

#### ORIGINAL RESEARCH

# A three-wave time-lagged study of mediation between positive feedback and organizational citizenship behavior: the role of organization-based self-esteem

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Background: Previous research has paid less attention to examine the mechanisms through which positive feedback affects employees' organizational citizenship behavior (OCB). Moreover, the use of cross-sectional data in most previous research has prevented researchers to make accurate inferences about the mediating processes between feedback and OCB. Given that, more research is required to understand the ways feedback enhances OCB.

**Purpose:** This study sought to explain how positive feedback may affect employees' OCB. Specifically, a mediating role of organization-based self-esteem (OBSE) in linking positive feedback and OCB was examined in a three-wave time-lagged model.

Method: Data were gathered from full-time employees and their supervisors from private banks in two districts of Southern Punjab (N=264). A three-wave time-lagged autoregressive mediation model was tested by using partial least squares structural equation modeling.

Results: The results of time-lagged multiple linear regression analyses indicate that positive feedback predicts OBSE, which in turn partially mediates the feedback-OCB relationship. Conclusion: This study concludes that positive feedback itself is less explicative in describing its effect on employees' OCB. Other mechanisms such as OBSE can explain why positive feedback enhances OCB.

Keywords: positive feedback, organization-based self-esteem, organizational citizenship behavior, time-lagged, mediation

## Introduction

Organizational citizenship behavior (OCB) has long been a phenomenon of interest for managers and researchers in various fields. Given that OCB is a source of many positive employee and organizational outcomes, 1,2 scholarly work has examined various antecedents of OCB. Among these antecedents, positive performance feedback has also gained researchers' attention. 3-6 Most previous research has suggested a significant positive relationship between feedback and OCB. However, less attention has been paid to examine the mechanisms through which positive feedback affects employees' citizenship behaviors.

Previously some mediators of positive feedback-OCB relationship have been examined, ie, leader-member exchange, affective commitment, emotional reactions, positive/negative affective-cognition, and positive/negative attitude. In a sequential mediation model, Sommer and Kulkarni found the mediating role of

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perceived respect and positive affect in the relationship between constructive feedback and OCB intentions. <sup>10</sup> In another sequential model, supervisor feedback environment and coworker feedback environment affected individual and organizational measures of OCB through perceptions of organizational politics and morale. <sup>11</sup> However, there is an overall lack of studies that examine indirect effect of feedback on employee outcomes. <sup>7</sup>

Insights from personnel and social psychology literature suggest that employees' organization-based self-esteem (OBSE) can be a potential mediator of the aforementioned relationship because previous research has examined it as an antecedent of OCB, 12-17 and consequence of performance feedback. 18-20 OBSE refers to "the degree to which an individual believes himself/herself to be capable, significant, and worthy as an organizational member". 21 OBSE is one of the self-esteem's diverse dimensions such as the academic, physical, moral, and social-self.21 The dimensionality of OBSE may range from performance- (ie, task performance) to nonperformance- based (ie, supervisor-subordinate relationships) feelings of competence and organizational worthiness.<sup>21,22</sup> OBSE matters to organizational behavior because it affects employee outcomes in organizations. Besides its effect on employee citizenship behavior, OBSE has been examined as a predictor of intrinsic motivation, organizational commitment, absenteeism, 23 achievement satisfaction, role performance, 24 subjective norms concerning behavior, ethical behavioral intentions, 25 turnover intentions, <sup>26</sup> deviant behavior, etc., <sup>17</sup> Existing literature has also informed that OBSE is affected by many organizational phenomena such as pay level,<sup>27</sup> empowering leadership, job security, coworker support, intrinsic job characteristics, participatory management, etc.<sup>28</sup>

Previous research has examined the mediating role of OBSE in a variety of studies. For example, Kim and Beehr found a significant mediating effect of OBSE between empowering leadership and employee behaviors (OCB and deviant behavior). <sup>17</sup> In another study, OBSE mediated the relationship of servant leadership and job social support with family satisfaction and family life quality. <sup>29</sup> OBSE mediated the relationship of perceived organizational support and leader–member exchange with employees' organizational deviance. <sup>30</sup> OBSE also played a role of mediating mechanism between perceived organizational support and work outcomes (in-role performance and organizational commitment). <sup>31</sup> However, previous research has not tested the mediating effect of OBSE in the relationship between performance feedback and OCB. So, this study

poses the question: does OBSE mediate the relationship between positive feedback and OCB?

Moreover, most previous mediation research, either it is about the role of various mediators between feedback and OCB or it is regarding the mediating effect of OBSE between diverse organizational phenomena, has examined the mediation process by using cross-sectional data which are not well-suited to draw rigorous inferences in mediation models.<sup>32</sup> A recent meta-analysis on the antecedents, consequences, and mediating effect of OBSE has suggested to conduct longitudinal studies for drawing more accurate results in relation to cross-sectional studies.<sup>33</sup> Given that, it can be stated that the mediation process between feedback and OCB is not clear, <sup>7,8,32</sup> and more research is required to understand the ways feedback enhances OCB.

The purpose of this study was twofold. First, this study sought to explain the relationship between positive feedback and OCB by analyzing what may happen within employee's psychological processes to enhance citizenship behavior. Precisely, we investigated a mediating role played by employee's OBSE in relating positive feedback and OCB. Second, longitudinal rather than cross-sectional data were used to make more rigorous inferences in mediation model.

# Theory and hypothesis

Figure 1 shows this study's theoretical model where positive feedback influences OCB through OBSE. The idea that feedback predicts OCB goes back to Organ's explanation of motivational basis of social exchanges in organizations. This idea is consistent with Thorndike's law of effect which suggests that positive feedback reinforces positive behaviors. Previous meta-analytic work has demonstrated that feedback is positively related to citizenship behavior. Though evidence on nonsignificant effect also exists, there is an overall consensus among researchers that positive feedback has positive effect on OCB.

Previous research has underpinned a positive relationship between OBSE and OCB. 12-17 Nevertheless, can OBSE also provide an explanation for why positive feedback promotes OCB? To corroborate the idea that OBSE mediates the relationship between positive feedback and OCB, we must first develop argument for the effect of feedback on OBSE.

#### Feedback and OBSE

In a competitive environment, performance feedback can modify an employee's self-esteem. <sup>19</sup> The notion of "competitive environment" is analogous to Pierce and

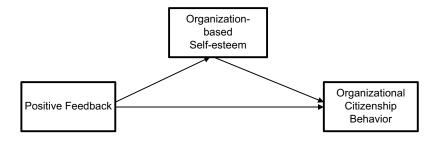


Figure I Theoretical model.

Gardner's "work or organizational context" in which employees see performance relative to others and obtain "ego utility" or self-esteem when they are provided with positive feedback on performance. 19,21 So, this OBSE is a direct result of positive performance feedback which informs employees about their relative standing among colleagues. We argue that positive feedback reinforces an employee's "performance identity" which, in fact, is an employee's social identity or self-esteem in organization. 22 So, feedback can be considered as an organization's positive activity which serves as an instrument to reinforce employees' OBSE. This is consistent with Kuhnen and Tymula, 19 Peiss, 20 and Kanning and Hill who also argued that performance feedback is an important source of OBSE.

Hence, among other predictors, positive performance feedback could be considered as an instrument to enhance employees' self-esteem in organizational settings. From a social psychology perspective, Ilgen et al described that feedback is "seen as a necessary component of task environments by those who emphasize the importance of higher order needs for self-esteem and self-actualization." In their discussion of the antecedents of OBSE, Tan and Kong also suggested that positive performance feedback enhances an employee's OBSE. Similarly, Singh — based on insights from Bandura, Franks and Marolla, Gecas and Schwalbe, and Smith and Mackie — used a social psychology perspective to report performance feedback as an important source of employees' self-esteem in work context. Accordingly, we hypothesize that:

Hypothesis 1. Positive performance feedback is positively associated with organization-based self-esteem.

# Mediating role of OBSE

To rationalize that feedback may affect OCB via OBSE, we used insights from Kuhnen and Tymula who, based on previous research, proclaimed that performance feedback

has the ability to modify employees' self-esteem in work settings, and self-esteem is "a strong motivator of human behavior." In organizational settings, self-esteem, derived from positive feedback, can lead an employee to make positive evaluation of the self and exert effort to maintain self-image. One reason why positive feedback enhances OCB is that self-confidence about one's capability and worth in organization develops vested interest in one's extra role performance "to build up and maintain his self-esteem". People work hard and go beyond their defined roles because they want to maintain their self-image based on their "can-do" optimism derived from positive feedback.

Bellou et al's conceptualization of OBSE further helped to develop mediation argument.<sup>51</sup> Based on Pierce and Gardner<sup>12</sup>, and Gardner et al,<sup>27</sup> they conceptualized "OBSE as the degree to which organizational members believe that they can satisfy their needs by participating in roles within the context of an organization." It suggests that employees' perceptions of their selves as significant and worthy organizational members may be important to determine the emergence of those employee behaviors which benefit the organization. We argue that another reason why feedback promotes OCB is that positive feedback may influence employees' beliefs that they are capable and useful members of the organization (ie, beliefs about their OBSE). Consequently, these feelings may provoke employees to respond by exhibiting OCB.

Positive feedback affects OCB because the judgments made from positive feedback influence the degree to which an individual believes in his or her self-respect and recognition in organization. In order to ascertain whether the link between feedback and OCB is mediated by OBSE, we examined the following:

Hypothesis 2. Organization-based self-esteem mediates the relationship between positive feedback and organizational citizenship behavior.

# **Methods**

# Sample and procedures

Data were gathered from full-time employees and their supervisors from private banks in two districts of Southern Punjab (Pakistan). Pakistan has a wellestablished banking sector which plays a vital role in the country's economic growth.<sup>52</sup> With the advent of China Pakistan Economic Corridor (CPEC) and CPECrelated activities, Pakistan's banking sector is following a sustainable growth trajectory (Pakistan Economic Survey, 2017). Banking is among a few sectors which provide well-established organizational setups in the country's less industrialized agriculture-based areas such as South Punjab. Banks have a centralized recruitment and selection system based on which qualified people are hired. 53 These organizations provide researchers with the population having a certain level of education to understand the importance and content of surveys. Moreover, these organizations have a wellorganized system of supervisor-subordinate hierarchy, which is suitable for the survey of this study.

Sample size was determined by using insights from Hair et al.<sup>54</sup> Based on Cohen<sup>55</sup>, Hair et al suggested that when maximum arrowheads pointing at an endogenous variable are seven, the minimum sample size is 109 for achieving a statistical power of 80% to detect R<sup>2</sup> values of at least 0.25 (with a 1% probability of error).<sup>54</sup> Simple random sampling was used to select a sample of 500 out of 1,452 employees working in 158 bank branches in the target districts. Each employee was assigned a distinct code ranging from 1 to 1,452. A sample of 500 was drawn by using RAND function in MS-Excel. The sample was sufficiently larger than the size recommended in power analysis because most respondents "who complete the first wave of the survey fail to participate in subsequent waves".55,56 Moreover, a low response rate has been observed in existing research.<sup>57</sup>

Before data collection, a written informed consent was obtained from the participants. The respondents' participation in the study was voluntary. They were assured that their data would remain confidential, and there would be no harm to them. Moreover, a documented review and approval from the ethical committee for scientific research (ECSR) of COMSATS, Vehari Campus, was also obtained for this study.

Data were collected in three waves by using a time lag of 6 months. Paper-based survey questionnaires were provided to the respondents. In order to obtain supervisorsubordinate matched responses, and to match responses of all three waves, each respondent was assigned a distinct code. Employees provided self-ratings about positive feedback and OBSE, and the respective supervisors provided ratings of their subordinates' OCB. Ratings of all study variables were obtained in three waves. However, the data were used according to the need of analytical procedures. Control variables (gender, tenure, and supportive manager behaviors [SMB]) were surveyed only in the first wave. <sup>58</sup> From the first wave, 416 supervisor–subordinate matched responses were usable.

Among these 416 respondents, one employee left her job, and two were on long-term leave at the time of second wave survey. So, second wave questionnaires were sent to 413 employees and their respective supervisors for whom we received usable responses in the first wave. After matching the first and second wave responses, only 338 supervisor-subordinate matched responses were usable. At the time of third wave data collection, one employee was on long-term leave. Questionnaires were distributed to 337 employees and their respective supervisors. After looking for missing values, 264 supervisor-subordinate matched usable responses were recorded finally. The effective response rate from initial sample to final usable data is 53%. Of the final 264 employees, 192 were male (73%) and 72 (27%) were female. The mean age of employees was 26 years, and the mean experience was 5.7 years. These 264 responses represent 22 supervisors (18 male). Each supervisor rated, on average, 12 employees' OCB.

## Measures

All the variables were measured with survey instruments adopted from existing research. OBSE was measured by 10-item scale developed by Pierce et al. <sup>12</sup> A three-item scale was used to measure positive feedback. Items were adopted from Teas and Horrell <sup>59</sup> and Jaworski and Kohli. <sup>60</sup> For measuring OCB, managers rated their respective subordinates on a 10-item scale used by Pearce and Gregersen. <sup>61</sup> The items of all questionnaires were measured at a 5-point scale ranging from "strongly disagree" = 1 to "strongly agree" = 5, except item 3 of positive feedback scale which was scaled on a 5-point scale ranging from "a minimum amount" = 1 to "a maximum amount" = 5.

#### Control variables

While performing statistical procedures on our research model, the effects of respondents' gender (0, "male", 1, "female") and

tenure in the organization (in years) were controlled because these variables are likely to influence employees' OCB. In addition, we controlled for supportive manager behaviors (SMB) because according to Pak and Kim such behaviors are likely to provide subordinates with a pleasant working environment, which is likely to promote employees' OCB. In Posdakoff et al's meta-analytic work, the correlation between supportive leader behaviors and OCB was 0.26 which is quite high among other antecedents of OCB. So, not controlling for this variable might have inflated the study results. This variable was measured by using a 5-item scale used by Pak and Kim. Their scale was based on supportive leader behaviors described in Podsakoff et al. A 5-point scale, ranging from "strongly disagree" = 1 to "strongly agree" = 5, was used to measure the items of supportive leader behaviors.

Table A1 shows the specific survey items for all the measurement instruments, including the control variable (SMB). The questionnaire was in simple English, which the participants were able to understand and respond. Table 1 shows the validity and reliability statistics for each construct and its indicators. The process of obtaining these statistics has been described in the "Evaluation of measurement model" section.

# Data analysis and results

Data were analyzed by using partial least squares structural equation modeling (PLS-SEM). PLS-SEM is a variance-based structural equation modeling which validates data in the measurement model and tests the significance and relevance of hypothesized relationships in structural model.

## Evaluation of measurement model

Table 1 shows each individual item's factor loading (?), and each latent variable's average variance extracted (AVE), composite reliability (CR), and Cronbach's alpha (a). According to the values in this table, our data are valid and reliable at item and construct level. One item from the construct of SMB1, two items from OCB construct (OCB9 and OCB10), and one item from OBSE construct (OBSE10) were deleted from analysis because of their factor loadings <0.40 in all waves. Items T1-OBSE8, T1-OBSE9, T1-OCB1, and T1-OCB2 were retained with their respective constructs despite their factor loadings <0.70. According to Hair et al, indicators with outer loadings between 0.40 and 0.70 should be considered for removal only if the deletion leads to an increase in composite reliability and AVE above the suggested threshold

value.<sup>62</sup> Deleting these items did not cause any increase in CR and AVE. So, these items were retained with their respective constructs.

In addition to above validity measures, discriminant validity was established to assess that the measures of one construct do not correlate with other constructs. As a tradition, discriminant validity is evaluated by using Fornell and Larcker's criterion. According to this criterion, the square root of each endogenous construct's AVE is compared with its bivariate correlations with all opposing endogenous constructs. For discriminant validity to exist, the square root of AVE for each latent variable should be greater than the values of its bivariate correlations. The correlations of latent variables in Table 2 indicate that the latent constructs are distinct from each other.

However, Fornell and Larcker criterion is considered insufficiently sensitive to detect discriminant validity. Henseler et al introduced a more sensitive new criterion, Heterotrait–monotrait ratio of correlations (HTMTs). <sup>66</sup> We used this new criterion for establishing discriminant validity between constructs. Using a more conservative approach (considered as the strictest criterion), HTMT value between two constructs must be <0.85 (HTMT<sub>0.85</sub>). Table 3 shows that all HTMT values between constructs are <0.85. So, discriminant validity has been established in our model.

#### Evaluation of structural model

According to Hair et al, collinearity between each set of predictor variables must be checked before hypotheses testing. PLS-SEM also requires collinearity test at item level in formative measurement models. However, in case of reflective measurement model, collinearity test is not required at item level. <sup>54</sup> As we used reflective measurement model, the collinearity test was performed only at construct level. <sup>54</sup> Variance inflation factor (VIF) is a frequently used measure of collinearity. Its value should be 5 or lower. The SmartPLS results in Table 4 indicate the absence of collinearity among the predictors because all VIF values are below 5.

#### **Mediation test**

Figure 2 shows the estimated three-wave time-lagged path model with direct and indirect effects. Insights from Cole and Maxwell<sup>32</sup> and Maxwell et al<sup>67</sup> suggest that in a three-wave longitudinal mediation model, the effect of time 1 predictor on time 2 mediator and subsequent effect on time

Table I Evaluation of measurement model

Construct	Indicators	Factor Loadings	Cronbach's Alpha	CR	AVE
Supportive manager behavior	SMB2	0.73	0.86	0.90	0.69
	SMB3	0.77			
	SMB4	0.90			
	SMB5	0.91			
Time I Positive feedback	TI-PFBI	0.70	0.76	0.87	0.68
	T1-PFB2	0.88			
	TI-PFB3	0.88			
Time I Organization-based self-esteem	TI-OBSEI	0.89	0.93	0.94	0.65
	TI-OBSE2	0.84			
	TI-OBSE3	0.86			
	TI-OBSE4	0.89			
	TI-OBSE5	0.85			
	TI-OBSE6	0.89			
	TI-OBSE7	0.85			
	TI-OBSE8	0.53			
	TI-OBSE9	0.55			
Time I Organizational citizenship behavior	TI-OCBI	0.63	0.93	0.93	0.63
	TI-OCB2	0.65			
	TI-OCB3	0.79			
	TI-OCB4	0.88			
	TI-OCB5	0.72			
	TI-OCB6	0.79			
	TI-OCB7	0.94			
	TI-OCB8	0.91			
Time 2 Positive feedback	T2-PFBI	0.94	0.90	0.94	0.84
	T2-PFB2	0.94			
	T2-PFB3	0.87			
Time 2 Organization-based self-esteem	T2-OBSEI	0.91	0.93	0.95	0.78
-	T2-OBSE2	0.90			
	T2-OBSE3	0.89			
	T2-OBSE4	0.92			
	T2-OBSE5	0.92			
	T2-OBSE6	0.93			
	T2-OBSE7	0.93			
	T2-OBSE8	0.81			
	T2-OBSE9	0.73			
Time 2 Organizational citizenship behavior	T2-OCBI	0.78	0.94	0.95	0.72
-	T2-OCB2	0.89			
	T2-OCB3	0.90			
	T2-OCB4	0.90			
	T2-OCB5	0.83			
	T2-OCB6	0.88			
	T2-OCB7	0.78			
	T2-OCB8	0.79			
Time 3 Organizational citizenship behavior	T3-OCBI	0.91	0.95	0.96	0.75
- O				1	
	T3-OCB2	0.89			

(Continued)

Table I (Continued).

Construct	Indicators	Factor Loadings	Cronbach's Alpha	CR	AVE
	T3-OCB4	0.87			
	T3-OCB5	0.88			
	T3-OCB6	0.90			
	T3-OCB7	0.89			
	T3-OCB8	0.71			

Table 2 Discriminant validity; latent variable correlations

	ı	2	3	4	5	6	7	8	9	10
I-Gender	1.00									
2-SMB	0.14	0.83 <sup>a</sup>								
3-TI-OBSE	0.27	0.15 <sup>b</sup>	0.81							
4-TI-OCB	0.38	0.20	0.26	0.80						
5-TI-PFB	0.19	-0.09	0.27	0.22	0.83					
6-T2-OBSE	-0.05	0.21	0.21	0.07	0.29	0.88				
7-T2-OCB	0.21	0.09	0.39	0.19	0.17	0.16	0.85			
8-T2-PFB	-0.21	0.03	-0.03	0.22	0.15	0.14	-0.04	0.92		
9-T3-OCB	-0.01	0.26	0.06	0.05	0.15	0.29	0.23	0.32	0.87	
10-Tenure	0.75	0.20	0.25	0.55	0.29	0.09	0.07	0.05	0.16	1.00

Notes: <sup>a</sup>The square roots of average variance extracted is provided in diagonal (bold); <sup>b</sup>Off-diagonal elements are the Pearson correlations between different constructs. **Abbreviations:** OBSE, organization-based self-esteem; OCB, organizational citizenship behavior; PFB, positive feedback; SMB, supportive manager behaviors T1, Time 1; T2, Time 2; T3, Time 3.

Table 3 Discriminant validity; heterotrait-monotrait ratio of correlations

	ı	2	3	4	5	6	7	8	9	10
I-Gender										
2-SMB	0.16									
3-TI-OBSE	0.28	0.24								
4-TI-OCB	0.40	0.24	0.26							
5-TI-PFB	0.20	0.12	0.35	0.29						
6-T2-OBSE	0.06	0.23	0.22	0.13	0.33					
7-T2-OCB	0.21	0.14	0.41	0.16	0.20	0.17				
8-T2-PFB	0.22	0.05	0.07	0.28	0.18	0.15	0.09			
9-T3-OCB	0.09	0.27	0.08	0.12	0.18	0.30	0.24	0.35		
10-Tenure	0.75	0.22	0.26	0.62	0.32	0.10	0.11	0.05	0.17	

Abbreviations: OBSE, organization-based self-esteem; OCB, organizational citizenship behavior; PFB, positive feedback; SMB, supportive manager behaviors T1, Time 1; T2, Time 2; T3, Time 3.

3 outcome variable (controlling for time 1 mediator, and time 1 and time 2 outcome variable) provide the best measures to avoid the issue of "half longitudinal design". If the effect of time 3 mediator is tested on time 3 outcome variable (or time 2 mediator on time 2 outcome variable), the model becomes half longitudinal because mediator and outcome variable have been measured at the same point of time. Consequently, a part of model (T3-OBSE  $\rightarrow$  T3-OCB or T2-OBSE  $\rightarrow$  T2-OCB) becomes cross-sectional

which should be avoided for obtaining causal inferences in longitudinal model.<sup>32</sup> So, we tested for the effect of time 1 positive feedback on time 2 mediator (OBSE), controlling for prior levels of OBSE (T1-OBSE) and OCB (T1-OCB and T2-OCB).

We tested for mediation in light of the steps involved in testing longitudinal mediation models for structural equation modeling mentioned in Cole and Maxwell<sup>32</sup> and Maxwell et al.<sup>67</sup> First, the total effect of positive

**Table 4** Collinearity assessment (inner variance inflation factor values)

	Criterion variables					
	T2-OBSE	Т2-ОСВ	T2-PFB	Т3-ОСВ		
Predictors Gender SMB T1-OBSE T1-OCB T1-PFB T2-OBSE T2-OCB T2-PFB T3-OCB Tenure	1.08	1.13 1.10 1.11	1.00	2.99 1.16 1.30 1.24 1.15 1.20		

**Abbreviations:** OBSE, organization-based self-esteem; OCB, organizational citizenship behavior; PFB, positive feedback; SMB, supportive manager behaviors T1, Time 1; T2, Time 2; T3, Time 3.

feedback on OCB was estimated. According to Cole and Maxwell, "this effect represents the sum of all non-spurious, time-specific effects of  $X_1$  on  $Y_T$ ." Following this logic, we estimated the overall total effect as  $[\beta = (0.15*0.24) + (0.05*0.23) + (0.24*0.14) = 0.08]$ . This effect means that one unit change in positive feedback brought 0.08 changes in OCB over the study period. Using insights from Hair et al, the significance of this effect (and all other effects) was tested by using bootstrapping process, with 5,000 samples, in SmartPLS software. The two-tailed t-test for overall total effect is 1.94, which is slightly lower than the recommended value (1.96) for considering P < 0.05.

Second, we estimated the overall direct effect which, according to Cole and Maxwell, is that part of the total effect of predictor (positive feedback) on outcome variable (OCB) that is not mediated by the mediator (OBSE). The dotted lines in Figure 2 represent the overall direct effect. The overall direct effect has been drawn based on Maxwell et al. These authors, unlike Cole and Maxwell and Maxwell and Cole Rallowed for the possibility of direct effect of predictor on criterion over time with one-unit lag. The coefficient of overall direct effect in our model is  $[\beta = (0.15*0.24) + (0.05*0.23) = 0.05]$ . The bootstrapping process yielded a t-value = 2.03 (P<0.05), which represents a significant direct effect.

Finally; the overall indirect effect was estimated. This effect "consists of the sum of all time specific indirect effects that start with  $X_1$ , pass through  $M_i$ , and end with  $Y_T$ ". In our three-wave model, there is only one tracing whereby positive feedback (T1-PFB) affects OCB (T3-OCB) through T2-BSE). So, this effect was estimated as  $[\beta = (0.24*0.14) = 0.03]$ . The t-value is 1.98, which represents a significant indirect effect at P<0.05. In addition to this, the effect on each individual path from T1-PFB to T2-OBSE, and from T2-OBSE to T3-OCB, was also significant at p<0.05.

For mediation to exist, the necessary (as well as sufficient) condition is that the product of the coefficients of paths from PFB to OBSE to OCB must be nonzero. This, in fact, is the overall indirect effect in our three-wave mediation model, which is nonzero and significant ( $\beta = 0.03$ ; t-value = 1.98). So, it can be stated that our model fulfills the necessary and sufficient condition for mediation to exist.

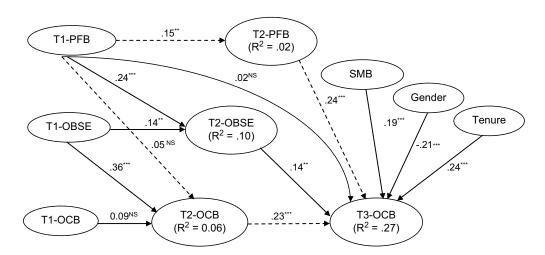


Figure 2 Estimated PLS longitudinal path models with direct and indirect effects.

Abbreviations: OBSE, organization-based self-esteem; OCB, organizational citizenship behavior; PFB, positive feedback; SMB, supportive manager behaviors T1, Time 1; T2, Time 2; T3, Time 3.

# Determining the size of mediation

Cole and Maxwell suggest that a full or complete mediation requires that the direct effect of predictor on outcome variable (ie, the curve from T1-PFB to T3-OCB) be zero.<sup>32</sup> This effect, however, is near to zero in our model (β=0.02). Insights from existing research suggest that "the absence of a direct effect after controlling for an initial mediator should not lead to conclusions of 'full' mediation.... [The] exploration of mediation should be guided by theory". 69 Therefore, it cannot be concluded that mediation is "full" in our model. Previous research has found various mediators of the relationship between positive feedback and OCB. 5,7,8 Based on Rucker et al, this study states that a mediator (OBSE) has been documented between positive feedback and OCB, and the possibility of any additional mediators cannot be omitted.<sup>69</sup> Given that, the significant indirect effect indicates that OBSE mediates the relationship between positive feedback and OCB (Hypothesis 2 supported).

## Discussion

The main objective of this research was to provide an explanation for why positive feedback affects employees' OCB. We tested whether positive feedback influenced OCB by affecting the degree to which employees' OBSE is enhanced, and whether this OBSE prompts OCB. The results of this study offer support for a relationship between positive feedback and OBSE, and between OBSE and OCB. By including OBSE as a mediator, the results provided support for a partially mediated model of the effects of positive feedback on OCB.

Consistent with existing research, the findings of this study provide support for the direct relationship between positive feedback and OCB. To-73 However, previous research on feedback—OCB relationship is dominated by the studies using cross-sectional design, and informs little about the temporal effects of feedback on OCB. Contrary to previous research, this study drew more accurate inferences by controlling for prior levels of OCB and OBSE in a longitudinal design. Hence, this research addressed the issue of scarce longitudinal research on the relationship between positive feedback and OCB.

The results also provide support for the relationship between positive feedback and OBSE. This finding is consistent with the theoretical insights in Kuhnen and Tymula, <sup>19</sup> Peiss, <sup>20</sup> and Kanning and Hill. <sup>41</sup> However, we found no empirical research on this specific relationship. So, our findings on this relationship should be considered preliminary, and

may require further empirical inquiry. The empirical findings of this study, however, are based on a strong research design and careful handling of data, which may guarantee a rigorous explanation of the relationship between positive feedback and OBSE.

The findings of this study also support the relationship between OBSE and OCB. This finding is consistent with previous research. Kanning and Hill's meta-analytic work reported eight studies where the correlation between OBSE and OCB ranged from 0.19 to -0.83. In our study, this correlation ranges from 0.06 to -0.39 for OBSE and OCB in the same wave and the subsequent waves. However, the correlation for the specific relationship between these two variables (T2-OBSE and T3-OCB) is 0.29. This correlation and the hypothesized relationship between OBSE and OCB are in line with existing research. However, our study addresses the issue of scarce longitudinal research on this relationship.

Previous research examined the mediating mechanisms between positive feedback–OCB relationship in cross-sectional study designs which are not well-suited to test mechanisms, ie, sets of causal effects. The use of longitudinal design has enabled us to make more careful and thorough inferences the mediation process. To our knowledge, this is the first longitudinal study examining the mediating effect of OBSE in the relationship between positive feedback and OCB.

There are some interesting findings about the effect of control variables on OCB. We controlled for employees' gender, tenure and supportive manager behavior. We found a negative effect of gender on OCB. Though not conclusive, this result is not surprising as existing theoretical insights and empirical evidence have not been supportive of gender's effect on OCB. 1,74,75 Additional empirical evidence may help clarify the gender–OCB relationship.

We found a significant positive effect of tenure on OCB. This result is not consistent with most of existing research. For example, Kim found a negative relationship between relative job tenure and OCB. Similar results have been found in Huei et al. Previously, Podsakoff et al's meta-analytic work also reported the similar results. Kegans et al found a significant positive effect of experience on civic virtue, but no significant effect on other dimensions of OCB. However, previous research also informs that the effect of tenure on OCB follows a curvilinear pattern, where the lesser years of tenure (usually less than 10 years) are positively related with OCB. P9.80 In our research, the average tenure of subjects

is only 4.7 years, where we can expect that most of the subjects are in less experience zone, and may exhibit citizenship behaviors to manage impression for securing their jobs.

Regarding the effect of SMB, our results are consistent with existing research. In Podsakoff et al's work, SMB was positively correlated with all dimensions of OCB. Pak and Kim also found a positive relationship between SMB and OCB. In our work, the correlation between SMB and OCB (SMB-T3-OCB) is 0.26, which is closer to the one reported in Pak and Kim's research (0.24).<sup>58</sup>

Overall, our research concludes that positive feedback itself is less explicative in describing its effect on employees' OCB. Other mechanisms such as OBSE can explain why positive feedback enhances OCB.

# Theoretical implications

Given that less is known about why positive feedback predicts employees' OCB, this study made two valuable theoretical contributions. First, after a scholarly discussion on the effect of positive feedback on OBSE and subsequent effect of OBSE on employees OCB, we provided theoretical reasoning as to why positive feedback predicts OCB, and explained why OBSE mediates the relationship between positive feedback and OCB. It is important because no previous research has developed such an argument.

Second, using a longitudinal research design, we found strong support for a mediating mechanism in the relationship between positive feedback and OCB. By analyzing OBSE as a mediator, we commenced to investigate precisely why and how positive feedback acts as a predictor of OCB. We found that when organizations use positive feedback, they enable themselves to promote those psychological states of the employee which are useful for enhancing their citizenship behaviors. Employees working in an environment of positive feedback are more likely to gain positive psychological states such as OBSE and, consequently, exhibit citizenship behaviors. Given that the underlying mechanisms in the relationship between positive feedback and OCB are relatively less explored, clarifying OBSE as a mediator is a good addition in existing theory.

# Practical implications

Given the importance of feedback for promoting OCB, organizational managers need to provide positive feedback

to their employees when they perform at an acceptable level. The results of this study suggest that the use of positive feedback is an important source of promoting employees' OBSE, and must be taken into account to make employees exhibit citizenship behaviors. More specifically, the findings of this study guide managers to establish an effective feedback system capable to exert influence on employees' OBSE, and subsequently the OCB. In other words, a good system of feedback would encourage citizenship behaviors in organization by positively affecting employees' OBSE.

## Limitations and future research

Despite its theoretical contribution and practical implications, our research does have some limitations. First, supervisors' ratings of more than one employee might have created systematic variance into the ratings of OCB. Second, our sample was from the bank branches in Southern Punjab region (Pakistan), and this context may be idiosyncratic enough to restrict the external viability of our results.

While theory and evidence support our research model, we cannot ignore other possible illustration of our results. For instance, employees who exhibit OCB may be more likely to receive positive feedback from their supervisors. Since social exchanges are basic to citizenship behavior, we recognize that the process explained in this research may be reciprocal. One recommendation for future scholars is to establish and examine a more comprehensive characterization of the viable antecedents of OBSE and OCB and also discover the level of mutual cause-effect relationship. For example, besides using performance feedback, managers can harness the effect of OBSE on employee behavior by using other ways to enhance employees' OBSE. As suggested by one of the anonymous reviewers, managers can use awards, promotions, bonuses, etc., to enhance employees' OBSE and subsequent effect on positive behaviors. These measures enrich an employee's sense of achievement which positively affects OBSE.<sup>21,43</sup> Future researchers can benefit from this idea by examining the effect of objective measures (ie, awards, promotions, bonuses, etc.) on employee behaviors, through OBSE. Specifically, future longitudinal studies can examine the reciprocal effect by examining how employees' OCBs make managers to provide employees with awards, promotions, bonuses, etc., and how these measures further promote OCB by enhancing employees' OBSE.

Despite these limitations, we surmise that we have reached the objective of this study. First, we provided an

explication for why positive feedback may affect employees' OCB. The obvious process is that positive feedback influences the degree to which employees obtain OBSE, and this OBSE increases OCB. Second, this study has also developed and supported the role of positive feedback as an antecedent of OBSE. Although we did not test other predictors of OBSE, it can be suggested that efforts to advance the use of positive feedback may be effective in conveying how an organization values and promotes employees' OBSE and OCB.

## **Disclosure**

The authors report no conflicts of interest in this work.

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## **Appendix**

## Table AI Survey items

Construct	Item
Organization-based self-esteem (OBSE)	In this organization I count around here I am taken seriously I am important I am trusted There is faith in me I can make a difference I am valuable I am helpful I am efficient
Organizational citizenship behavior (OCB)	This employee Attends nonrequired training or educational sessions on own time. Makes especially helpful suggestions to improve the organization. Works before or after regular working hours in order to finish a task. Standards of work quality are higher than the stated standards. Actively and constructively seeks to get his or her suggestions adopted by the organization. Orients new people even though it is not required. Makes special attempts to gain more knowledge about job-related techniques and skills. Attends functions that are not required, but that help this organization. Goes out of his or her way to help others with job-related problems. Looks for additional responsibilities and/or tasks despite the fact that it increases his or her work load.
Feedback (FB)	My manager lets me know when he thinks I am producing good results.  My manager tells me when I deal with customers appropriately.  To what extent your manager and colleagues let you know how well you are doing on your job.
Supportive manager behaviors (SMB)	My manager makes working on our tasks more pleasant.  My manager helps us overcome problems that stop us from carrying out our tasks.  My manager does things to make it pleasant to be a member of the group.  My manager is willing to take initiative in the group.  My manager keeps the group working together as a team.

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