



# Article How Leaders' Positive Feedback Influences Employees' Innovative Behavior: The Mediating Role of Voice Behavior and Job Autonomy

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**Abstract:** This study investigated the effects of a leader's feedback behavior on the followers' innovative behaviors, and the mediating effects of voice behavior and job autonomy in the above relationship. To test the analytical model with the hypotheses, survey data were collected from 527 Korean employees working in 35 companies from manufacturing, distribution, and service industries. A structural equation model analysis was performed to test the hypotheses. The results of our empirical analysis are as follows. First, it was found that positive feedback from the leader positively influenced the followers' voice behaviors, job autonomies, and innovative behaviors. Second, voice behavior and job autonomy were confirmed to have a positive mediating effect between the leader's feedback and the innovative behavior of the followers' innovative behaviors in the process of organizational innovation. We suggest that organizations and managers pay attention to the benefits of feedback activities and facilitate key mechanisms that connect them to employee innovation behavior, effectively.

Keywords: leader's positive feedback; role of leader; voice behavior; job autonomy; innovative behavior

# 1. Introduction

Innovation can be considered a source of sustainable competitiveness for organizations, both in tangible areas, such as products, processes, and services, and intangible areas, such as leadership and organizational culture. Thus, it is important for organizations to recognize the necessity of innovation to proactively cope with the rapid change of market and customer demands, to secure sustainable competitive advantages, and survive in such tough business environments. Moreover, scholarly interest in organization studies and managers have increased the effects of a leader's behavior on the follower's attitude/behavior, particularly in relation to innovation, which ultimately affects the sustainable growth of an organization [1,2]. Recent studies have indicated that the decisive role of the leader is required in order to initiate proactivity from employees—for innovation and to address complex problems in the process of innovation [3,4]. In this paper, we focus on the leader's feedback as a key factor in promoting employees' innovative behavior, by giving the employees more autonomy and psychological support in their work, thereby (eventually) increasing the sustainability of the organization. In this context, many prior studies have been conducted to identify the key factors that lead to such innovative behavior of employees [5–8]. Among the various factors affecting innovation, the leader's behavior emerges as a significant aspect in promoting and supporting the innovative behavior of subordinates. Studies of leadership behaviors include transformative leadership, empowering leadership, ethical leadership, self-leadership, and leader feedback [5,9-14], and they all imply that receiving useful feedback from leaders can boost the followers' self-esteem and on-the-job autonomy, leading to innovative behavior.



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The leader's feedback comprises of communication and evaluation concerning behavior or performance, for the achievement of individual or group goals. It includes positive feedback (with feelings of praise and reinforcement) and negative feedback (with feelings of criticism and correction) [15,16]. A leader's positive feedback can improve the team's confidence and result in high performance when followers actually do their jobs [17,18]. Feedback also serves to confirm that everyone's thoughts (and information) have been clearly communicated in the course of completing their jobs. During communication, positive interaction between the leader and followers, in searching for a better solution to a given task, can help increase the followers' creative capabilities [19–21]. Despite being a factor that directly affects the performance of followers, research on how a leader's feedback leads to employees' innovative behavior is still relatively underdeveloped. Therefore, this paper aims to study the factors and processes that induce innovative behavior in followers, from the leader's feedback perspective. Previous studies regarding leaders' feedback have often investigated its relation with business performance, job satisfaction, and organizational commitment [17,22-27]. For example, Zhou [28] found that leader feedback positively related to members' personal creativity, but, with a few exceptions, there were limitations in showing the relationship to individual innovative behavior and the change process behind such behaviors [29-32].

Moreover, Eva et al. [29] explored the relative influence of coworker and supervisor feedback, and identified how this feedback interacted to foster innovative behavior among Chinese employees. Su et al. [30] confirmed the positive influence of a supervisor's developmental feedback on employees' innovative behavior, via creative self-efficacy, as well as the moderating role of a supervisor's organizational embodiment in this relationship. Bak [31] also investigated how supervisor feedback affected innovative work behavior, in the context of local government employees, with the mediating roles of trust in the supervisor and affective commitment.

On the other hand, employee voice behavior is important to enhance organizational change and innovation, as it allows for presenting new ideas for continuous improvement [33]. Voice behavior is considered valuable for obtaining information from employees at the site—to enable managers to make better decisions. It may depend, not only on personal characteristics, but also on the superior's leadership. In addition, previous studies have reported that voice behavior is recognized as part of organizational learning and has a positive effect on ultimately creating innovation, by reducing work-related mistakes and organizational negligence, and enabling active work performance [34–36]. The early stage of voice behavior research found that it was related to individual personality; therefore, it was seen as an important factor for job satisfaction [37]. Interestingly, other studies determined that it can be developed by leaders at the organizational level [35,38–40]. Therefore, our study suggests that voice behavior provides an important mechanism to explain how leader feedback enhances innovative behavior.

It was also reported that job autonomy has a positive impact on creative behavior and innovation, as it relates to inherent motivation and job satisfaction [5,41–44]. In a similar context, employees can sense their job autonomy—based on a leader's positive feedback and empowerment behaviors. Consequently, awareness of the leader's feedback and support will increase the followers' job autonomy, which will eventually increase innovative behavior. This study assumed job autonomy as an important mediating factor in the relationship between leader feedback and innovative behavior.

Building on these previous studies, we draw on the job demands–resources (JD–R) theory [45,46] to explain the underlying mechanisms on how positive feedback from the leader can promote employees' innovative behavior. The JD–R theory provides a useful theoretical lens on individual motivational processes and attitudes to jobs that enhance their creative problem solving skills and innovative behavior approaches. Job resources refer to psychological, social, and organizational conditions that reduce job demands and the psychological aspect of costs, and provide resources for stimulating personal growth, learning, and development [47]. According to this perspective, job resources mostly focus on interpersonal relations (such as supervisor support) and task nature (such as job autonomy) [48]. Thus, it is associated with explaining how a leader's feedback provides psychological support and positive job attitudes,

increasing employee engagement in innovative activities. In particular, this study assumes that positive feedback and psychological support from a leader, concerning the followers' performance functions, are important job resources, which are likely to foster more innovative behavior approaches from employees by enhancing their voice behavior and job autonomy skills. Thus, the purpose of this study was to empirically analyze the effect of leaders' feedback on employees' innovative behavior, and to verify the mediating role of voice behavior and job autonomy. The findings of our study will highlight the importance of leader feedback an important source and mechanism of employees' innovative behavior.

#### 2. Theoretical Background and Hypotheses

#### 2.1. Leaders' Positive Feedback and Innovative Behavior

Feedback is information that can be used for an individual's job performance. Feedback from a leader is the process of communicating with employees concerning the achievement of task goals and the assessment of strategies to achieve such goals. Positive feedback conveys a good feeling of praise or encouragement of employee behavior, and negative feedback conveys a feeling of criticism or correction when performance or job-related behavior is failing [15,16]. In this study, leader feedback is suggested as an important predisposing factor that induces innovative behavior [5]. Leader feedback can be divided into followers' performance feedback and behavior feedback, based on the argument that positive feedback has a significant impact on a salesperson's performance and satisfaction, by providing information and motivation [17]. However, Cianci et al. [49] show that results worsen after positive feedback, indicating inconsistent results.

Innovative behavior, on the other hand, means developing new ideas to solve difficult problems and finding new technologies, processes, and methods that are necessary to perform tasks more effectively [42]. This study assumed that leader feedback would affect the followers' inner motivation [50], communication, and information sharing, and have a positive effect on innovative behavior, for the following reasons. First, the leader's positive feedback conveys a feeling of praise or reinforcement on the followers' behavior and achievements, thereby motivating them and increasing their self-efficacy [51]. High self-efficacy and positive emotions can have positive effects on the followers, leading to the creation of new ideas and innovative tools, increasing flexibility and satisfaction [52]. Second, leader feedback has a positive effect on the formation of positive psychology capital, by providing technical advice on how to solve problems faced in the course of task performance, which stimulates personal creativity [28,53]. Third, previous studies have indicated that job satisfaction, creativity, and innovative behavior are activated when self-efficacy is increased and positive and desirable feelings are maintained [54,55]. Therefore, a leader's positive feedback, concerning followers' performances and behaviors, is expected to lead to innovative behavior, because it increases the follower's self-efficacy and fosters psychological endurance, enabling the follower to pursue risky and innovative activities. We therefore propose the following hypotheses.

## **Hypothesis 1.** The leader's positive feedback will have a positive effect on innovative behavior.

#### 2.2. Leaders' Positive Feedback and Voice Behavior

The term "voice behavior" was first used by Hirschman [56] to describe an attempt by an employee to raise objections to try to get out of unpleasant situations created by his superior or manager. LePine and Van Dyne [57] defined voice behavior as a verbal act, whereby members of the organization communicated ideas, suggestions, and opinions to improve organizational effectiveness. Previous studies have identified determinant factors of voice behavior from individual and contextual dimensions [37,58], finding that, at an organizational level, the structure, culture, and leader's attitude and personality contribute to employees' voice behavior [57,59]. First, there should be frequent communication between the leader and followers concerning a given task, such as directing, reporting, commanding, commenting, and evaluating [60]. Just as organizational members can deliver their messages in a meaningful way to the organization through their leader, the leader's behavior and personality can influence the members' voices [38,61]. We therefore expected leaders' positive feedback behavior to have a positive effect on followers' voice behavior. Second, positive leaders' feedback has been confirmed to enhance self-efficacy, and self-efficacy-enhanced followers promote voice behavior in the workplace [51,62]. In addition, leaders' feedback is seen as a positive influence on voice behavior because it creates a place of deep communication for followers and a sense of psychological security, mutual respect, and trust between leader and subordinate [38,63]. Third, leaders provide followers with the motivation they need to perform their tasks through feedback and promise various forms of support. Therefore, followers are likely to actively address work-related difficulties and requirements and useful ideas for positive organizational change to more actively repay the leader's support [64]. We therefore propose the following hypothesis.

## Hypothesis 2. The leader's positive feedback will have a positive effect on voice behavior.

### 2.3. Leaders' Positive Feedback and Job Autonomy

Job autonomy is a basic concept in job characteristics that refers to the sense of authority associated with a series of processes, of determining and completing work schedules and methods based on individual spontaneity, independence, and discretion [65]. Such job autonomy means being the principal agent of the performance of a given task and having comprehensive responsibility and authority for its planning and progress, and even its results. The leader's feedback behavior is expected to increase job autonomy of the followers for the following reasons.

First, the leader's positive feedback concerning followers' efforts and contributions to achieving organizational goals is perceived by followers as interest and encouragement, thereby enhancing their self-efficacy in the duties being performed. This, in turn, is expected to have a positive impact on job autonomy by enabling employees to establish their own work plans and behave actively. Second, the various forms of leadership and unique characteristics of the leader influence the attitudes and behaviors of followers. For example, the leader's sincere sharing of emotions creates a close relationship with followers and brings them trust, respect, and psychological stability [66,67]. In such a context, the leader's feedback behavior is accompanied by the followers' sincere recognition, advice, and sharing of emotion, which makes them feel psychologically respected and stable and, thereby, able to exercise more autonomy in performing a given task. It is also expected that frequent feedback from leaders on the work of followers will have a significant impact on their job autonomy as trust is built, and these organizations form horizontal relationships, rather than vertical organizational cultures [42,68]. We therefore propose the following hypothesis, based on this logic.

#### **Hypothesis 3.** *The leader's positive feedback will have a positive effect on job autonomy.*

## 2.4. Mediating Effect of Voice Behavior

Voice behavior is affected by four main factors: (1) by the effects of individual attitudes, tendencies, and perceptions [69–71]; (2) by the leader who is not only the most important object of voice, but also an important channel of voice behavior, influencing salary and performance evaluation [59]; (3) by the employee's sense that questioning the organization's work process and decision-making is not risky or disadvantageous [38]; and (4) by an organizational culture that makes voice behavior worthwhile and reasonable [72]. These voice behaviors occur when employees act voluntarily for the organization in response to job dissatisfaction, which is an extra role of work behavior [73].

Voice behavior is expected to positively mediate the relationship between leaders' feedback behavior and employees' innovative behavior for the following reasons. First, the leader's feedback behavior means close interaction with subordinates, whereby the leader gives followers the impression that he will control disadvantages in salary or performance evaluation, regardless of the outcome of voice behavior. Therefore, followers will more actively present various opinions needed to perform their duties, which will have a positive impact on innovative behavior by promoting creative problem solving and approaches.

Second, through his feedback behavior, the leader naturally engages his subordinates in the given work processes of the team or organization. This is because the leader enhances the followers' psychological stability by making them feel that they are not risking any disadvantages in questioning the work process and decision-making [63]. Presenting various opinions in the course of performing tasks serves as an opportunity to enhance job efficiency and will promote innovative behavior. In prior studies of leadership, leaders have been reported to have a positive influence on followers' voice behavior through roles and initiatives tailored to the purposes of the organization [18,35,74]. In particular, they showed that leaders in the decision-making process promote extra role work behavior and voice behavior by engaging their followers [39]. Therefore, it is expected that leaders' positive feedback behavior will increase subordinates' voice behavior, resulting in increased psychological stability, job satisfaction, and self-efficacy [57,75]. This will, in turn, create an active organizational culture in which continuous improvement and novel ideas are presented in the work process and have a positive impact on the innovative behavior of the members of the organization. We therefore propose the following hypothesis, based on the above discussion.

**Hypothesis 4.** *Voice behavior will positively mediate the relationship between the leader's positive feedback and innovative behavior.* 

## 2.5. Mediating Effect of Job Autonomy

Self-determination theory argues that employees who are given sufficient authority over the overall work are inherently well motivated and become more active in innovative behavior [44,76–78]. In particular, prior research suggests that job autonomy and followers with good feedback are positively linked to innovative behavior [79]. Therefore, the leader's feedback behavior creates a closer trust relationship between the leader and the subordinates, and this relationship gives the subordinates sufficient autonomy over the entire job. This increase in job autonomy can be seen as having a positive impact on innovative behavior by strengthening internal motivation and causing people to seek various ideas and methods for more creative problem solving in their given task. In addition, the leader's positive feedback is expected to enable the leader's attention to, encouragement of, and delegation to subordinates, which will have a positive impact on innovative behavior by allowing followers to exercise a higher level of job autonomy. We therefore propose the following hypothesis, based on the above discussion.

**Hypothesis 5.** *Job autonomy will positively mediate the relationship between the leader's positive feedback and innovative behavior.* 

Figure 1 summarized the proposed relationships.

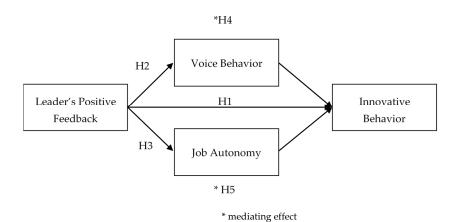


Figure 1. Analytical model.

## 3. Method

## 3.1. Sample and Procedure

The data collection for this study was conducted through an online and offline questionnaire with 35 companies in the manufacturing and distribution service industries in Korea. We visited each company, explained the intent of the survey to the department managers, and received their permission. A total of 600 questionnaires were distributed and 531 were returned, resulting in a response rate of 88%. Of these 531 questionnaires, four questionnaires were considered invalid due to omitted or incorrect answers. Eventually, 527 responses were used for data analysis.

The demographic characteristics of the respondents are as follows. Among the 527 respondents of this study, 490 (93.0%) were male, and 37 (7.0%) were female. The average age of the respondents was 39.7 years (SD = 8.55), mean organizational tenure was 11.0 years (SD = 6.26), and average duration of education was about 15.5 years (SD = 1.78).

## 3.2. Measures

Items measuring the leader's feedback were adopted from Jaworski and Kohli [17]. Of their 18 items, nine were adopted to measure the leader's feedback on employees' positive performance and behavior. A sample item is, "When my manager thinks my performance is good, he provides me with positive feedback." The Cronbach's  $\alpha$  of our scale was 0.891. For voice behavior, ten items adopted from Liang et al. [80] were used to measure voice behavior ( $\alpha = 0.907$ ). A sample item is, "Proactively develop and make suggestions concerning issues that may influence the unit." The Cronbach's  $\alpha$  of our scale was 0.907. Job autonomy was measured with four items ( $\alpha = 0.951$ ) adopted from Hackman and Oldham [65]. A sample item is, "I am allowed to decide how to go about getting my job done (the methods to use)." The Cronbach's  $\alpha$  of our scale was 0.835. To measure innovative behavior, nine items were adopted from Scott and Bruce [42] ( $\alpha = 0.913$ ). A sample item is, "Develops adequate plans and schedules for the implementation of new ideas." The Cronbach's  $\alpha$  of our scale was 0.913.

## 4. Results

## 4.1. Correlation and Reliability Analyses

We conducted a correlation analysis to investigate the relationship between the measured variables. The means, standard deviations, reliabilities, and correlations among the key variables are shown in Table 1. As shown, innovative behavior was related to the leader's positive feedback (r = 0.385, p < 0.001), voice behavior (r = 0.673, p < 0.001), and job autonomy (r = 0.423, p < 0.001).

Variable	Mean	SD	1	2	3	4
1. Leader's positive behavior	3.69	0.62	(0.891)			
2. Voice behavior	3.46	0.59	0.345 ***	(0.907)		
3. Job autonomy	3.74	0.66	0.299 ***	0.466 ***	(0.835)	
4. Innovative behavior	3.61	0.58	0.385 ***	0.673 ***	0.423 ***	(0.913)

Table 1. Means, standard deviations, correlations, and reliabilities.

Note: N = 527. \*\*\* p < 0.001. Reliability alpha ( $\alpha$ ) coefficients are reported in diagonal.

The reliability of the constructs was also tested using Cronbach's alpha ( $\alpha$ ). The Cronbach's alpha values of the constructs ranged from 0.835 to 0.913. These results suggest that proper internal consistency was associated with most of the measures.

## 4.2. Assessments of Common Method Variance

To reduce common method bias, in accordance with Podsakoff et al. [81] suggestions, we explained our commitment to the confidentiality of responses by stating this purpose on the cover letter attached to each questionnaire. Common method bias was assessed

using Harman's single factor test for all items. Our results suggest that a general factor did not emerge to account for most of the variance. An unrotated factor analysis extracted four distinct factors that accounted for 66.734% of the total variance. The largest factor explained 18.015% of the variance. Therefore, common method variance did not affect this analysis. In addition, variance inflation factors (VIF) were calculated to check for multi-collinearity. VIF values ranged from 1.169 to 1.354, which were much lower than the upper limit of 10.0 [82]. In conclusion, multi-collinearity issues did not affect this analysis.

We also conducted a confirmatory factor analysis (CFA) on the measures of the key variables to verify their factor structure and construct validity by following the approach suggested by Hair et al. [83]. As seen in Table 2, our hypothesized model consisted of four factors: leader's positive feedback, voice behavior, job autonomy, and employee's innovative behavior. The indices of our hypothesized model show the following results:  $\chi^2(df) = 844.837(414)$ ; 0.905; incremental fit index (IFI) = 0.955; and comparative fit index (CFI) = 0.955, suggesting that our measurement model fit well [84]. Additionally, a series of Chi-square difference tests revealed that the four-factor model fit the data significantly better than several alternative measurement models (Table 2). The results confirm the hypothesized four-factor model, thus supporting discriminant validity among the measures.

Table 2. Model fit statistics for measurement models.

Model	$\chi^2(df)$	CFI	TLI	RMSEA	$\Delta \chi^2(df)$
Hypothesized 4-factor model (LF, VB, JA, IB)	844.837(414)	0.955	0.949	0.044	
3-factor model (LF, JA, VB and IB)	11,191.815(417)	0.918	0.909	0.059	346.978(3) ***
3-factor model (LF and VB, JA, IB)	1452.945(417)	0.891	0.781	0.069	608.108(3) ***
2-factor model (LF and JA, VB and IB)	1797.184(419)	0.855	0.839	0.079	952.347(4) ***
2-factor model (LF and VB and JA, IB)	2287.241(419)	0.803	0.781	0.092	1442.404(5) ***
1-factor model	2641.014(420)	0.766	0.741	0.100	1796.177(6) ***

Notes: LF: leader's positive feedback, VB: voice behavior, JA: job autonomy, IB: innovative behavior, CFI: comparative fit index, TLI: Tucker–Lewis index, RMSEA: root mean square error of approximation; the Chi square difference for each model reflects its deviation from the four-factor model. \*\*\* p < 0.001.

# 4.3. Hypotheses Testing

We tested Hypotheses 1–3 with the structural equation modeling (SEM) analysis. Table 3 shows the path analysis result for the hypothesis test in SEM. Hypothesis 1, which tested the effect of leader's positive feedback on employee's innovative behavior was supported ( $\beta = 0.168$ ; p < 0.001). Similarly, Hypothesis 2, which tested the effect of leader's positive feedback on employee's voice behavior was supported ( $\beta = 0.352$ ; p < 0.001). Hypothesis 3, which tested the effect of leader's positive feedback on employee's positive feedba

To test the mediating effects of employee voice behavior and employee job autonomy, we conducted bootstrapping tests using SEM with a bootstrap sample of 10,000 based on Shrout and Bolger [85]. This method can effectively verify both direct and indirect effects [86]. Two separate mediation analyses were conducted. In the first mediation analysis, we began by testing the direct effect of the independent variable (i.e., leader's positive feedback) on the dependent variable (i.e., employee's innovative behavior). Then, we included employee's voice behavior as the mediator in the established model and obtained the indirect effect of leader's positive feedback on employee's innovative behavior. The second mediation analysis followed the same procedure with employee's innovative behavior as a dependent variable. As seen in Table 4, our results show that the employee's voice behavior significantly mediated the relationship between the leader's positive feedback and the employee's innovative behavior (estimate of standardized indirect effect: 0.576; bias-corrected

confidence intervals (95% CI): 0.496 to 0.631). The employee's job autonomy also mediated the relationship between the leader's positive feedback and the employee's innovative behavior (estimate of standardized indirect effect: 0.113; bias-corrected confidence intervals (95% CI): 0.038 to 0.158). We confirmed that both indirect and direct effects from the two mediation analyses are statistically significant. Accordingly, Hypotheses 4 and 5 were supported.

Direct Effects	Coefficient	T-Value	Outcomes	
Paths				
Leader's positive feedback→Innovative Behavior(H1)	0.168 ***	4.714	supported	
Leader's positive feedback $\rightarrow$ Voice behavior(H2)	0.352 ***	8.619	Supported	
Leader's positive feedback $\rightarrow$ Job autonomy(H3)	0.309 ***	7.464	Supported	
Voice behavior→Innovative behavior	0.576 ***	16.927		
Job autonomy→Innovative behavior	0.113 ***	3.383		

Table 3. Standardized estimates from the structural model.

Notes: \*\*\* *p* < 0.001. RMR = Root Mean Square Residual. IFI = Incremental Fit Index

Table 4. Bootstran	o analysis of the ma	gnitude and statistical	l significance of the	e indirect effects.

Independent Variable	Mediator Variable	Dependent Variable	SMC	В	95% (Lower	6 CI -Upper)	Outcomes
Leader's positive feedback	Voice behavior	Innovative behavior	0.124	0.576 ***	0.496	0.631	Supported (H4)
Leader's positive feedback	Job autonomy	Innovative behavior	0.096	0.113 **	0.038	0.158	Supported (H5)

Notes: CI: confidence interval; \*\* *p* < 0.01; \*\*\* *p* < 0.001, SMC: squared multiple correlations.

## 5. Discussion

#### 5.1. Theoretical Contributions

This study analyzed the effect of the leader's feedback on the innovative behavior of the employees, who are the starting point and main body of implementation of innovation in organization. The leader was found to increase positive awareness by stimulating the subordinate's desire for achievement and autonomy through feedback behavior and to induce more voluntary participation in the course of innovation implementation. The theoretical implications of this study are as follows.

First, we confirmed that the impact of leaders' positive feedback was identified as an important determinant factor for enhancing innovative behavior. Previous studies have mostly focused on the individual level performance, such as job satisfaction, and organizational commitment with a few exceptions [17,23–27,29–31]. This study also confirmed the outcomes of previous literature by empirically demonstrating the positive influence of leaders' feedback on followers' innovative behavior in a Korean worker's context. Second, drawing the JD-R theory, our study found the key mediating mechanism to explain how leaders' feedback behaviors stimulated employees' innovative behavior. Although several studies have examined how leaders' feedback behaviors influenced employees' motivation and attitudes toward their job performances and organizations they worked for [5,17]. However, the relationships among leaders' feedback behaviors, voice behavior, job autonomy, and innovative behavior have been rarely investigated. Thus, this study made an important contribution by extending the applicability of JD-R theory to leadership and innovation literatures in the Korean employee context, identifying the substantial mediating roles of voice behavior and job autonomy in the relationship between leader feedback and employees' innovative behavior.

## 5.2. Managerial Implications

The practical implications of this study are as follows. First, feedback from the leader was shown to have a positive effect on the innovative behavior, voice behavior, and job

autonomy of followers. Therefore, an organization should develop various supporting schemes for promoting leaders' feedback behavior, as this is an effective factor to facilitate employees' job related motivation and positive attitudes, which ultimately influence innovative behavior and performance.

Furthermore, our study enhanced the understanding of the significance of leader feedback behavior as an important sustainable factor in evoking positive attitudes and behavior toward innovation from employees, thus leading to the sustainable development of the organization. In other words, our results indicate that organization should be aware of the importance of a leader's feedback behavior on the follower's behavior and commitment to innovation, leading to the sustainable growth of the organization.

Second, organizations should provide proper conditions promoting employees' voice behavior to connect the positive effects of leader feedback on innovative behavior. For instance, if an organizational culture is created in which voice behavior is encouraged, even if a new work attempt fails, followers can accept failure and try again, without facing criticism or career disadvantages. Therefore, employees enhance their motivation and engagement toward innovative behavior. Finally, our findings also suggest that managers should recognize the role of job autonomy to maximize the positive effects of leader feedback, regarding enhancing employees' innovative behavior. Therefore, the leader should make extra effort to give followers enough autonomy and responsibility to perform their jobs. Consequently, the leaders should give their followers intrinsic motivation, so the followers feel that they have more flexibility when they are doing their jobs (ideally in more innovative ways).

## 5.3. Limitations and Future Research

Despite the useful implications of this study, we would like to present the direction of future research by clarifying the following limitations. First, this study used a cross sectional research design and the data used in the empirical analysis employed the questionnaire response method during the same period. Therefore, designing longitudinal research and using different sources of data are necessary for future research to address limitations of the common method bias and increase the generalizability of the conclusion. Second, although the data used in this study came from multiple areas of industry, including manufacturing, distribution, and service industries, this study was conducted on samples drawn exclusively from South Korean workers. Future research should explore the generalizability of these results to other emerging and developed countries. In particular, the generalizability of our findings remains limited as the percentage of women employees in the sample may not be representative of these industrial sector. Therefore, there is still a need to expand the empirical investigation on leader feedback effects to various other industries with balanced gender configurations. Finally, we included two mediating variables to explain the relationship between leaders' feedback behavior and innovative behavior. While the present study focused on identifying the mediating factors connecting above relations, the proper condition (i.e., moderators) to maximize the effect of leaders' feedback was not examined. Therefore, we call for future research that explores various internal and contextual conditions, such as industry, market, and firm specific contexts [87,88] to strengthen the relationship among leaders' feedback behavior, employees' innovative behavior, and firm level innovation performance. Researchers may also want to focus on other possible job characteristic and task group level factors, such as team and organizational climates, as they both relate to promote leaders' feedback behavior and employees' innovative behavior. In addition, as innovation activities can be seen as essential factors for sustainable competitiveness in organizations today [89–91], and is a complex process involving many actors [92,93], we suggest that future studies should explore the clear connections and interactions among individual, task group, and firm level factors for effective innovation.

# 6. Conclusions

This study investigated the effects of leaders' positive feedback on employees' innovative behavior. Our findings also identified that voice behavior and job autonomy play important mediating roles, concerning the effect of leaders' positive feedback in promoting innovative behavior. The study highlights the positive benefits of leaders' positive feedback behaviors in enhancing employees' positive attitudes and behaviors-toward innovative behavior-by increasing employee voice behavior and job autonomy, ultimately strengthening the significance of proper feedback given by the leaders to the followers, leading to proactive job-related performances. Despite the limitations, the study provides invaluable insights that can help managers understand the uncovered mechanisms that explain how a leader's feedback behavior can increase the followers' innovative behaviors in the workplace in Korea.

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