

BURNOUT AND WORK ENGAGEMENT AMONG TAIWANESE FLIGHT ATTENDANTS: THE APPLICATION OF JOB DEMANDS-RESOURCES MODEL

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ABSTRACT

This study investigates the relationships between antecedents and consequences of flight attendant's burnout and work engagement using a sample of 305 Taiwanese flight attendants. The Job Demands-Resources (JD-R) model is applied to construct the antecedents while flight attendant's health problems and turnover intention are chosen as the consequences. The results reveal that job demands positively relate to burnout while job resources positively relate to work engagement but negatively relate to burnout. In addition, burnout is detrimental to health, which directly induces turnover intention. However, elevating the levels of work engagement efficaciously reduces flight attendant's turnover intention.

Keywords: Job Demands-Resources model, Burnout, Work engagement, Health, Turnover intention, Flight attendants

1. Introduction

Flight attendants have more responsibilities than most front-line employees in service industry since they are first trained to guard cabin safety, and second to provide customer service on board. The occupation of flight attendant is well known as a prototype of emotional work (Hochschild, 1983). During flights, averagely one flight attendant has to serve 15 to 20 passengers. The job demands, including dealing with demanding or

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aggressive passengers, long working hours in a confined space with low relative humidity, and exposure to certain levels of contaminants, often lead to flight attendant's job stress. Commonly, cabin crew suffers from physical illness and mental exhaustion due to jet lag and a tight work schedule which changes frequently. Due to their shift-work schedule, flight attendants are often unable to maintain daily family and social lives for periods of time and confronting the conflicts between work and family. The work-family conflicts furthermore cause increased work-related stress and in turn burnout for flight attendants (Chang and Chiu, 2009). Past studies have recognized the significant impacts of work-family conflict on burnout (e.g., Rupert et al., 2009; Jarrod, 2006; Burke & Greenglass, 2001).

The Job Demands-Resources model proposes that job demands and job resources initiate two psychological processes that impact organizational outcomes (Bakker & Demerouti, 2007; Demerouti et al., 2001). It has been applied to various professions, including home care organizations staff (Bakker et al., 2003), teachers (Hakanen et al., 2006) and flight attendants (Xanthopoulou et al., 2008). However, the studies on cabin attendants have focused only on European cabin crew. The current study thus employs the JD-R model to analyze Asian flight attendants' vocational behaviours, particularly the ones in Taiwan. Cabin crew position remains highly competitive in Taiwan, for young people consider it as the precious opportunities to travel worldwide to broaden the horizons and elevate their socioeconomic status. Nevertheless, comparing to European airlines, the much more rigid work requirements and airlines policies often raise intangible workload to Taiwanese flight attendants. How Taiwanese cabin crew copes with the job related psychological processes may provide an interesting viewpoint to interpret organizational behaviours. The results reveal the potential cultural differences between western and eastern cabin crew in this paper.

The sophistication of the duties performed by cabin crew demands both airlines and cabin crew to invest considerable time and money in on-the-ground and on-the-job training. A high turnover rate of cabin crews is costly for airlines and employees alike. To reduce the turnover rate, research into potential causes and feasible remedies is required. Epstein (1994) and Saks (2006) claim that burnout positively relates to employees' health problem and turnover rate, yet work engagement negatively relates to both. Based on the previous literatures, this paper forms the structure between possible antecedents and outcomes of burnout and work engagement among Taiwanese flight attendants. The relationships among the selected variables are well discussed in the paper.

2. LITERATURE REVIEW

2.1 Burnout and work engagement

Burnout and work engagement have been well-discussed as practical measures of the psychological well-beings of employees among service-oriented industries. Burnout is defined as "the extinction of motivation or incentive, especially where one's devotion to a cause or relationship fails to produce the desired results" (Freudenberger, 1974 ; 1980). Most contemporary research describes burnout as a reaction to chronic occupational stress

characterized by emotional exhaustion, cynicism, and reduced personal accomplishment (Maslach et al., 1996; González-Romá et al., 2006). Emotional exhaustion refers to feelings of energy depletion and describes mental, physical, and emotional tiredness. Cynicism is characterized by the development of impersonal, indifferent attitudes toward the receivers of one's services under a certain amount of emotional labour. Reduced personal accomplishment describes the feelings of incompetence and lack of achievement at work. In particular, emotional exhaustion and cynicism (or depersonalization) are considered the core dimensions of burnout (Green et al., 1991; Heuven & Bakker, 2003). Because of the highly emotionally, mentally, and physically demanding nature of flight attendants' duties, emotional exhaustion and cynicism are deemed as good indicators of burnout. Flight attendant's burnout has been associated with a variety of negative outcomes, both personally and organizationally, such as depression, irritability, greater conflict at work, stress related health problems, and reduced organizational commitment (Maslach et al., 2001).

Work engagement, on the other hand, represents the result of positive psychological processes. It can be understood as optimistic feelings and fulfilment from work. Work engagement is characterized by vigour, dedication, and absorption (Schaufeli et al., 2002). Vigour refers to high levels of energy and mental flexibility while working, especially in the face of difficulties. An individual with dedication will always engage in work with enthusiasm and pride. Absorption describes the condition of full concentration and happy immersion in one's work, as well as feelings of difficulty detaching oneself from work as time goes by. Vigour and dedication are considered as two core dimensions of work engagement (Schaufeli & Bakker, 2004).

Past studies have found that a high level of work engagement is related to better job performance, higher organizational commitment, lower absenteeism, and lower turnover rates (Salanova et al., 2005; Bakker et al., 2006; Schaufeli & Salanova, 2007). Maslach & Leiter (1997) assessed work engagement by the opposite pattern of scores on the three burnout dimensions, while Diener (1999) regards burnout and engagement as two independent yet negatively correlated states of mind. In this paper, burnout and work engagement are adopted as two opposite mediators to turnover intention.

2.2 The Job Demands-Resources model

Following the Job Demand-Control (JD-C) model (Karasek, 1998), the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007; Demerouti et al., 2001) assumes that every work environment has unique job demands and resources. Job demands refer to the physical, social, or organizational aspects of a job that require sustained physical or mental effort and are therefore associated with certain physiological or psychological costs. Job resources refer to the physical, psychological, social, or organizational aspects of a job that (a) reduce job demands and the associated physiological and psychological costs; (b) achieve work goals, and/or (c) stimulate personal growth, learning and development.

The JD-R model addresses two relatively independent processes: the health impairment process and the motivational process. In the Job Demands-Resources model, the presence of job demands and absence of job resources relate to burnout through a

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psychological energetic process, whereas the presence of job resources is associated with work engagement through a motivational process (Van den Broeck et. al., 2008). People usually feel tired from daily work activities, but inner energetic resources may counteract the negative inclination under normal conditions. However, if a structural mental discrepancy has already led to fatigue, extra energy has to be mobilized through mental effort in order to maintain task performance (Gaillard, 2001). It is crucial that timely compensation must be made, or this may in turn lead to chronic effects on health and well-being (Frankenhaeuser & Johansson, 1986). In the current study, which explores the possible consequences of burnout and work engagement, cabin crews' health problems (both mental and physical) and turnover intention are linked to a model for integrating the two psychological processes. A complete work-related structure was thus created to gain insights into the interrelatedness of all aspects of the hypothetical model in this study.

2.3 The predictors of burnout and work engagement

To review the job characteristics of flight attendants (Xanthopoulou et al., 2008; Chen, 2006; Williams, 2003), one specific job demand (work-family conflict) and two job resources (possibility for development and social support) are examined in this paper as possible antecedents of burnout and work engagement.

2.3.1 Work-family conflict

Geruts et al. (1999) proposed that work-family conflict is an incompatibility of work and family roles resulting in stress. The peculiar work schedule of flight attendants inevitably becomes a significant cause of inter-role conflict between work demands and family obligations. The level of work-family conflict indeed relates closely to flight attendants' vocational behaviour, and consequently impacts organizational performance.

Since the overwhelming majority of flight attendants in Taiwan are females (as in other Asian countries), the role pressures of women employees in Asia must be taken into consideration. Traditional Asian culture considers the family to be more important than the individual (Markus and Kitayama, 1991). Cultural values also encourage females to engage in household duties, such as housekeeping and childcare (Lo et al., 2003). A working mother therefore has to negotiate with job and family obligations at all times. Single flight attendants also suffer from the inability to attend family or social activities that caused by their abnormal working hours. Cabin crews' monthly schedules are usually distributed at the end of the each month, but are subject to change without notice. Because of the shift-work schedule, flight attendants may be burdened by the imbalance between their work and family, or social, lives.

Ballard et al. (2006) studied Italian female flight attendants and found that reporting health as fair to poor was associated with low job satisfaction. Reducing conflicts between work and private life and minimizing job stress may enhance job satisfaction. Work-family conflict has been proven to affect psychological and physical health in various ways. Increased work-family conflict is related to increased job burnout (Greenglass & Burke, 1988). Frone et al. (1997) found that higher work-family conflict was related to increased job and family distress. Regarding organizational behaviour issues, studies also supported that

turnover intention was the most highly related work-related variable to work-family conflict (Haar, 2004; Allen et al., 2000).

Since the job characteristics of cabin attendants tend to increase the level of work-family conflict, it is chosen as the primary job demand for predicting burnout among flight attendants in this study.

2.3.2 Social support and professional development

The motivational process of the JD-R model encompasses work-related resources at different levels. Autonomy, social support, opportunity for professional development, and feedback are among the commonly selected aspects to practice the researches. Some studies have proposed that enhancing social support may be an important step towards improving the well-being and satisfaction of flight attendants (MacDonald et al., 2003). Bakker et al. (2004) claimed that social support was not significantly correlated with job performance, whereas opportunities for professional development appeared to be the strongest correlate. However, Xanthopoulou et al. (2008) have presented multilevel data to confirm that colleague support enhances flight attendants' work engagement. Ballard et al. (2004) also argued that mutual support from colleagues is a positive attribute of flight attendants' jobs, as talking with colleagues about job related stresses helps to overcome difficult moments. Because of the distinctive job characteristics of flight attendants, such as working with a changing schedule and partners in a confined space without supplementary resources, support from supervisors and colleagues is thought to be one particularly important resource that helps to restore lost or threatened resources (Hobfoll, 1998).

Limited research has addressed the causality between professional development and cabin crew well being. This is partially because people usually think of a flight attendant's position as a temporary one that only lasts a couple of years because of the heavy physical and mental workload. However, an in-depth interview with 16 flight attendants, conducted prior to this study, revealed that professional development might be crucial to flight attendants' self-appraisal at work, especially for male cabin attendants. Ayala and Oreniva (2001) claimed that job burnout may arise from lack of feelings of accomplishment. Namely, the perception of insufficient professional development may contribute to burnout.

Alderfer (1972) proposes ERG (existence, relatedness, and growth) theory to discuss the three hierarchical levels of psychological needs. It argues that different levels of needs may be pursued simultaneously. While a higher level need remains unsatisfied, an individual may focus on lower level needs that are easier to fill. This is known as the frustration-regression principle. Flight attendants with low satisfaction for relatedness and growth may still retain the job to meet the lower level needs. Nevertheless, their work engagement and performance are in doubt. Social support and professional development, as inherent motivators of job resources, not only fulfil basic human needs such as belongingness, but foster individuals' growth and development. Hence, professional development and social support have been assessed in this paper as the antecedents of work engagement.

After a literature review, the core concepts of the JD-R model used to create a model of eight hypotheses as follows (see Fig. 1):

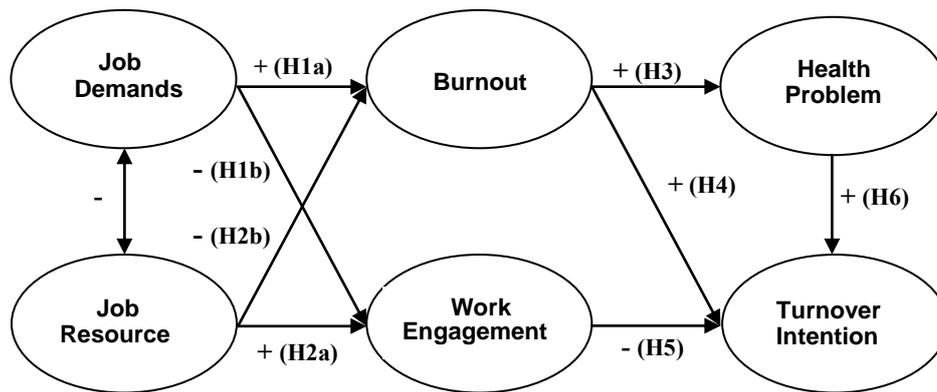


Figure 1 –The hypothesized Job Demands-Resources model

Hypothesis1a : Job demands are positively related to burnout.

Hypothesis1b : Job demands are negatively related to work engagement.

Hypothesis2a : Job resources are positively related to work engagement.

Hypothesis2b : Job resources are negatively related to burnout.

Hypothesis3 : Burnout is positively related to health problem.

Hypothesis4 : Burnout is positively related to turnover intention.

Hypothesis5 : Work engagement is negatively related to turnover intention.

Hypothesis6 : Health problem is positively related to turnover intention.

3. METHODS

3.1 Participants and procedure

Flight attendants working for five international airlines in Taiwan have been invited to fill out the questionnaire with 42 items in total. Giving a response rate of 87%, the valid samples of the study included 305 participants.

The self-administrated questionnaires were distributed and collected on board through acquainted flight attendants by using the snowball sampling technique. As concerning flight attendants' shifted working schedule and difficulties to be accessed, snowball sampling is deemed adequate the efficient method to reach the prospective respondents and enhance the willingness of participation. Data were collected during the period of three months from October to December, 2009.

The sample included 89.5% of females. Mostly their age ranged from 26 to 35. Respondents' years of tenure mainly fell into the ranges of 1 to 5 years and 11 to 15 years. 69.8 % of the sample had a position as flight attendant. 54.8% of the respondents were single and 66.2% of the respondents had no children. The major range of flight time within the last three months was between 81 and 100 hours.

3.2 Measures

Each of the following measures was constructed for participants responding to their flight attendant job conditions.

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Work-Family Conflict was assessed with four items developed by Bacharach et al. (1991) to study the work-home conflict among nurses and engineers. The reliability of coefficient was reported of 0.77. As flight attendants share similar job requirements with nurses, the scale is practicable to measure the level of WFC for flight attendants. However, the slight adjustment has been made on the description to further match the work characteristics of flight attendants. Exemplary item is: "The time spending at work detracts me from family or social life".

Professional Development and social support were respectively assessed with four items based on the Copenhagen psychosocial questionnaire, version I (COPSOQ-1), an instrument developed for the comprehensive assessment of psychosocial working conditions (Aust et al., 2007). The COPSOQ-1 has been validated in a representative sample of the Danish workforce (Kristensen et al., 2005) and translated into several languages. The original interrogative sentences were rephrased to positive sentences to make the format consistent. Exemplary items of professional development are: "My work is varied", and "I have the possibility of learning new things through my work". Social support dimension include supervisor's support and colleagues' support aspects. Respondents were asked, e.g., "My colleagues are willing to listen to my work related problems", and "I can get help and support from my immediate superior". The reported Cronbach's alpha values were 0.75 and 0.74, respectively.

Burnout: The Maslach Burnout Inventory (MBI) has been developed as a measure of burnout (Schaufeli et al. 1996) and so far it is the most used instrument. The Exhaustion and Cynicism subscales of MBI were adapted in the study to assess burnout among flight attendants. The Exhaustion subscale consists of five items. An example is: "I feel tired when I get up in the morning and have to face another day on the job" (reported Cronbach's alpha = 0.86). The Cynicism subscale includes five items, such as "I have become less enthusiastic about my flight attendant work" (reported Cronbach's alpha = 0.81).

Work Engagement. The two subscales of Utrecht Work Engagement Scale (UWES; Schaufeli et al. 2006) were used to assess respondents' experiences of work engagement. The cross-national validity, reliability and stability of the UWES have been confirmed by several studies. The Vigour scale comprises three items (e.g., at my work, I feel bursting with energy). Cronbach's alpha of the scale varied across countries between 0.60 and 0.88 (median = 0.77). The Dedication scale also consists of three items (e.g., I am proud of the work that I do.). Cronbach's alpha of the scale varied between 0.75 and 0.90 (median = 0.85).

Health problem: General health and mental health were assessed in the study, respectively. General health adopted six items of Occupational Stress Indicator (OSI, Cooper et al., 1988) to indicate the physical well-being of flight attendants within the last three months. An example item is: "Feeling unaccountably tired or exhausted". The Cronbach's alpha was reported of 0.82. Besides, mental health was assessed with five items of COPSOQ-1 scale. Questions include "I have often felt downhearted and blue during the last three months". The reported Cronbach's alpha was 0.80.

Turnover Intention was measured with three items scale adapted from Mitchel (1981) and Good et al. (1996), including "I plan to continuously work as a flight attendant for the next three to five years". A good reliability over 0.80 for this scale was reported.

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All items in the questionnaire were measured with a 5-point Likert scale ranging from 1 = "strongly disagree" to 5 = "strongly agree".

3.3 Strategy of analyses

To test the hypotheses model of the current paper, structural equation modelling (SEM) analyses were performed by using LISREL 8.52 computer program (Jöreskog and Sörbom, 2002). Maximum likelihood parameter estimates were used and the covariance matrix of the items was the input for the analysis. The internal consistencies of all variables were first examined with the Cronbach's alpha values. A confirmatory factor analysis (CFA) was followed to verify the factor structure of all observed variables.

The structural equation model among the latent constructs was then examined to test the hypotheses model. The fit of the models to the data was assessed with the chi-square (χ^2) statistic, the goodness-of-fit index (GFI) and the root mean square error of approximation (RMSEA). Further, three fit indices which are less sensitive to sample size were used : the incremental fit index (IFI), the comparative fit index (CFI) and the non-normed fit index (NNFI). In general, model with these fit indices which values of .90 or higher and an RMSEA value lower than .80 is acceptable (Kline, 1998).

4. RESULTS

4.1 Sample analysis

Both the reliability and validity of the measures were assessed in this study. The reliability assessments were conducted by using the Cronbach's alpha. The scales showed good reliabilities with satisfying the criterion of .70.

In professional development aspect, gender shows the significance (Men, mean = 3.67; Women, mean = 3.55; $t(-.91) = p < .05$). Meanwhile, pursers also show higher levels of professional development than flight attendants (Pursers, mean = 3.77; FA, mean = 3.51; $F(3.30) = p < .05$). Interestingly, the perception of burnout diminishes with the increase of tenure (tenure of more than 21 years, mean = 2.19; tenure of less than one year, mean = 3.0; $F(7.24) = p < .01$). Means, standard deviations, and internal consistencies (Cronbach's alpha values) of the observable variables are presented in Table 1.

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Table 1 – Descriptive statistics and Cronbach's α (N = 305)

Constructs	Mean	S.D.	Cronbach's α
Work-Family Conflict (WFC)	3.34	0.67	0.76
Professional Development (PD)	3.57	0.64	0.80
Social Support (SS)	3.39	0.60	0.72
Exhaustion (EXH)	2.78	0.75	0.90
Cynicism (CYN)	2.69	0.74	0.88
Vigour (WEV)	3.11	0.70	0.83
Dedication (WED)	3.42	0.65	0.79
General Health (GH)	2.89	0.73	0.89
Mental Health (MH)	2.67	0.56	0.76
Turnover Intention (TI)	2.75	0.69	0.70

4.2 Measurement model

Table 2 presents the correlations among variables. According to Hair et al. (2006), the convergent validity of CFA results have to be supported by item reliability, construct reliability and average variance extracted. Items with the factor loading lower than 0.5 should be deleted to fit the validity requirement. Three items thus were removed from the scale.

Table 2 – Correlations among variables

	WFC1	WFC2	PD	SS	EXH	CYN	WEV	WED	GH	MH	TI
WFC1	1										
WFC2	.76**	1									
PD	-.07	-.05	1								
SS	-.22**	-.13*	.47**	1							
EXH	.44**	.45**	-.16**	-.19**	1						
CYN	.27**	.25**	-.28**	-.24**	.71**	1					
WEV	-.14*	-.12*	.43**	-.34**	-.29**	-.43**	1				
WED	-.15**	-.13*	.47**	-.39**	-.28**	-.42**	.68**	1			
GH	.28**	.31**	-.05	-.11	.58**	.53**	-.30**	-.21**	1		
MH	.22**	.26**	-.04	-.12*	.51**	.49**	-.24**	-.24**	.74**	1	
TI	.12*	.15**	-.34**	-.28**	.42**	.45**	-.48**	-.48**	.39**	.37**	1

Note. ; WFC, work family conflict ; PD, professional development ; SS, social support ; EXH, emotional exhaustion ; CYN, cynicism ; WEV, vigour ; WED, dedication ; GH, general health ; MH, mental health ; TI, turnover intention.

* $p < .05$

** $p < .01$

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Table 3 – Convergent validity

Constructs	Items	Item reliability			Construct reliability	Average variance extracted
		Standardized Factor loadings	Standard errors	t-Value		
Job Demands	WFC1	0.88	0.07	15.04**	0.87	0.77
	WFC2	0.87	0.07	14.78**		
Job Resources	PD	0.76	0.07	11.76**	0.64	0.48
	SS	0.61	0.07	9.86**		
Burnout	EXH	0.88	0.04	17.79**	0.83	0.69
	CYN	0.81	0.04	16.02**		
Work Engagement	WEV	0.81	0.05	15.26**	0.81	0.68
	WED	0.84	0.05	16.01**		
Health Problem	GH	0.91	0.05	18.01**	0.85	0.74
	MH	0.81	0.05	15.62**		
Turnover Intention	TI	1	—	24.66**	—	—

Note. ** denotes $p < .01$

Table 3 shows the data of t - values, which are found significant ($p < 0.01$). In addition, the construct reliability estimates ranging from 0.64 to 0.85, which exceed the critical value of 0.6, as suggested by Fornell and Bookstein (1982). The average extracted variances of all constructs range between 0.48 and 0.77. All the constructs, except for Job resources, are above the value of 0.5 which was suggested by Fornell and Larcker (1981). These results represent that the measurement items have been consented with the reliability and validity.

Discriminant validity which is assessed by comparing the construct correlations with the square root of the average variance extracted (Fornell & Larcker, 1981), was also conducted in this study. The results data shown in Table 4 indicate that the square root of the average variance extracted for each construct is greater than the levels of the correlations involving the construct. Therefore, the discriminant validity is confirmed.

Table 4 – Discriminant validity

Constructs	JD	JR	BO	WE	HP	TI
JD	0.88					
JR	-0.14	0.69				
BO	0.41	-0.27	0.83			
WE	-0.16	0.52	-0.42	0.82		
HP	0.31	-0.10	0.61	-0.29	0.86	
TI	0.14	-0.36	0.47	-0.52	0.41	—

Note. JD, Job Demands ; JR, Job Resources ; BO, Burnout ; WE, Work engagement ; HP, Health problem ; TI, Turnover intention. Square root of average variance extracted (VE) is shown on the diagonal of the matrix

4.3 Structural model

In this paper, the structural model is estimated with a maximum likelihood estimation method and a correlation matrix as input data. The fit indices of the structural model are summarized in Table 5. Comparing the results data with the corresponding critical values, it suggests that the hypothesized model fits the empirical data well.

Table 5 – Goodness of fit

	Criteria	Indicators
χ^2 test		
χ^2	$p > 0.05$	99.26 ($p < 0.001$)
$\chi^2/d.f.$	< 5	2.76 (99.26/36)
Fit indices		
GFI	> 0.90	0.94
AGFI	> 0.90	0.90
RFI	> 0.90	0.93
NFI	> 0.90	0.96
NNFI	> 0.90	0.95
Alternative indices		
CFI	> 0.95	0.97
RMSEA	< 0.08	0.07
RMR	< 0.05	0.05

Fig.2 depicts the results of SEM analysis. $\chi^2 = 99.26(p = 0.0)$, $df = 36$, $\chi^2/df = 2.76$, $GFI = 0.94$, $AGFI = 0.90$, $NFI = 0.96$, $RMR = 0.05$, and $RMSEA = 0.07$. The estimates of the structural coefficients indicate a good fit for the proposed hypotheses.

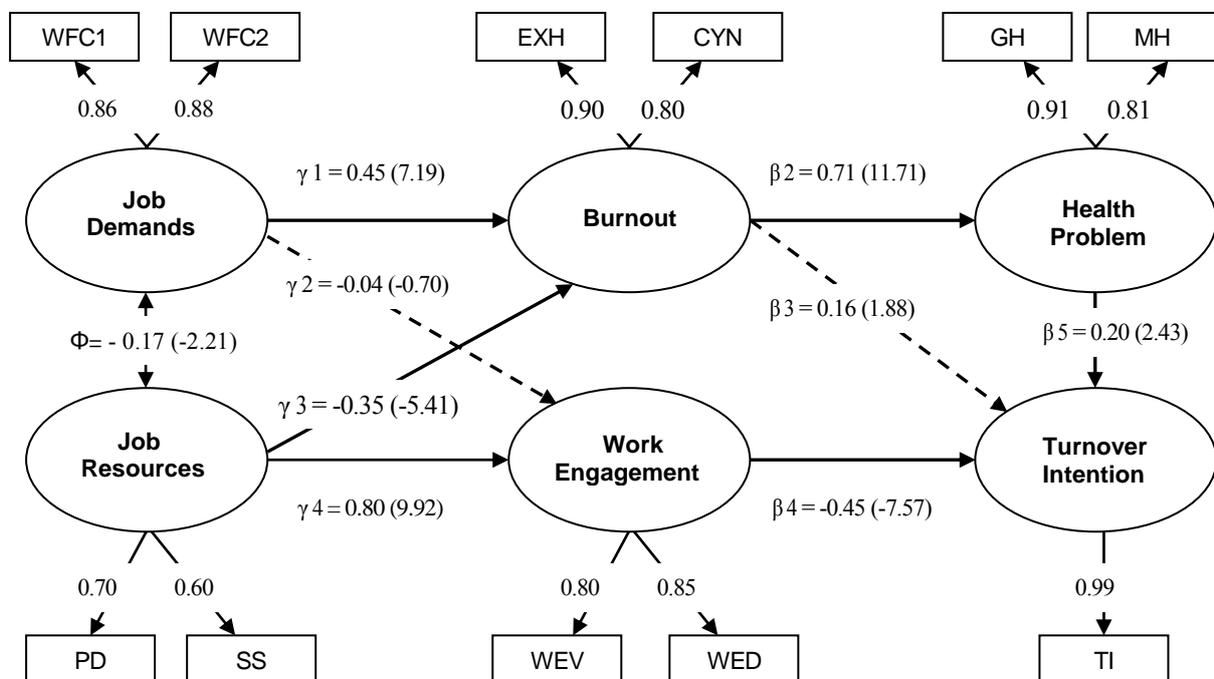


Figure 2. Estimated results of the model

Note. The values in the parentheses are t-values. Solid lines denote significance at the 5% level, while dashed lines denote insignificance.

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Table 6 provides the results of testing the hypotheses. Totally, six out of eight hypotheses are supported. Job demands show significantly positive effect on burnout ($\gamma 1 = 0.45$, t -value = 7.19), but the negative effect on work engagement is not found to have significance ($\gamma 2 = -0.04$, t -value = -0.70). Thus, H1a is supported but H1b is rejected. Job resources, on the other hand, have a significantly positive effect on work engagement ($\gamma 4 = 0.80$, t -value = 9.92), and negative effect on burnout. ($\gamma 3 = -0.35$, t -value = -5.41). Therefore, H2a and H2b are both supported. Burnout has a significantly positive effect on health problem ($\beta 1 = 0.71$, t -value = 11.71), but not showing significantly positive effect on turnover intention ($\beta 2 = 0.16$, t -value = 1.88). H3 thus is supported and H4 is rejected. Work engagement shows a significantly negative effect on turnover intention ($\beta 3 = -0.45$, t -value = -7.57) while health problem has a significantly positive effect on it ($\beta 4 = 0.20$, t -value = 2.43). Hence, both of H5 and H6 are supported.

Table 6 – Hypotheses tests

Path	Estimates	t - value	Test results
H1a : Job Demands → Burnout	0.45	7.19**	Supported
H1b : Job Demands → Work Engagement	- 0.04	- 0.70	Not Supported
H2a : Job Resources → Burnout	- 0.35	- 5.41**	Supported
H2b : Job Resources → Work Engagement	0.80	9.92**	Supported
H3 : Burnout → Health Problem	0.71	11.71**	Supported
H4 : Burnout → Turnover Intention	0.16	1.88	Not Supported
H5 : Work Engagement → Turnover Intention	- 0.45	- 7.57**	Supported
H6 : Health Problem → Turnover Intention	0.20	2.43**	Supported

5. DISCUSSION AND CONCLUSIONS

The principal aim of this study is to apply the Job Demands-Resources model to study the possible antecedences and consequences of burnout and work engagement among Taiwanese flight attendants. As the empirical results indicate the significances of both psychological processes, JD- R model is proved to be well-fitted with the study of Taiwanese flight attendants' vocational related well-beings. Job demands are positively related to burnout and job resources are positively related to work engagement, respectively. Meanwhile, sufficient job resources may buffer the perceptions of burnout. Unequivocally, high level of burnout will aggravate flight attendants' health problem and the latter one may directly cause turnover intention. Work engagement, on the other hand, was capable of alleviating turnover intention. This finding is consistent with Schaufeli & Bakker (2004).

Regarding the possible antecedences of work engagement, both professional development and social support have been proved to be highly predictive. In order to elevate cabin crew's work engagement, sufficient job resources (e.g., professional development and social support) are requisite. The selected antecedence of burnout, work-family conflict, has also been proved to be a significant predictor. In addition, the results of current paper have confirmed that burnout is adverse to health condition. Consequently, the higher level of the

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health problem is detected, the higher turnover intention is induced. However, enhancing work engagement would be the efficacious way to diminish turnover intention.

One hypotheses path didn't show significance is between burnout and turnover intention, though it is positively related. The weak correlation between burnout and turnover intention indicates that the psychological process is very complex. However, while the translation between burnout and health problems emerges, turnover intention will be significantly predicted. This result doesn't replicate the finding by Schaufeli & Bakker (2004), but is consistent with Weisberg (1994). His study identified that emotional exhaustion is not significantly related to turnover intention, yet physical and mental ones are found of significance. The qualitative research conducted by Chang (2008) also provided circumstantial evidences to support the present findings. Certain reasons for which flight attendants stay at the current position, include the conspicuous vocational image of flying job, unwillingness to practice other occupations with lower salary and insufficient confidence on personal expertise. Burnout syndromes do not alter their determination to continuously perform cabin service duty. However, as Maslach and Goldberg (1998) suggested, employees suffering from burnout may remain in the job, but only get the necessary tasks done without devoting the best efforts.

This could be a cogent message for the managerial implication. Asian airlines are accustomed to advertise young flight attendants with outstanding appearance and smile to create the appealing image of delicate and pleasant cabin service. The importance of senior crew thus tends to be underestimated. Nevertheless, experience is invaluable to the sophisticated cabin work while dealing with various service and emergency situations. With the ability of balancing job demands and personal psychological status, senior flight attendants perceive much lower burnout than young ones. Airlines should recognize the values of experienced crew members and encourage the translation of experiences with concrete approaches.

There are a number of limitations in the present study. First, the results data relied exclusively on self-report questionnaire, which may encounter common method bias (Podsakoff et al., 2003). However, the use of person-centred variables (Sonnetag & Natter, 2004) and the confirmation from the in-depth interview may allow the conclusion that the study findings can not utterly ascribed to the use of self-report data. To eliminate the problematic concerns, longitudinal studies or diary studies may be conducted in the future to further validate the findings. Moreover, with the vocational behaviour related issues gaining more and more attention, working with HR departments to design organization-oriented measurement by using the objective files or records may enhance the practical values of the related studies. Second, the characteristics of job demands and job resources included in the paper were limited. Future researches may expand the dimensions of variables to broaden the potential of JD-R model in predicting the antecedents of burnout and work engagement among flight attendants.

This paper targets on Taiwanese flight attendants to study the possible antecedents and consequences of burnout and work engagement. The findings may provide airlines the references while establishing employment policies for extending flight attendants career lifetime to create a win-win situation. For future researches, comparison between western

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and eastern flight attendants may be a valuable contribution to expand the cross-cultural aspects.

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