

# “Fostering innovative behavior in the aviation industry: The role of perceived supervisor support and work group diversity”

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# FOSTERING INNOVATIVE BEHAVIOR IN THE AVIATION INDUSTRY: THE ROLE OF PERCEIVED SUPERVISOR SUPPORT AND WORK GROUP DIVERSITY

## Abstract

The research primarily seeks to understand how supervisor support can directly and indirectly enhance the service innovative behavior (SIB) of flight attendants via work engagement. Moreover, although there has been some research on the effect of group diversity on organizational performance, the results have not been consistent. Thus, this study addresses this gap by investigating how work group diversity can make variance in the relationship between work engagement and innovative behavior of flight attendants. The sample size of 242 flight attendants working at the central airport in Ho Chi Minh City, Vietnam, has been taken for the study. To test hypotheses, structural equation modeling and bootstrapping were employed. This study provided an evidence for the positive nexus between perceived supervisor support and SIB. Additionally, the results shed light on a mediation mechanism of work engagement for the association between flight attendants' perception of their supervisor and innovative behavior. Furthermore, tenure diversity and job position diversity in a work group were proved to play a moderating role in the relationship between work engagement and service innovative behavior. Specifically, flight attendants are more willing to exhibit innovative behaviors when working in a homogeneous group in terms of tenure and job position rather than in a heterogeneous group. The empirical results contributed to the diversity management literature and broadened the understanding of how to activate the service innovative behavior of employees. From a managerial perspective, managers should pay attention to the characteristics of employees when organizing teamwork.

## Keywords

aviation industry, service innovative behavior, work engagement, work group diversity

## JEL Classification

D23, L93, M10

## INTRODUCTION

As an emerging economy (Hai et al., 2020), Vietnam has one of the fastest growing aviation industries (Lalk, 2019). In 2019, Vietnam welcomed 18 million international tourists with the growth of 16.2% (Tue Nhi, 2019). As expected, Vietnam would benefit from 2.9% annual GDP growth over the period 2014–2020, driven by aviation (Laplace et al., 2019). Thus, quality control in the aviation service is the top priority for Vietnam (Fan et al., 2017). Quality assurance in aviation services is widely studied among scholars (Angelov, 2019; Soekkha, 2020; Volynkina & Solohin, 2020; Webster et al., 2020) to effectively meet the growing customer demand and attract returns (Bock et al., 2016). Organizations want to deliver high quality services by requiring employees to go beyond their assigned customer service role (Garg & Dhar, 2016). One of the out-role behaviors that ensure the sustainable growth of airlines in a continuously changing global market is innovative behavior (Franke, 2007).

Several studies were conducted on a frontline employee of airline such as flight attendants to clarify which factors could affect service innovative behavior (SIB) (Alshamsi & Ahmad, 2018; Gozukara et al., 2016; Gozukara & Yildirim, 2016; Lee & Huyn, 2016). However, most research has mentioned factors at the organizational level, such as culture, organization justice (Gozukara et al., 2016; Gozukara & Yildirim, 2016) or positive psychological experiences of employees in the workplace (Lee & Huyn, 2016). In addition to these organizational factors, Vietnam culture originates from Confucian philosophy (Jia, 2016), so the influence of a supervisor in any organization on employees in Vietnam is noticeably clear (Tran et al., 2017). Besides, the effect of a supervisor on an employee's innovative behaviors as support at work was confirmed in the national culture (Chen et al., 2016; Eisenberger et al., 2002; Jansen, 2005; Škerlavaj et al., 2014). Therefore, flight attendants perceived the support from their supervisor may be effective in nurturing service innovative behavior in the aviation industry.

Perceived supervisor support refers to “employee assessments of whether or not their manager care about them and value their work” (Eisenberger et al., 2012). Supervisor support of employees can lead to positive outcomes for organization, such as as increased work engagement (Gordon, 2020; Rai et al., 2017), innovative work behaviors (Chen et al., 2016; Tafvelin et al., 2019) or reduced turnover intention (Alkhateri et al., 2018; Gordon et al., 2019). Stressful workplace in the airline industry (Lee & Huyn, 2016) limited these positive behaviors of employees, such as innovative performance of flight attendants (Cheng et al., 2018), and led to the need for increased support from supervisor to employees (Guchait et al., 2015). Therefore, when employees behave proactively via perceived support from their supervisor, the organization may be more strategic in managing human resource, which is a key factor for service organization (Gordon, Adler, Day & Sydnor, 2019), such as aviation organizations.

Several studies confirmed that perceived supervisor support can enhance service innovative behavior directly (Garg & Dhar, 2017; Jaroensutiyotin et al., 2019; Škerlavaj et al., 2014) or indirectly via work engagement (Monica & Krishnaveni, 2019). However, there have been varying results between work engagement and positive behavior in terms of work diversity (Luu et al., 2019; Shimazu et al., 2012; Rodriguez, 2018; Yang & Matz-Costa, 2019). Employee engagement may vary by age, education, gender, tenure, and job position due to differences in employee perceptions of supervisor support (Gordon et al., 2019). Furthermore, the study also explores the moderating role of work group diversity in the relationship between work engagement and service innovative behavior.

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## 1. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### 1.1. Perceived supervisor support and service innovative behavior

Perceived supervisor support is defined as “employee assessments of whether or not their managers care about them and value their work” (Eisenberger et al., 2002). Gregory (2010) stated that employees tend to have creative ideas, exploring the opportunities in the workplace when they perceive the caring from their organization. This argument is based on the idea of social exchange theory (Eisenberger et al., 1986) that employees would have a feeling of responsibility for caring

their organization as a “repay”. Perceived supervisor support is also an aspect of social support in job resource categories within the Job Demands – Resources model (Tang & Tsaur, 2016). Supervisor may signal to their employees that the workplace has positive climate and encourage them to behave proactively (Dewayani & Ferdinand, 2019). Employees who perceived the support from their direct supervisor will have better serve guests (Tang & Tsaur, 2016) and improve their work performance (Rath & Harter, 2010).

Service innovative behaviors focus on two directions: innovation in decision making and service-oriented (Lee & Huyn, 2016). Hon (2011) stated that SIB is a discretionary behavior that employees engage in to generate innovative ideas in regard to services supplied to customers.

Innovative behavior in aviation is the willingness to propose innovative ideas and convince a customer to enhance the service's quality (Lee & Huyn, 2016). Service behavior is also regarded as a symbol of organizational service quality (Farrell et al., 2001). Hence, many organizations are studying opportunities to enhance employee innovative behavior (Hu et al., 2009).

Innovative behavior in the workplace is expected to be promoted through support at both organizational level (Le & Lee, 2019; Nazir et al., 2019; Qi et al., 2019) and individual level (Cai et al., 2019; Chen & Lueng, 2016; Sönmez & Yıldırım, 2019). Managers often act on the behalf of an organization in terms of communicating to employees the organization's goal or expectations (Eisenberger et al., 2002). Thus, employees tend to perceive support from their organization as a supervisor's support (Eisenberger et al., 2002). Several studies on supervisor support within aviation have been conducted (Gungor & Altin, 2020; Krongboonying & Lin, 2015; Wang, 2014). For example, perceived supervisor support can enhance employee conformity behavior (Gungor & Altin, 2020) or job satisfaction (Krongboonying & Lin, 2015), or even out-role behaviors (Wang, 2014). In sum, employees who have a high-quality relationship with their supervisors will tend to display more innovative behavior due to the fact that this relationship can support them to face challenges in the workplace (Garg & Dhar, 2017). For the above discussions, when employees realize the support from their supervisor, it becomes a driving force for activating innovative behavior.

*H<sub>i</sub>: Perceived supervisor support is positively related to service innovative behavior.*

## 1.2. Mediating role of work engagement

Schaufeli et al. (2002) defined work engagement as a positive, fulfilling, and work-related state of mind that is regarded as vigor, dedication, and absorption. Thus, work engagement is considered a psychological contract in the service industry because it helps an employee overcome difficulties in the workplace to ensure the service performance (Yeh, 2012).

In this study, work engagement is anticipated as a mediation factor that connects perceived supervisor support to service innovative behavior. This expectation is in line with Saks's (2019) view that employee's work engagement has link perceived supervisor support to out-role behaviors (e.g., innovative behaviors). It is also premised on Černe et al. (2016) that supervisor support can establish the creativity of employees through their attachment to work.

The Job Demands – Resources model assumed that regardless of the type of job or work, characteristics can be categorized into two groups: job resources and job demands (Hakanen et al., 2008). Hakanen et al. (2008) also stated that job resources influence the engagement level of employees then define outcome behaviors. Moreover, inherited from Gorter et al. (2006) that social support is one of the vital factors in job resources. Individuals can be motivated by job resources and lead to the pursuit of excellent service via engaging in their job (Hobfoll, 1989). Thus, work engagement plays a role in linking the nexus between perceived supervisor support and service innovative behavior.

*H<sub>2</sub>: Work engagement mediates a positive relationship between perceived supervisor support and service innovative behavior.*

*H<sub>2a</sub>: Perceived supervisor support is positively related to work engagement.*

*H<sub>2b</sub>: Work engagement is positively related to service innovative behavior.*

## 1.3. Moderating role of the work group diversity

Diversity is defined as “Differences between individuals on any attribute that may lead to the perception that another person is different from self” (Van Knippenberg et al., 2004). Scholars study diversity attributes such as age, gender, race, tenure, educational background, and functional background (Van Knippenberg & Schippers, 2007; Williams & O'Reilly, 1998). The diversity among individuals in a work group is divided into two levels: surface level (primary) and deep (secondary) level (Manoharan & Singal, 2017). The surface level of diversity refers to any noticeable differenc-

es by age, gender, ethnicity, physical abilities, sexual orientation. The deep of diversity refers to the characteristics that identify who they are in terms of education, income, religion, work experiences, and status (Roberson, 2013).

Van Knippenberg and Schippers (2007) proposed two categories of diversity in the workplace, including demographic diversity and functional diversity. Luu et al. (2019) consider demographic diversity in terms of age and gender, while functional diversity includes tenure and expertise. In agreement with Luu et al., (2019), ethnicity is no longer seen as a problem in the Vietnamese context, so it was not included in this study. This study considers diversity from adjustments to Luu et al. by adding job position diversity as the following suggestion by Kim and Song (2016) for job position is a vital factor in ensuring a safety culture in aviation. In summary, this study measures workgroup diversity in aviation services, such as demographic diversity (age, gender, education) and functional diversity (tenure, job position).

The diversity of workgroup has two directions, from (1) completely homogeneous to (2) completely heterogeneous (Harrison et al., 2002). The impact of diversity on an organization raised the question whether it is positive or negative for the organization's performance (Bower et al., 2000, William & O'Reilly, 1998). However, a meta-analysis from De Dreu and Weingart (2003) showed that a more heterogeneous group would lead to more conflict and decrease an organization's effectiveness. Bowers et al. (2000) suggested that tasks with low stimulus uncertainty, processing demands, and response complexity are performed better by homogeneous groups. Nowadays, in the aviation industry, flight attendants are facing stressful and always-changing working environment (Lee & Huyn, 2016) which reduces their creativity. For their complicated job, employees in aviation services do need a homogeneous group for boosting their performance as proposed by Bower et al. (2000).

When performing similar tasks, a work group in an organization will share common affective state and a higher homogeneous group will lead to better consistency (Costa et al., 2014). Bartel and Saavedra (2000) confirmed the convergence of em-

ployees' mood when they have mutual characteristics. The existence of a positive effect of the homogeneous group makes employees become more engaged in performing their job (Bakker & Bal, 2010; Costa et al., 2014). Shimazu and Schaufeli (2009) also stated that workaholism and work engagement tend to occur in homogeneous groups rather than in heterogeneous. At the individual level, the diversity of a group can both positively and negatively affect innovative behavior (Taylor & Greve, 2006) due to its chance of confliction happened among team members. In the aviation service, cabin crew is established in groups (Mahony et al., 2008), so homogeneous groups would be better in performing innovative service behavior due to their consistent characteristics (De Villiers et al., 2003). For the discussions above, the impact of work engagement on innovative behavior in the workplace may vary based on their work group characteristics.

$H_{3a}$ : *The diversity by age moderates the relationship between work engagement and SIB.*

$H_{3b}$ : *The diversity by gender moderates the relationship between work engagement and SIB.*

$H_{3c}$ : *The diversity by educational background moderates the relationship between work engagement and SIB.*

$H_{3d}$ : *The diversity by tenure moderates the relationship between work engagement and SIB.*

$H_{3e}$ : *The diversity by job position moderates the relationship between work engagement and SIB.*

## 2. AIM

This study aims to foster understanding of innovative behaviors in the aviation service. Specifically, it examines the direct and indirect impact, via work engagement, of perceived supervisor support on service innovative behavior of flight attendants. In addition, the results of previous studies of workgroup diversity are still inconsistent, so this study explores the moderating role of workgroup diversity in the relationship between work engagement and service innovative behavior.

### 3. METHOD

#### 3.1. Sample and procedure

The study collected data from flight attendants working for airlines at the central airport in Ho Chi Minh City, Vietnam, from May to July 2020. The snowball sampling method was employed because the study did not have a list of participants in advance and sampling frame for exploring the population (Hendricks & Blanken, 1992). This sampling method was widely used in aviation research (Cohen & Higham, 2011; Fala & Marais, 2019; Henriksen & Ponte, 2018; Opengart & Ison, 2016). Through the relationship between the Vietnam Aviation Academy and flight attendants working for airlines, and from the introduction of these flight attendants, recruited participants take part in the survey by using a Google Form. A total of 242 valid responses were collected. The detail was shown in Table 1.

**Table 1.** Sample characteristics

Measure	Item	Percentage
Age	From 18 to 24 years old	31
	From 24 to 30 years old	52.1
	From 30 to 36 years old	12.8
	Above 36 years old	4.1
Gender	Male	53.7
	Female	43.4
	Not specified	2.9
Education	High school	19.8
	2-year college degree	16.1
	4-year college degree	55.8
	Graduate degree	8.3
Tenure	Under 1 year	48.8
	From 1 to 3 years	25.2
	From 3 to 6 years	14
	Over 6 years	12
Job position	Cabin attendant	78.1
	Assistant purser	2.1
	Purser	19.8

#### 3.2. Measures

Respondents indicated their opinions on a five-point scale from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was translated into Vietnamese and then translated back into English to make a comparison and avoid discrepancy between the two versions (Mullen, 1995).

Perceived supervisor support was measured using a 3-item scale developed by Eisenberger et al. (2002) (e.g., My supervisor strongly considers my goals and values) (Cronbach's alpha = 0.956).

Work engagement used a shorten version with a nine-item scale adapted from Schaufeli et al. (2006) (e.g., I am immersed in my work) (Cronbach's alpha = 0.941).

Service innovative behavior scale was estimated by a six-item scale adapted from Hu et al. (2009) (e.g., At work, I seek new service techniques, methods, or techniques) (Cronbach's alpha = 0.952).

Group diversity (age, gender, educational background, tenure, job position) was measured using Blau's index (1977) for each element ( $1 - \sum P_i^2$ ), where P is the proportion of individuals in each category. The diversity coefficient ranges from 0 (totally homogeneous) to 1 (totally heterogeneous).

### 4. RESULTS

#### 4.1. Measurement model

The model fit data was evaluated through fit indices, including Chi-square/degree of freedom, Tucker-Lewis coefficient (TLI), comparative fit index (CFI), standardized root mean square residual (SRMR), and root mean square error of approximation (RMSEA). The model is considered to be fit when CMIN/DF < 2 (Carmines & McIver, 1981), TLI and CFI are greater than 0.9 (Tabachnick et al., 2001), and RMSEA and SRMR are less than 0.8 (Graves, Sarkis, & Zhu, 2013; Mathieu and Taylor, 2006). The hypothesized 8-factor is suitable (CMIN/DF = 1.590; TLI = 0.971; CFI = 0.978; SRMR = 0.036; RMSEA = 0.049) and better than any other alternative model such as a 7-factor model collapsing perceived supervisor support and work engagement (CMIN/DF = 3.924; TLI = 0.855; CFI = 0.889; SRMR = 0.055; RMSEA = 0.110), a 6-factor model collapsing perceived supervisor support, work engagement, and age diversity (CMIN/DF = 4.057; TLI = 0.848; CFI = 0.880; SRMR = 0.062; RMSEA = 0.113), a 5-factor model collapsing perceived supervisor support, work engagement, age diversity, and gender diversity (CMIN/DF = 4.086; TLI = 0.847; CFI = 0.

876; SRMR = 0.067; RMSEA = 0.113), a 4-factor model collapsing perceived supervisor support, work engagement, age diversity, gender diversity, and educational background diversity (CMIN/DF = 4.082; TLI = 0.847; CFI = 0.875; SRMR = 0.069; RMSEA = 0.113), a 3-factor model collapsing perceived supervisor support, work engagement, age diversity, gender diversity, educational background diversity, and tenure diversity (CMIN/DF = 4.353; TLI = 0.833; CFI = 0.862; SRMR = 0.075; RMSEA = 0.118), a 2-factor model collapsing perceived supervisor support, work engagement, age diversity, gender diversity, educational background diversity, tenure diversity, and job position diversity (CMIN/DF = 4.392; TLI = 0.831; CFI = 0.

860; SRMR = 0.077; RMSEA = 0.119), and a 1-factor model by loading all variables on a single factor (CMIN/DF = 6.154; TLI = 0.744; CFI = 0.786; SRMR = 0.091; RMSEA=0.146).

As illustrated in Table 2, composite reliability of the proposed model ranges from 0.949 (work engagement) to 0.963 (perceived supervisor support), which is over the threshold of 0.7 (Bagozzi & Yi, 1988). Average variance extracted is also greater than the threshold 0.5 (Fornell & Larcker, 1981), ranging from 0.699 (work engagement) to 0.881 (perceived supervisor support). These results confirmed the reliability of scales in the research framework.

**Table 2.** Correlation matrix and variance extracted

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	CR	AVE
Age	...														
Gender	-.05	...													
Education	.33**	-.03	...												
Tenure	.72**	-.11	.24**	...											
Job position	.63**	.01	.19**	.67**	...										
Work engagement	-.23**	-.08	-.15*	-.32**	-.29**	.836								.949	.699
Service innovative behavior	-.16*	.13*	-.18*	-.24*	-.15*	.735***	.880							.954	.775
Perceived supervisor support	-.29**	-.04	-.22**	-.40**	-.30**	.756***	.745***	.939						.963	.881
Age diversity	.14*	-.09	-.18**	.35**	.33**	.04	-.11	.08	...						
Gender diversity	-.05	.98**	-.00	-.11	-.00	-.07	-.12	.09	-.11	...					
Educational background diversity	-.19**	.13*	-.55**	-.16*	-.20**	.21*	.12	.20**	.13*	.08	...				
Tenure diversity	.58**	-.08	.29**	.91**	.54**	-.42**	-.34**	-.28**	.14*	-.81	-.24**	...			
Job position diversity	.63**	.02	.19**	.66**	.98**	-.29**	-.29**	-.13*	.32**	.01	-.18**	.54**	...		

Note: CR = Composite reliability; AVE = Average variance extracted, \* $p < 0.05$ ; \*\* $p < 0.01$ .

**Table 3.** Structural equation modeling results

Hypotheses	Description of paths	Path coefficient (unstandardized)	Conclusion
H <sub>1</sub>	Perceived supervisor support → service innovative behavior	.37***	Supported
H <sub>2a, 2b</sub>	Perceived supervisor support → work engagement	.52***	Supported
	Work engagement → service innovative behavior	.51***	Supported
H <sub>3a, 3b, 3c, 3d, 3e</sub>	Work engagement x age diversity → service innovative behavior	-.53	Unsupported
	Work engagement x gender diversity → service innovative behavior	-1.1	Unsupported
	Work engagement x educational background diversity → service innovative behavior	.38	Unsupported
	Work engagement x tenure diversity → service innovative behavior	-1.3*	Supported
	Work engagement x job position diversity → service innovative behavior	-.71***	Supported

Note: \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

## 4.2. Hypotheses testing

The data was tested using a structural equation model framework. As Table 3 shows, perceived supervisor support has a significantly positive association with service innovative behavior ( $\beta = 0.37$ ,  $p < 0.001$ ) and work engagement ( $\beta = 0.52$ ,  $p < 0.001$ ). Work engagement is in turn significantly correlated with service innovative behavior ( $\beta = 0.51$ ,  $p < 0.001$ ).

### 4.2.1. Mediation testing

The hypothesized partial mediation model via work engagement (CMIN/DF= 1.774, TLI = .977, CFI = .983, SRMR = .036, RMSEA = .056) fits better than the alternative full mediation model (CMIN/DF = 2.095, TLI = .966, CFI = .975, SRMR = .06, RMSEA= .067). The indirect effect of perceived supervisor support on service innovative behavior via work engagement was 0.264. Performing 1000 bootstrap samplings showed that all C.R coefficients  $< 1.96$ ; it is concluded that hypothesized partial mediation meets the reliability requirement. The result supported hypothesis 2 that work engagement has a mediating role in linking perceived supervisor support to service innovative behavior.

### 4.2.2. Moderation testing

The moderating effect of work group diversity was estimated using interaction term coefficients and followed by simple slope tests to verify hypotheses. The simple slope tests evaluate a relationship between predictors and its consequences at high and low value of a moderator (Preacher et al., 2006). The interaction between work engagement and tenure diversity in predicting service innovative behavior (hypothesis H3d) was confirmed by its significantly negative term ( $\beta = -1.3$ ,  $p < 0.05$ ). The result was further tested in the plot in Figure 1, where work engagement increases service innovative behavior when tenure becomes more homogeneous (simple slope = 1.02,  $p < 0.05$ ) than heterogeneous (simple slope = 0.74,  $p < 0.05$ ).

The interaction term between work engagement and job position diversity in predicting service innovative behavior (hypothesis  $H_{3e}$ ) was also confirmed by its significantly negative term ( $\beta = -.71$ ,  $p < 0.001$ ). The moderating effect of job position diversity is observed through the plot in Figure 2. Work engagement increases service innovative behavior when the job position is at the low level of diversity (simple slope = 1.09,  $p < 0.05$ ) than at the high level (simple slope = 0.76,  $p < 0.05$ ).

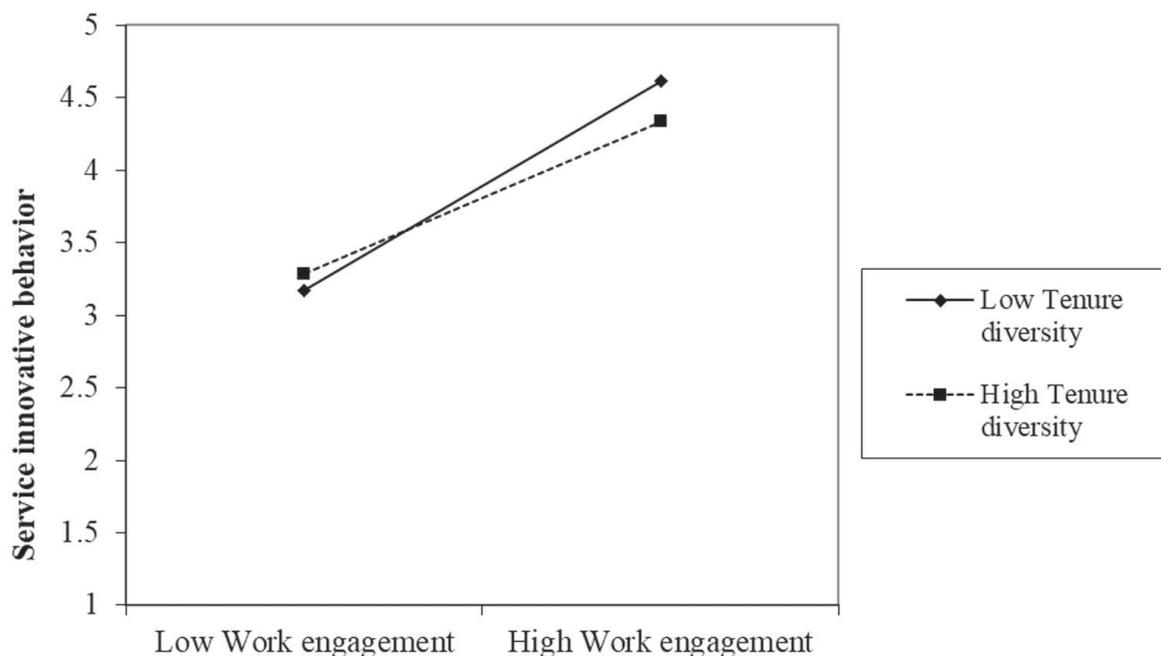
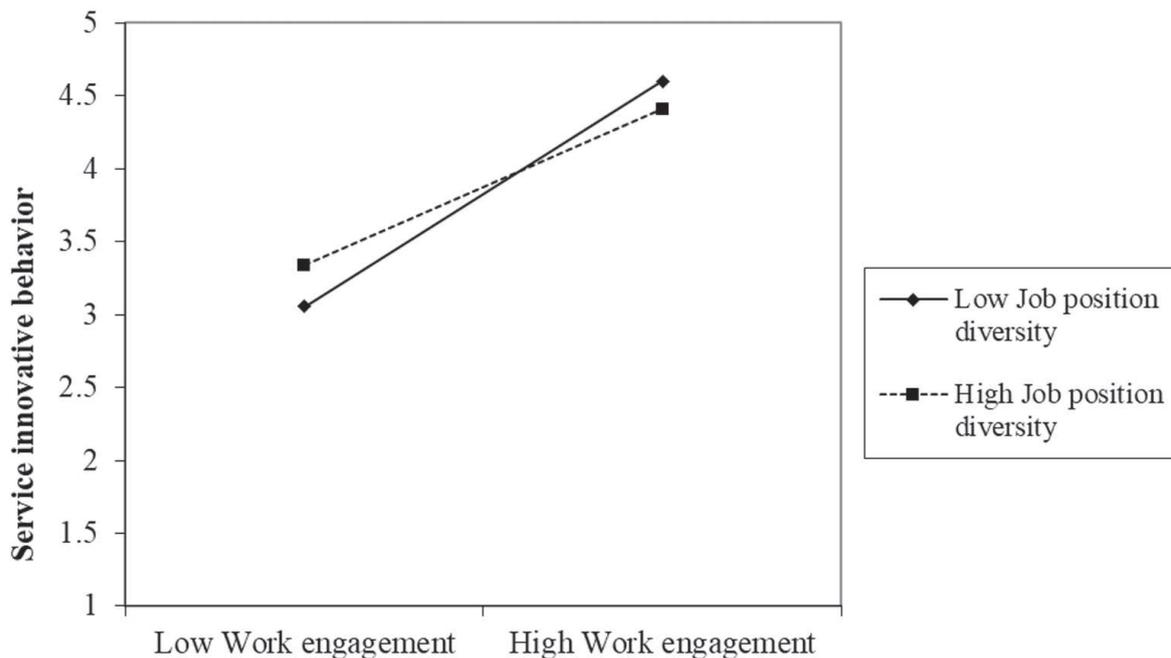


Figure 1. Moderating effect of tenure diversity



**Figure 2.** Moderating effect of job position diversity

## 5. DISCUSSION

### 5.1. Implications

This study contributed greatly to the development of the aviation industry and diversity management. First, it extended the research stream about the antecedents of innovative behavior in aviation from the organizational to individual level. This study confirmed that a supervisor could directly enhance the innovative behavior of flight attendants. With escalating service problems (Bock et al., 2016) and a stressful working environment (Lee & Huyn, 2016) in aviation, employees must go beyond their job descriptions and innovate to improve service quality. The supervisor is a vital factor because their support will ensure psychological safety of employees while promoting new ideas (Garg & Dhar, 2017).

Second, the result confirms that work engagement plays a mediating role in linking perceived supervisor support to service innovative behavior in the aviation industry, which is consistent with the results of Černe et al. (2016) and Saks (2019) in other service industries. The characteristics of a flight attendant job is that employees must work in long hour, both day and night (Lee & Huyn, 2016), so the employees who

perceived support from their supervisor tend to have more motivation to overcome the struggles, engage in their job and find the way to improve service quality by creating more innovative solutions (Yeh, 2012).

Third, this study has made an important contribution to diversity management. In the aviation industry, a group of flight attendants with the equivalent characteristics as tenure or job position will have higher engagement and generate more creative ideas than a heterogeneous group. The result supports the idea that tasks with low stimulus uncertainty, processing demands, and response complexity are performed better by a homogeneous group (Mahony et al., 2008), which is appropriate in the aviation industry (Lee & Huyn, 2016), consistent employee characteristics will reduce conflict among members (De Dreu & Weingart, 2003) and lead to positive association with innovative behavior (De Villiers et al., 2003)

Lastly, this study has some recommendations for airlines in Vietnam. The innovative behavior of flight attendants can be activated through their direct supervisor. Organizations should integrate support culture by communicating from top to bottom through supervisors. The support from organizations to employee's well-being would be identified as

support from the supervisor because they are the one who work directly with flight attendants. Managers should also pay attention to building flight attendant teams in their airlines. Innovative behaviors of flight attendants act better in homogeneous groups in terms of tenure and job position than in heterogeneous groups. Managers want to have an effective team and can rearrange flight attendants into groups, which share the same characteristics. The less diversity of tenure and job position in the flight attendant group will tend to share mutual affection and engage better in performing their job.

#### **5.1.1. Limitation and future research direction**

This research has some limitations. First, since the data was collected through a sectional sur-

vey, a cross-lagged longitude should be done to reduce biases and identify relationships (Podsakoff et al., 2012). Second, the effect of support from supervisor on the behavior of flight attendants was analyzed, so future research should explore which support leadership style (e.g., servant leadership, transformational leadership, shared leadership) can foster innovative employee behavior in the aviation service. Lastly, the result expands knowledge of the controversial topic about diversity in the workplace (Van Knippenberg & Schippers, 2007) whether homogeneous or heterogeneous groups perform better. Further empirical research can be conducted in another industry or the sample size can be expanded to examine diversity in the workplace.

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## **CONCLUSION**

Analysis of the data shows a positive association between perceived supervisor support and service innovative behavior. The results also confirmed the mediating role of work engagement in connecting employees' perceptions of their supervisor with innovative behavior. The link between work engagement and service innovative behavior was also moderated by tenure diversity and job position diversity. The diversity of tenure and job position decreases a positive effect of work engagement on service innovative behavior. Future longitudinal studies in aviation or other industries can further validate and strengthen the results. From a managerial perspective, a manager wants his/her employees to be innovative, should pay more attention to employees' well-being and be selective in forming groups in the organization.

## **AUTHOR CONTRIBUTIONS**

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