



# SELECTED PROCEEDINGS

## THE ROLE OF WORK ENGAGEMENT AND JOB TENURE AS MODERATORS OF THE BURNOUT–PERFORMANCE RELATIONSHIP AMONG FLIGHT ATTENDANTS

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# **THE ROLE OF WORK ENGAGEMENT AND JOB TENURE AS MODERATORS OF THE BURNOUT–PERFORMANCE RELATIONSHIP AMONG FLIGHT ATTENDANTS**

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## **ABSTRACT**

An understanding of how flight attendants perform effectively under stress deserves more attention, because they are often confronted with stressful and demanding situations. The purpose of this study is to investigate how work engagement and job tenure moderate the effect of burnout on job performance. The sample includes 305 flight attendants from Taiwan's airline industry. The results show that flight attendants with high work engagement perform better when they have low levels of burnout than those with low work engagement. Higher performance occurs among flight attendants who are more experienced in their jobs when they have high levels of burnout. In particular, job performance is further differentiated into two components: in-role performance and extra-role performance. The results suggest that consideration of the moderators of the burnout-performance relationship is important both theoretically and practically. Managerial implications are discussed and provided.

*Keywords: burnout; work engagement; job tenure; job performance; flight attendant*

## **INTRODUCTION**

Flight attendants are required to express certain positive emotions as a part of their work, even when facing difficult situations such as dealing with arrogant or aggressive passengers, and this often leads to higher levels of stress (Pienaar & Willemse, 2008). As workers with low job autonomy and long working hours, flight attendants are typically characterized as undertaking work that can lead to burnout in the form of emotional exhaustion (Williams, 2003). To maintain flight and service quality, it is thus important to better understand flight

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attendants' job stress and the effects of burnout on their job performance, as well as how such individuals can perform more effectively when stressed.

Burnout is viewed as a form of job stress, while the exhaustion component represents the basic individual stress dimension of burnout (Maslach et al., 2001). In addition, Bakker et al. (2004) indicated that burnout has negative effects on both official and discretionary behavior. The official behavior is recognized as operating in in-role performance while discretionary one is extra-role performance. However, certain moderating variables may regulate the effects of burnout on job performance. Previous studies have examined work engagement as a moderator of the relationship between different types of stress and work-related outcomes (e.g., Britt, 1999), while Sturman (2003) claimed that job tenure reduces the effects of job stress on job performance. Furthermore, past studies have provided evidence that burnout and work engagement impact job performance (Bakker et al., 2004), while job tenure is positively related to task performance (Ng & Feldman, 2008). However, no prior research has specifically tested the moderating effects of work engagement and job tenure on the relationship between burnout and job performance.

Workers subject to similar stresses may differ in the extent to which they feel nervousness or tension as a result of personal experiences or events that occur in their work setting (Parker & DeCotiis, 1983). Therefore, the effects of burnout on job performance are likely to be contingent on other moderating factors, and the mixed and contradictory results of earlier studies can be attributed in part to these contingencies. This study aims to investigate the relationships among burnout, work engagement, job tenure and job performance and theorizes that both work engagement and job tenure affect the burnout-performance relationship. First, this study assesses whether workers who feel low levels of burnout in their jobs perform more effectively. Second, this study also examines whether the relationship between burnout and performance would be stronger when individuals are engaged in their work than when they are disengaged. Finally, this study tests whether the relationship between burnout and performance would be stronger for individuals who are more experienced to their jobs than for individuals who are relatively new hires. These questions are especially important when organizations increase the pressure on employees to perform well.

## **THEORY AND HYPOTHESES**

### **Effect of burnout on performance**

Maslach et al. (2001) claimed that burnout is a form of job stress, with links to such concepts as organizational commitment, job satisfaction, and turnover. Burnout is treated as a consequence deriving from stressful work conditions, and is a syndrome consisting of feelings of emotional exhaustion, cynicism (or depersonalization) and a lack of professional accomplishment (Maslach et al., 2001). The Maslach Burnout Inventory (MBI) conceptualizes burnout as a three-dimensional syndrome, however, some of the major similarities and differences among various measures of burnout are discussed. Previous studies argued the

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lack of an overarching theory that explains why the three components of the MBI should be viewed as facets of the same phenomenon. Specifically, Shirom (2005) claimed that diminished professional accomplishment seems to develop largely independently from the other MBI components, again raising the question as to whether all three dimensions are needed to measure the burnout syndrome. As noted by Halbesleben and Demerouti (2005), the Oldenburg Burnout Inventory (OLBI) is based on the MBI that includes only the exhaustion and cynicism of the MBI components, dropping the third component, namely professional accomplishment. Previous studies have indicated that exhaustion and cynicism are the most critical components of burnout for workers (Lewig et al.; Schaufeli & Bakker, 2004; Maslach et al., 2001; Shirom, 2005). Further, emotional exhaustion appears to be the core feature and initial symptom in the burnout process, and is always included as part of the burnout dimensions in the literature (Shirom, 2005). Thus, we conceptualize burnout as employee perceptions of exhaustion and cynicism in this work to reflect the job characteristics of flight attendants. High employee burnout is costly for both organizations and individuals, as it may lead to negative work-related outcomes such as low work engagement (Bakker et al., 2004), low job performance (Babakus et al., 2009), high employee turnover (Schaufeli & Bakker, 2004), and poor health (Hakanen et al., 2006; Pienaar & Willemse, 2008; Schaufeli & Bakker, 2004). However, there are mixed results about the relationship between burnout and job performance in past studies. The majority of studies support a negative relationship between the two constructs (Babakus et al., 2009; Bakker et al., 2004), while others find no or even a positive relationship between them (Keijsers et al., 1995; Simmons et al., 2009).

In addition, the majority of studies use self-reported surveys as an instrument, and focus on formal performance appraisals, including meeting organizational objectives and effective functioning. However, Bakker et al. (2004) argued that burnout has negative effects on both official and discretionary behavior. The official behavior is recognized as operating in in-role performance while discretionary one (or organizational citizenship behaviors) is extra-role performance. Van Dyne and LePine (1998) distinguish two role behaviors: in-role and extra-role behavior. In-role behavior is required or expected behavior and is the basis of regular and ongoing performance while extra-role behavior is positive and discretionary (Van Dyne & LePine, 1998). Thus, in-role performance refers to those officially required behaviors that directly serve the goals of the organization (Motowidlo & Van Scotter, 1994), while extra-role performance refers to “those discretionary behaviors on the part of an employee that are believed to directly promote the effective functioning of an organization, without necessarily directly influencing a person’s target productivity” (Podsakoff & MacKenzie, 1994, p.351). According to role-based performance theory (Griffin et al., 2007), in addition, task performance and citizenship performance are two primary performance dimensions (Wallace et al., 2009). Task performance was defined as doing things specifically related to one’s job description while citizenship performance as going above the call of duty in one’s concern for the firm (Wallace et al., 2009). Therefore, in this study we define in-role and extra-role performance as task and citizenship performance, respectively, to capture the comprehensive job performance. Although flight attendants are recognized as often being involved in stressful and demanding situations (Pienaar & Willemse, 2008), few studies have

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investigated how they can perform better under stress. Based upon the above findings, the first hypothesis is proposed:

- H1. Burnout has a negative effect on job performance.
- H1a. Burnout has a negative effect on in-role performance.
- H1b. Burnout has a negative effect on extra-role performance.

### **Effect of work engagement on performance**

Work engagement is a positive, fulfilling, and work-related state of mind that is characterized by vigor, dedication, and absorption (Bakker & Bal, 2010). Furthermore, work engagement is considered as the opposite of burnout, particularly as far as exhaustion and vigor, and cynicism and dedication are concerned. Engagement with work is important for organizations, and has been linked to desirable work outcomes such as client satisfaction (Salanova et al., 2005), low turnover intentions (Schaufeli & Bakker, 2004), and high job performance (Bakker et al., 2004). Hockey (1997) proposed the compensatory control model, and found that loss of performance is associated with aversion to effort and consequently task disengagement. Further, recent studies have shown that work engagement is positively related to in-role performance (Halbesleben & Wheeler, 2008) and extra-role performance (Bakker et al., 2004). In particular, Xanthopoulou and colleagues' (Xanthopoulou et al., 2008) study on the organizational behavior of European flight attendants provided evidence that work engagement has a significant positive impact on flight attendants' job performance, including in-role performance and extra-role performance. Accordingly, the second hypothesis is proposed:

- H2. Work engagement has a positive effect on job performance.
- H2a. Work engagement has a positive effect on in-role performance.
- H2b. Work engagement has a positive effect on extra-role performance.

### **Work engagement as a moderator of the burnout-performance relationship**

Britt (1999) examined work engagement as a moderator of the relationship between different types of stresses and work-related outcomes. In contrast to the scant empirical research into moderators of the effects of burnout on workplace performance, the theoretical and empirical literature on the burnout-performance relationship and its mediators, is extensive. On the other hand, instead of perfectly complementary and mutually exclusive states, burnout and engagement are independent states. Further, the two dimensions are supposed to be negatively related because of their antithetical nature (Schaufeli & Bakker, 2004). Based on the Maslach multidimensional model, Maslach and Goldberg (1998) proposed new approach to the prevention of burnout that focuses on improving work engagement. Schaufeli et al. (2002) mentioned that engaged employees have a sense of energetic and effective connection with their work activities, and they see themselves as able to deal completely with the demands of their job. However, when flight attendants who are energetically engaged with their work feel burnout, whether they are still able perform to well is worthy of further attention. Based on the arguments outlines above, this study proposes the third hypothesis:

- H3. Work engagement moderates the relationship between burnout and job performance.

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H3a. Work engagement moderates the relationship between burnout and in-role performance.

H3b. Work engagement moderates the relationship between burnout and extra-role performance.

### **Effect of job tenure on performance**

Previous research has indicated that job tenure is a better predictor of performance than age, and that it has a nonlinear relationship with performance (Avolio et al., 1990). Sturman (2003) argued that the clear or implicit knowledge gained by organizational tenure has unique positive effects on job performance. However, the positive relationship between experience and performance typically declines when employees acquire more experience with their job (Schmidt & Hunter, 2004). In addition, job tenure has been found to be positively related to task performance (Ng & Feldman, 2008). Based on these earlier studies, we propose the fourth hypothesis:

H4. Job tenure has a positive effect on job performance.

H4a. Job tenure has a positive effect on in-role performance.

H4b. Job tenure has a positive effect on extra-role performance.

### **Job tenure as a moderator of the burnout-performance relationship**

Job experience may help flight attendants to reduce and cope with stress. The Career Development model (Levinson et al., 1978) has provided evidence that the stress-performance relationship varies when job tenure increases. Sturman (2003) claimed that job tenure reduces the effects of job stress on job performance. Shirom et al. (2008) investigated gender, age and tenure as moderators of work-related stress relationships with job performance, and found that the relationship between role ambiguity and performance reduces when employee tenure and age increase simultaneously. Although burnout is a form of stress with the symptoms of exhaustion and cynicism, no prior research has specifically tested the effect of burnout-job tenure interaction on job performance. Based on the arguments of the stress-related literature, the fifth hypothesis is proposed:

H5. Job tenure moderates the relationship between burnout and job performance.

H5a. Job tenure moderates the relationship between burnout and in-role performance.

H5b. Job tenure moderates the relationship between burnout and extra-role performance.

The research model is presented in Figure 1, which illustrates how the existence and strength of a relationship between burnout and job performance could be different depending on flight attendants' job tenure and work engagement.

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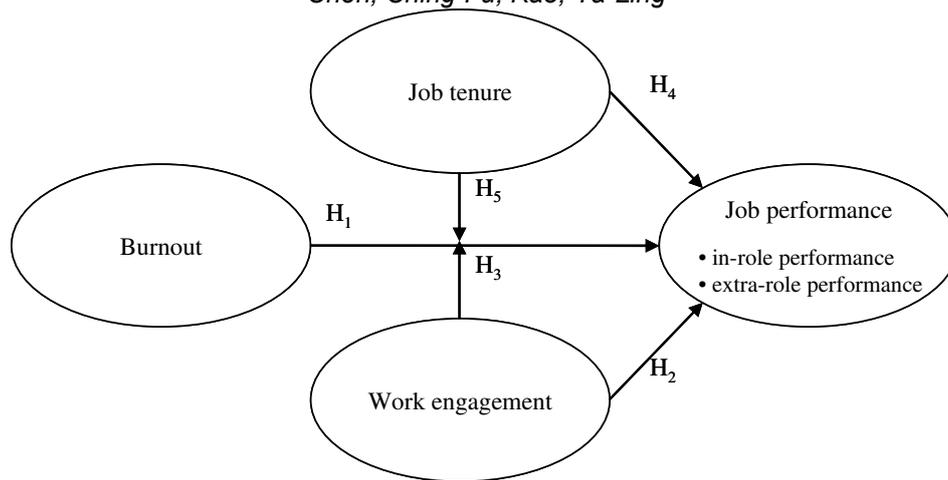


Figure 1 –Conceptual framework

## METHOD

### Measures

#### *Job performance*

Job performance includes two dimensions, in-role and extra-role performance, and is assessed through the use of self-reported measure. In-role performance is measured with three items adapted from Williams and Anderson's (1991) in-role performance scale: "I adequately complete the assigned duties", "I fulfil the responsibilities specified in my job description", and "I perform the tasks that are expected of me". Additionally, extra-role performance is characterized as citizenship behaviors toward individuals (i.e. altruism), and is measured by a three-item scale adapted from MacKenzie et al. (1993), with the following items: "I help orient new people even though it is not required", "I am always ready to help or to lend a helping hand to those around me", and "I willingly give my time to help others". A five-point Likert-type scale was used to measure these items, ranging from 'strongly agree' (= 5) to 'strongly disagree' (= 1).

#### *Burnout*

Previous studies have indicated that exhaustion and cynicism are the most critical components of burnout for workers (Lewig et al., 2007; Maslach et al., 2001), and so the exhaustion and cynicism subscales of the Maslach Burnout Inventory-General Survey (MBI-GS) (Schaufeli et al., 1996) were adapted in order to measure burnout among flight attendants. The five exhaustion items include: "I feel emotionally drained from my work", "I feel burnout from my work", "I feel tired when I get up in the morning and have to face another day on the job", "Working all day is really a strain for me", and "I feel exhausted from

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overworking myself”. Additionally, the five cynicism items are: “I have become less interested in my job after doing this work”, “I have become less enthusiastic about my work”, “I only need to complete my job without being disturbed and I will be all right”, “I doubt that my work contributes anything significant”, and “I have become more cynical about whether my work contributes to anything”. A five-point Likert-type scale ranging from ‘strongly agree’ (= 5) to ‘strongly disagree’ (= 1) was used to gather data.

### *Work engagement*

Work engagement includes two dimensions, vigour and dedication, which are measured by Utrecht Work Engagement Scale (UWES) adapted from Schaufeli et al. (2006). The three items of the vigour scale are: “At my work, I feel bursting with energy”, “At my job, I feel strong and vigorous”, and “When I get up in the morning, I feel like going to work”. Additionally, the three items of dedication scale are: “I am enthusiastic about my job”, “My job inspires me”, and “I am proud of the work that I do”. A five-point Likert-type scale ranging from ‘strongly agree’ (= 5) to ‘strongly disagree’ (= 1) was used to gather data.

### *Job tenure*

Job tenure is measured as job tenure through the use of self-reported item, denominated in years and starting from the year the respondents began the job that they held at the time of the survey. Job tenure is classified into two categories, with 1 equal to *above five years*, and 0 equal to *below five years*.

### *Controls*

This study controlled individual characteristics that might be associated with job performance and the research variables. Gender and marital status are dummy variables with 1 equal to *female* and *single*, respectively. Position is controlled for the two different job levels; *cabin attendant* is the dummy variable, with assistant pursers and pursers as the omitted category.

### *Checks*

To rule out the possibility of systematic effects on the data and hypothesis testing, this study probed for nonresponse bias by comparing early and late respondents on the key study variables and respondent profiles. None of these comparisons revealed any differences. To minimize common method variance as suggested by Podsakoff et al. (2003), these measures for the dependent variables and other variables were obtained from different sources.

## **Participants and procedure**

Sample firm is the first tier of Asia's airlines, serving 6.2 million passengers per annum on 40 international destinations, with additional cargo destinations. The sample airline operates from Taiwan and flies to destinations in Asia, Australia, Europe and North America, providing full-service commercial, passenger, and cargo transportation. In past five years, it has won numerous awards for its service quality and cabin facilities, and is emerging as one of top ten international airlines.

The flight attendants selected for this study were mainly from the sample airline, and a questionnaire was used to collect data from them. The potential respondents were chosen based on a convenience sampling method, as this allows a large number of respondents to be investigated in a relatively short time. A self-administered questionnaire was distributed to the potential respondents after their willingness to take part in the survey had been ascertained. Respondents were assured that they would not be identified, and that individual data would not be released. The data collection was conducted from October to December, 2009. A total of 350 questionnaires were distributed and the total number of valid responses was 305, giving a response rate of 87.1 %.

Female respondents accounted for the majority (89.5%) of the sample, consistent with the fact that most flight attendants are women in Taiwan. 28.5% of the respondents were 26-30 years old, followed by those aged 31-35 (26.2%) and 36-40 (19.7%). 54.8% of the respondents were unmarried and 66.2% had no children. In addition, 57.0% reported that they had flown 81-100 hours per month over the previous three months.

## **RESULTS**

### **Descriptive statistics and reliability**

Table 1 provides the results for the means, standard deviations, Pearson's correlations and Cronbach's  $\alpha$ . Two of our main variables of interest, burnout and work engagement, are strongly negatively correlated ( $r = -.42, p < .01$ ). As expected, burnout is negatively correlated with job performance ( $r = -.35, p < .01$ ), while work engagement is positively related to performance ( $r = .32, p < .01$ ). Moreover, gender and job tenure are positively correlated with job performance ( $r = .16, p < .01$ ;  $r = .18, p < .01$ ). The means of three constructs (burnout, work engagement and job performance) range from 2.73 to 3.94, and their standard deviations range from 0.51 to 0.69. In terms of reliability, the Cronbach's  $\alpha$  values range from .87 to .93, higher than .70 as suggested by Hair et al. (2006), indicating the internal consistency reliabilities of all the constructs are highly acceptable.

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Table I – Means, standard deviations, correlations and Cronbach's  $\alpha$

Variables	Mean	s.d.	1	2	3	4	5	6	7
1 Gender	0.90	0.31							
2 Position	0.70	0.46	.17**						
3 Marital Status	0.55	0.50	.12*	.35**					
4 Job tenure	0.67	0.47	-.22**	-.44**	-.48**				
5 Burnout	2.73	0.69	.21**	.08	.04	-.10	<b>.93</b>		
6 Work engagement	3.27	0.62	-.13*	-.22**	-.12*	.15**	-.42**	<b>.87</b>	
7 Job performance	3.94	0.51	-.16**	-.06	-.10	.18**	-.35**	.32**	<b>.90</b>

Note: The bold numbers in the diagonal row are Cronbach's  $\alpha$ ; \*  $p < .05$ , \*\*  $p < .01$ .

### Hierarchical regression analyses

Hierarchical regression analysis is used in this study to test the moderating effects, which attempts to improve standard regression estimates by adding a second-stage regression to the ordinary model. Table 2 reveals that the results for three models with job performance, in-role performance, and extra-role performance as the dependent variables. Variables are entered in three steps for the three models. First, the main effects of gender, position and marital status are tested. Next, the main effects of job tenure, burnout, and work engagement are examined. Finally, the interaction terms are entered.

#### *Job performance*

To assess whether there are significant interactions between burnout, work engagement and job tenure in job performance, hierarchical regression is used to test three steps for job performance in this study, as shown in Model 1 of Table 2. In the first step, gender, position and marital status are entered into the regression equation as control variables. Burnout, work engagement and job tenure are then entered into the regression equation to test their main effects in the second step, (i.e.,  $H_1$ ,  $H_2$ , and  $H_4$ ). In the third step, the interaction terms are specified to estimate the moderating effects of work engagement and job tenure on the relationship between burnout and job performance ( $H_3$  and  $H_5$ ).

In the Step 1, the background variables account for a significant amount of variance in job performance ( $R^2 = .03$ ,  $F = 3.25$ ,  $p < .05$ ). Gender has a significant negative effect on job performance ( $\beta = -0.15$ ,  $p < .05$ ), indicating male flight attendants may have higher levels of job performance.

In the Step 2, burnout, work engagement and job tenure are found to explain a significant additional variance in the variance of job performance after controlling the variance accounted for by background variables ( $\Delta R^2 = .15$ ,  $F$ -value = 11.12,  $p < .001$ ). The results of second step show that all three independent variables, namely job tenure ( $\beta = 0.14$ ,  $p < .05$ ) and work engagement ( $\beta = 0.21$ ,  $p < .001$ ) positively affect job performance, as well as that burnout has a significant negatively effect on job performance ( $\beta = -0.24$ ,  $p < .001$ ), thus

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supporting H<sub>1</sub>, H<sub>2</sub> and H<sub>4</sub>. Furthermore, among these three independent variables, burnout appears to have the largest impact on job performance in terms of regression coefficients.

Table I –Hierarchical regression analysis on job performance

Variables	Model 1			Model 2			Model 3		
	Job performance			In-role performance			Extra-role performance		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Gender	-0.15*	-0.06	-0.06	-0.16**	-0.08	-0.07	-0.11	-0.04	-0.03
Position	0.00	0.09	0.09	0.03	0.11	0.11	-0.04	0.05	0.06
Marital Status	-0.08	-0.03	-0.01	-0.08	-0.04	-0.02	-0.07	-0.01	0.01
Job tenure		0.14*	-0.36		0.11	-0.27		0.14*	-0.39
Burnout		-0.24***	-0.15		-0.26***	-0.15		-0.19**	-0.12
Work engagement		0.21***	0.61***		0.16**	0.49**		0.22***	0.64***
Burnout×Job tenure			0.63*			0.49			0.68*
Burnout×Work engagement			-0.52*			-0.43			-0.54*
R <sup>2</sup>	0.03	0.18	0.20	0.03	0.16	0.17	0.02	0.16	0.18
Adjusted R <sup>2</sup>	0.02	0.17	0.18	0.02	0.14	0.15	0.01	0.14	0.16
F-value	3.25*	11.12***	9.44***	3.32*	9.53***	7.79***	2.48	9.13***	7.99***
R <sup>2</sup> change		0.15	0.02		0.13	0.01		0.13	0.02
F-value for R <sup>2</sup> change		8.42***	3.76*		15.27***	2.31		5.42***	4.01*

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . All coefficients reported are standardized betas.

In the final step, the interaction terms, that is, burnout × work engagement, and burnout × job tenure, account for a significant additional amount of variance in the variance of job performance after controlling the variance explained by background variables, burnout, work engagement and job tenure ( $\Delta R^2 = .02$ ,  $F$ -value= 9.44,  $p < .001$ ). The interaction between burnout and work engagement is negative and statistically significant ( $\beta = -0.52$ ,  $p < .05$ ), as predicted by H<sub>3</sub>. Model 1 of Table 2 shows results for testing H<sub>5</sub> by adding a two-way interaction between burnout and job tenure. The two-way interaction term is positive and statistically significant ( $\beta = 0.63$ ,  $p < .05$ ). Specifically, job tenure acts as a more powerful moderator on the relationship between burnout and job performance.

Figures 2 and 3 illustrate the results of the moderating effects in Model 1. Figure 2 displays the estimated burnout–performance relationships at low and high levels of work engagement. First, the values for high (one standard deviation above the mean) and low (one standard deviation below the mean) levels of burnout are calculated. Values for high and low levels of work engagement are then plotted using the top and bottom 30% sample mean. The results show that the effect of burnout on performance would vary in direction at different levels of work engagement. At a high level of work engagement, the line slopes sharply down. At a

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low level of work engagement, the slope is relatively flat, the burnout–performance line slopes slightly upward. Specifically, flight attendants with high levels of work engagement perform better when they have low levels of burnout than those with low levels of work engagement.

Figure 3 displays the interaction between burnout and job tenure with two lines, representing employees with less and more five years in their jobs. The results reveal that there is significant moderating effect of job tenure with regard to burnout. At either below or above five years of job tenure, burnout is negatively related to job performance. With more experience, the slope of the line is relatively flat: the higher the job tenure, the smaller the slope. Flight attendants who have high job tenure perform better when they have high levels of burnout than those who have low levels of job tenure.

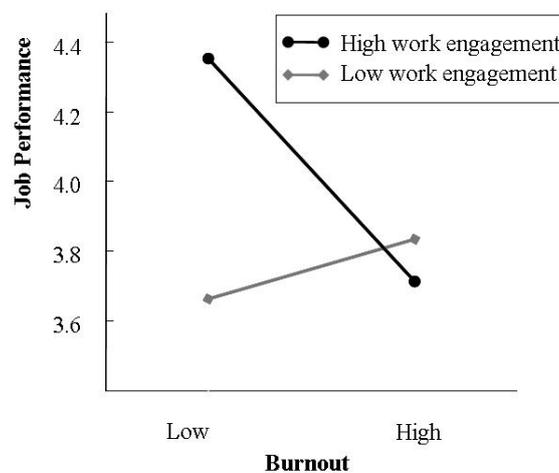


Figure 2 –Interaction between burnout and work engagement predicting job performance

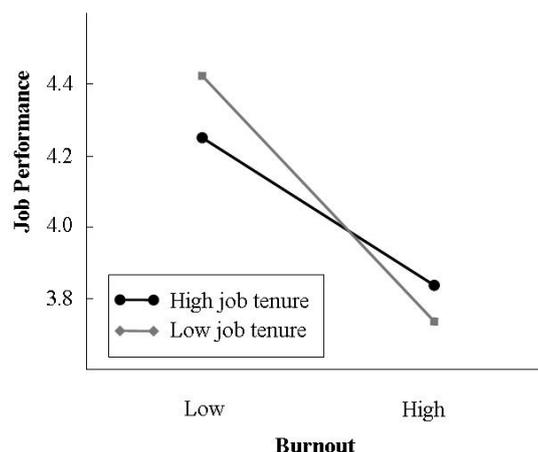


Figure 3 –Interaction between burnout and job tenure predicting job performance

*In-role and extra-role performance*

The majority of related studies focus on formal performance appraisals, and in order to consider the multidimensional perspective of performance, this study employs adequate

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measures to capture in-role and extra-role performance. The official behaviors are recognized as part of in-role performance, while the discretionary ones are extra-role performance. This study performs further checks on the results of job performance by estimating models with interaction terms between burnout, work engagement, and job tenure. This study also considers whether the effects of burnout, work engagement, and job tenure might differ systematically by gender, position, or marital status. The results for Models 2 and 3 distinguish between two types of job performance: in-role and extra-role performance.

In the Step 1 of Model 2, the background variables account for a significant amount of variance in in-role performance ( $R^2 = .03$ ,  $F = 3.32$ ,  $p < .05$ ), while gender has a negative and significant relationship with in-role performance ( $\beta = -0.16$ ,  $p < .01$ ). However, the effect of background variables on extra-role performance is not significant, as shown in the first step of Model 3.

In the second step of Model 2, except for job tenure (H4a), both burnout and work engagement are found to explain a significant additional variance in the variance of in-role performance after controlling the variance accounted for by background variables ( $\Delta R^2 = .13$ ,  $F\text{-value} = 9.53$ ,  $p < .001$ ). The results show that work engagement has a significantly positive effect on in-role performance ( $\beta = 0.16$ ,  $p < .01$ ), while burnout as the independent variable has negative effects on in-role performance ( $\beta = -0.26$ ,  $p < .001$ ), and thus H1a and H2a supported, respectively. Burnout appears to have a larger impact on in-role performance in terms of the regression coefficients.

In the second step of Model 3, burnout, work engagement and job tenure are found to explain a significant additional variance in the variance of extra-role performance after controlling the variance accounted for by background variables ( $\Delta R^2 = .13$ ,  $F\text{-value} = 9.13$ ,  $p < .001$ ). The results of the second step in Model 3 show that job tenure ( $\beta = 0.14$ ,  $p < .05$ ) and work engagement ( $\beta = 0.22$ ,  $p < .001$ ) positively affect extra-role performance, while burnout has a significant negatively effect on extra-role performance ( $\beta = -0.19$ ,  $p < .01$ ), thus supporting H1b, H2b and H4b. The results reveal that work engagement has greater predictive power in explaining extra-role performance than burnout.

As shown in Step 3 of Model 2, the two interaction terms, that is, burnout  $\times$  work engagement, and burnout  $\times$  job tenure, are not significantly related to in-role performance (H3a and H5a). In contrast, in the final step of Model 3, the two interaction terms (i.e. burnout  $\times$  work engagement term and burnout  $\times$  job tenure term) account for a significant additional amount of variance in the variance of job performance after controlling the variance explained by the background variables, namely burnout, work engagement and job tenure ( $\Delta R^2 = .02$ ,  $F\text{-value} = 7.99$ ,  $p < .001$ ). The interaction between burnout and work engagement is negative and statistically significant ( $\beta = -0.54$ ,  $p < .05$ ), while the two-way interaction between burnout and job tenure is positive and statistically significant ( $\beta = 0.68$ ,  $p < .05$ ), indicating that H3b and H5b are supported.

In sum, Table 2 reveals results for extra-role performance that are generally consistent with those reported for job performance in the second and third steps. More specifically, the

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positive main effect of job tenure on performance is not significant when in-role performance is the dependent variable ( $\beta = 0.11, p > .05$ ), but is significant when performance is measured by extra-role performance ( $\beta = 0.14, p < .05$ ). The effect of the two-way interaction between burnout  $\times$  work engagement, and burnout  $\times$  job tenure on extra-role performance is statistically significant at conventional levels ( $\beta = -0.54, p < .05$ ;  $\beta = 0.68, p < .05$ ), unlike the effect on in-role performance.

## **DISCUSSION AND CONCLUSION**

This study considers whether the effects of burnout on job performance depend on employees' levels of work engagement and on workers' experience in their jobs. The findings of this study provide additional support for the validity of these relationships, particularly in the airline industry. Moreover, this study focused on the moderating effects of job tenure and work engagement on job performance among flight attendants. The findings confirm that the relationships between burnout and job performance are moderated through job tenure and work engagement. The results also prove that the positive main effects of job tenure and work engagement are significant with regard to job performance, while burnout as the independent variable has negative effects on job performance. On the whole, the proposed models in this study are well supported by the empirical evidence, and the five process hypotheses are confirmed, which can thus serve as useful references for the development of burnout and work engagement management policies to improve employee performance.

This study examines whether flight attendants who are energetically engaged with their work perform more effectively. The findings reveal that the work engagement of employees is positively associated with their performance. Work engagement is also found to negatively moderate the burnout-performance relationship. When they have low burnout, flight attendants with high work engagement appear to have excellent performance compared to those with low work engagement. However, employees who have high work engagement begin to decrease performance if they are starting to feel burnout. These findings imply that feeling of burnout leads to sharply reduced performance of flight attendants with high work engagement, although increasing burnout could slightly improve the job performance of those with low work engagement. High employee burnout is costly for airlines, as it can reduce the benefits associated with high work engagement, which may lead to negative work-related outcomes, such as low job performance (Babakus et al., 2009). Therefore, managers should consider the stress management of flight attendants, and encourage such staff to accept more training on how to deal with stress. Regarding the maintaining and promotion of work engagement, job resources such as supervisor and colleague support, as well as performance feedback, contribute to increasing work engagement (Bakker & Demerouti, 2008; Bakker et al., 2008).

The results indicate that more experienced employees perform better than those new to airline service work. Furthermore, job tenure is found to positively moderate the burnout-performance relationship. The findings regarding the moderating effect of job tenure in a low burnout condition are noteworthy. Instead of improving performance, low levels of burnout

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have a surprisingly negative effect among flight attendants with longer job tenure. However, higher performance occurs among flight attendants who are more experienced in their jobs when they have high levels of burnout. In other words, flight attendants with longer job tenure resist burnout better, and thus have relatively high levels of job performance, as they are able to channel any stress they feel more effectively into improving their performance (Hunter & Thatcher, 2007). Therefore, managers should more provide support in order to retain senior members of the cabin crew, and this can be done by pursuing pro-active personnel planning and encouraging teamwork and openness among co-workers, as well as providing opportunities for training and career development (Schaufeli & Bakker, 2004).

These findings reinforce the importance of distinguishing indicators of two types of performance: in-role and extra-role performance. This research reveals that the moderating effects of the burnout × job tenure term and the burnout × work engagement term have significantly influences on extra-role performance, while the two interaction terms have no significant effects on in-role performance. The results imply that job tenure and work engagement could also improve the impact of burnout on organizational citizenship behavior. However, burnout may impact in-role performance through the moderation of other variables, such as affective organizational commitment (Hunter & Thatcher, 2007). With respect to new and highly committed employees, managers could focus on preventing burnout via such efforts as encouraging and practicing good communication channels, and informing such staff of the clear scope of their responsibilities, workload, and evaluation criteria. Such behaviors could lead quickly to high self- or supervisor-ratings, but would likely not be quickly reflected in official performance measures, such as in-role performance.

Several limitations of this work provide research directions for further studies. Male respondents' self-rated performance seems to be higher than that of the female respondents, but only a minority of the overall respondents were male. Deeper insights into the influences of gender (or other individual socio-economic variables) on job performance are therefore suggested to be explored in future research. Although job performance is differentiated into two components, the self-reported assessment of performance may cause a bias in this study. Access to objective, comparable measures of individual employee performance thus deserves further research efforts. In addition, this study addressed concerns about the relationships between burnout and these research variables only when the survey was administered, but repeated measures of burnout would provide more insights into the extent to which these phenomena are themselves affected by job performance. Maslach and Goldberg (1998) claimed that creating a better fit between the individual and the job contributes to prevent burnout. Whereas this study is limited to the moderating roles of individual variables, future research could focus on the interaction between burnout and organizational characteristic variables.

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