path from role stressors to burnout and the path from P-O fit to organizational commitment. Additionally, because our data relied on cross-sectional data, we included an alternative model (Model 4) that was not nested within the above three models. This model assessed the effects of construct-order changes, which captured the influence of OCB on supervisor feedback environment as mediated by burnout and stressors and as mediated by commitment and P-O fit. As Table 3 shows, Model 4 did not fit our data well. The result of the $\chi^2$-difference test demonstrated that the partially mediated model, $\Delta\chi^2$ (1) = 1.05, $p > .05$, failed to provide a significant improvement in fit over the more parsimonious, fully mediated model. In addition, the fully mediated model was found to be a significantly better fit than the non-mediated model ($\Delta\chi^2$ (2) = 194.99, $p < .01$). Therefore, the theoretical (fully mediated) model was retained in the analysis.

The LISREL results of the theoretical model are shown in Figure 2. It can be seen that there was support for our initial six hypotheses. Hypothesis 1 predicted that supervisor feedback environment would be negatively associated with role stressors; Hypothesis 2 predicted that role stressors would be positively associated with burnout; Hypothesis 3 predicted that burnout would be negatively associated with OCB; and Hypothesis 4 predicted that supervisor feedback environment would be positively associated with P-O fit. These hypotheses were supported by the corresponding results ($\beta = -.42$, $\beta = .59$, $\beta = -.22$, & $\beta = .62$, respectively, all $p < .01$). We also hypothesized that P-O fit would have a positive effect on organizational commitment. The results provided support for this hypothesis ($\beta = .81$, $p < .01$). In Hypothesis 6, we predicted that organizational commitment would be positively associated with OCB. The results were consistent with our expectations ($\beta = .63$, $p < .01$).

## Discussion

Consistent with our theoretical framework, this study found that when supervisors provided an advantageous feedback environment to employees, employees' perceived P-O fit and organizational commitment were enhanced. Thus, there was an increased display of OCB among employees. This finding is consistent with findings of past studies (Norris-Watts & Levy, 2004; Rosen et al., 2006). The present study differs from prior research in that we investigated the intermediary mechanism of P-O fit between supervisor feedback environment and organizational commitment. This focus of the current study is novel in comparison with prior research, and the findings show that an organization can devote itself to the establishment of feedback-oriented organizational culture by enhancing the

**FIGURE 2.  Structural Model.**

*Note: Standardized path coefficients are shown. \*\*p < 01.*
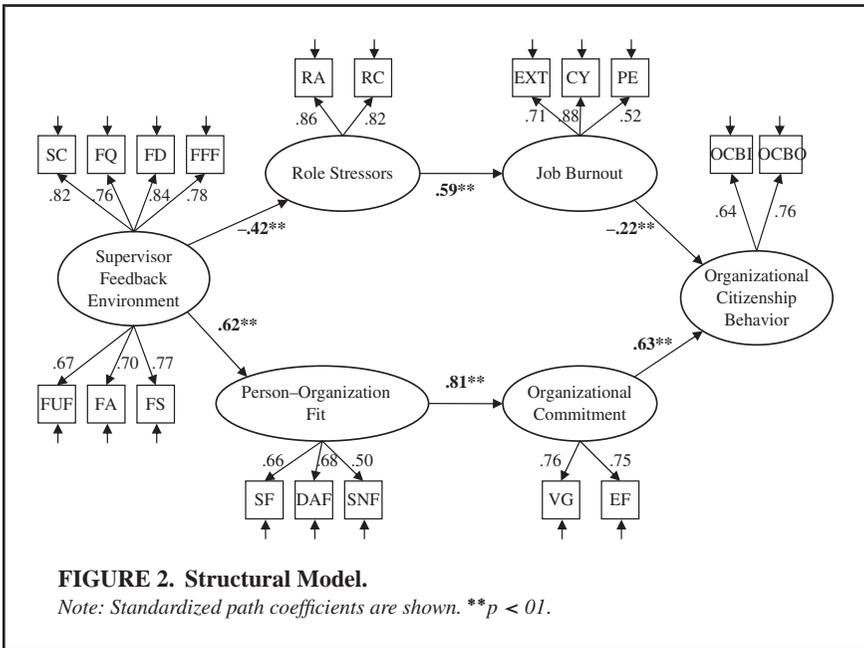
quality of supervisor feedback therein. This culture would facilitate employees' perceptions of P-O fit in the aspects of value congruence, ability-demands fit, and supply-needs fit. When employees had high P-O fit, the employees were more likely to display OCB.

As for the mediating role of negative affective-cognition and job attitudes, this study found significant support for the assertion that there are chain effects extending supervisor feedback environment to OCB though employees' role stress and job burnout. When employees perceived a high-quality supervisor feedback environment, employees perceived a lower level of role stressors and exhibited lower levels of job burnout; this situation, in turn, enhanced employees' display of OCB. Prior research has shown that role clarity (i.e., a contrary construct of role ambiguity) might mediate the relationship between the feedback environment and OCB (Whitaker et al., 2007). This finding extends Whitaker et al.'s (2007) research in that the current study proposed and tested a broader category of role stressors (i.e., role ambiguity and role conflict) and included job burnout as a linking mechanism between feedback environment and OCB. Such perspectives treat the supervisors as "reminders" who operate in the organizational structure and who can provide the necessary assistance to employees who encounter problems; the purpose of this assistance is to create a situation in which employee behavior conforms to organizational role expectations. Thus, if the organization can construct an open cooperative feedback policy and

can encourage supervisors to provide timely, precise, and useful information to employees in certain work environments, employees then perceive supervisors' provision of a favorable feedback environment as helping to decrease employees' experience of role stressors and employees' subsequent suffering from job burnout. Thus, this study finds that negative affective variables and negative attitude variables function as intermediary mechanisms between supervisor feedback environment and OCB. This finding should be able to fill a gap that has characterized previous research on the antecedent variables associated with stress and job burnout.

In sum, this study discovers that supervisor feedback environment influences employee citizenship behavior through positive and negative intermediary mechanisms. More clearly, supervisors who provide advantageous feedback environments affect OCB by simultaneously alleviating employee role stress and burnout, and by increasing the fit and commitment between employee and organization. Even though Burris et al., (2008), showed that employee psychological attachment and detachment have an asymmetric mechanism relative to discretionary behavior, the current study does not support the conclusion regarding positive-negative asymmetry. In addition, prior studies showed that employees have a defensive or self-deceptive mentality, in which the employees would conclude that a supervisor's provision of bad feedback has a greater effect, and exercises greater power, on the employees' perceptions their own performance than does good feedback (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). However, consistent with the definition of unfavorable feedback given by Steelman et al. (2004), when employees yield a negative performance, and when supervisors respond by sending out clear and consistent signals (criticism), the employees are actually not resentful, and this scenario represents a positive relationship constituting employee satisfaction with supervisor feedback. Therefore, from the perspective of feedback environment, the strategies according to which a supervisor presents the employee with either unfavorable feedback or favorable feedback are equally important leadership behaviors in enhancing organizational performance.

The present study's overall findings have practical implications for organizations. First, in this study, the mediation role stressors very clearly emphasized the provision of a well-known "role information and performance" standard to the employees; these feedback processes not only lowered the role that stress played in employee affect, but also—and consequently—decreased employees' level of burnout and enhanced employees' performance. Thus, in order to promote the display of employee OCB, organizations may adopt several policies or practices. For example, organizations can harness knowledge of the feedback process: for example, organizations can make available more time in which a supervisor can (1) increase two-way communication, (2) acquire knowledge about employees' actual performance, (3) definitively clarify performance expectations, (4) avoid dwelling on negatives, and (5) provide employees with more ongoing

feedback (Longenecker & Nykodym, 1996). If organizations integrate this knowledge into their leadership training of supervisors, and if the supervisors absorb this integrated feedback knowledge, then the supervisors—and by extension, the organizations—can enhance their own daily interactions with subordinates and improve employee motivation and performance (OCB).

Second, organizations can cultivate a feedback-oriented organizational culture to encourage employees to seek feedback from supervisors. The two-way communications between supervisors and employees would help to increase value congruence between employees' values and the organization's values. When the employees accept values claimed by the organization, then the sense of consensus and community can establish itself among organization members, an outcome that would facilitate employees' identification with the organization and would, therefore, increase employees' display of OCB.

Third, our findings have important implications for employee development. Formal performance evaluations are usually conducted within organizations only once or twice a year, if at all. Thus, there is a long wait that greets employees who seek to correct their own behavior and to conform to organizational expectations by obtaining information—gathered through formal performance evaluations—about role, work tasks, and performance standards. In short, to promote employees' pursuit of development-related feedback, organizations would be wise to promote feedback.

### Limitations and Suggestions for Future Research

Despite its theoretical and practical implications, this study has its limitations. First, it relied on cross-sectional data; therefore, no causal relationship of the studied variables can be unambiguously established. For example, there might be an interactive and interconnected process between burnout and OCB (Wright & Bonett, 1997). It is possible that, when displaying high levels of OCB, an employee shall experience increased burnout. Similarly, we do not rule out the possibility that role ambiguity can affect the frequency of feedback; in other words, role ambiguity and feedback have reciprocal relations with each other. In fact, it is quite reasonable to suppose that uncertainty about work outcomes (i.e., role ambiguity) triggers a feedback-seeking process (Ashford 1986). Thus, future studies can start from similar experimental designs or from time-series designs to collect longitudinal data that clarify the causal relationships among the studied variables. Second, although OCB was rated by supervisors, the independent variables (i.e., supervisor feedback environment) and the intermediary variables (i.e., role stressors, burnout) were rated by employees. We also conducted a test for common method variance (CMV) and found that it did not significantly impact our findings (since the one-factor model is significantly worse than the measure model, $\Delta\chi^2$ (13) = 788.66, $p < .01$) (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). For all that, we still suggest that in order to deal with the potential threat

of CMV produced by the study, future studies use not only various methods (self-evaluation or other-evaluation) to measure research variables but also the longitudinal design to evaluate cross-lagged effects between various research variables. This design could help reduce the common method variances among the measures (Spector, 2006).

This study investigated employees' positive and negative affective and attitudinal variables as mediators, and future research may explore the potential mediating effects of employee affective variables, such as positive moods, frustration, and tension. For example, it is possible that the supervisor feedback environment may affect employees' OCB through the intermediary mechanisms of positive affect (e.g., enthusiasm, calm) and negative affect (e.g., frustration, tension). In addition, in our study, we did not explore the influence of coworker feedback environment on employee affect, attitudes, and performance. However, in a meta-analysis, Chiaburu and Harrison (2008) found that coworker support (a concept similar to coworker feedback environment) would influence individual effectiveness, and such influence means that coworker support has positive contributions of support on the expression of OCBI and OCBO by other employees. The study by Whitaker et al. (2007) found that coworker feedback environment influences employee contextual performance in a way that adds role clarity through the intermediary mechanism of employee feedback seeking; this additional clarity, in turn, influences employee contextual performance. Therefore, future studies that, with rigor, further explore the influence of coworker feedback environment on employee work outcomes can illuminate the overall influence of different feedback environments on organizational performance. In a time when team cooperation and team engagement are emphasized, the pursuit of such research insights should be meaningful and, indeed, requisite.

## AUTHOR NOTES

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