

# LINKING CABIN CREW'S MOTIVATION TO SERVICE PERFORMANCE: THE MEDIATING ROLE OF AMBIDEXTROUS BEHAVIOR

Prae Sinanuwong<sup>1</sup>, Charoenchai Agmapisarn<sup>2</sup>, and Siriporn Khetjenkarn<sup>3,\*</sup>

## Abstract

This study aims to investigate the effect of two types of motivation (intrinsic and extrinsic motivations) on the ambidextrous behavior of cabin crew. Ambidextrous behavior refers to the capability of the cabin crew members to engage in and alternate between opposing activities (i.e., exploitation and exploration), leading to better service performance. Data were collected using a self-administered questionnaire disseminated to 569 cabin crew members working in commercial, Asia-based airlines. Results confirmed that both types of motivation were positively related to individuals' ambidexterity. Additionally, cabin crew members who pursue both exploration and exploitation activities in managing their time and resources, exhibit positive service performance. The mediating role of ambidextrous behavior was also supported. The benefits of this study can be used as a reference for the selection, training, and development, as well as the evaluation, of cabin crew members who must perform ambidextrous behavior to improve their service performance.

**Keywords:** Intrinsic motivation, Extrinsic motivation, Individual ambidexterity, Service performance

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<sup>1</sup> Ms. Prae Sinanuwong obtains a master's degree in Integrated Tourism and Hospitality Management from National Institute of Development Administration (NIDA), Thailand. Currently she is working as a personal assistant to CEO in King Power International Co., Ltd. in Thailand.

<sup>2</sup> Asst. Prof. Dr. Charoenchai Agmapisarn obtains a Ph.D. in Economics from the National Institute of Development Administration (NIDA), Thailand. Currently, he is working as a lecturer in the Graduate School of Tourism Management, National Institute of Development Administration.

<sup>3,\*</sup> Dr. Siriporn Khetjenkarn (Corresponding Author) obtains a Ph.D. in Integrated Tourism and Hospitality Management from National Institute of Development Administration (NIDA), Thailand. Currently she is working as a lecturer in the Tourism and Hotel Department, Faculty of Humanities and Social Sciences, Nakhon Pathom Rajabhat University Email: skhetjenkarn@gmail.com

## **1. INTRODUCTION**

The airline business has unique characteristics, especially regarding the interpersonal skills used in encounters between cabin crew and passengers during service delivery. Airlines should focus on a strategic operational process to effectively and efficiently compete with other airlines and achieve a sustainable competitive advantage (Heracleous & Wirtz, 2009). Many airlines offer excellent service to passengers in order to build-up their reputation; however, providing such service must be cost effective (Kao & Chen, 2016; Slevitch & Washburn, 2017). Cabin crew members simultaneously play a major role in providing hospitality to passengers and in satisfying themselves under their working conditions, both within a highly dynamic environment (Babbar & Koufteros, 2008; Kao & Chen, 2016; Slevitch & Washburn, 2017). Therefore, airlines must look for adaptive individuals who are able to perform various activities, satisfy passengers, and deliver outstanding service. Thus, cabin crew who can efficiently and effectively handle all aspects of their work can increase their service performance (Heracleous & Wirtz, 2009).

Ambidexterity in service organizations is a result of a dynamic process. It engages on both organizational and individual levels (Mom et al., 2007; Raisch et al., 2009). Raisch et al. (2009) stated that individual ambidextrous behavior is the ability of an individual to flexibly

allocate time in carrying out conflicting tasks of exploration and exploitation. Exploration activities focus on adaptability, variability, discovery, and innovation, while exploitation activities relate to alignment, creating reliability, selection, and efficiency (March, 1991). Many empirical studies have shown that individual ambidexterity positively affects employee performance in service organizations (Jasmand et al., 2012; Mom et al., 2007). However, the understanding of individual ambidexterity in the airline business is very limited. Pierro et al. (2006) found that motivation is an antecedent of ambidexterity and affects ambidextrous behavior. Considering both intrinsic and extrinsic motivations is important and has previously been found to be positively related to ambidextrous behavior and service performance (Ahammad et al., 2015; Kao & Chen, 2016; Ryan & Deci, 2000).

To a certain degree, airline businesses must create their best service quality to achieve passenger satisfaction and maintain a competitive advantage in the long-term (Heracleous & Wirtz, 2009; Kao & Chen, 2016). High service quality, which results from a comparison of passenger expectations with service performance, can increase the satisfaction level of passengers (Park & Jang, 2014). Thus, increasing satisfaction through excellent services may lead to repurchase intentions among passengers. As cabin crew are frontline employees in direct contact with passengers, they are expected to

exhibit excellent service performance in order to maintain passenger satisfaction under their working conditions (Babbar & Koufteros, 2008). To increase service performance, individual ambidexterity may become an important factor for cabin crew when performing their duties (Kao & Chen, 2016).

This study aims to examine the relationships between motivation, individual ambidexterity, and service performance, from the perspective of the cabin crew of commercial airlines based in Asia. This study benefits the airline industry and society by providing a reference point for the selection, training, and development, as well as evaluation of cabin crew members.

## **2. LITERATURE REVIEW**

### **2.1 Ambidexterity**

The term “**ambidexterity**” was first used by Duncan (1976) to describe the capability of an organization to both exploit existing resources and explore new opportunities (Hafkesbrink & Schroll, 2014). An organization which spends more time on exploration activities may enhance and renew its knowledge, but in so doing, the organization will suffer in terms of revenue, and may take risks in terms of investment, consequently losing opportunities. An organization which engages exclusively in exploitation activities can increase its short-term performance. However, the

organization may fail to deal with a changing environment in the long term and consequently risks obsolescence (Raisch & Birkinshaw, 2008). Balancing two types of activity, such as efficiency versus flexibility, or creativity versus cost leadership, is difficult and is considered as being ambidextrous (Gibson & Birkinshaw, 2004). An ambidextrous organization must have an appropriate balance between exploration and exploitation activities in order to respond to various environments (Jasmand et al., 2012). In addition, the ambidextrous ability present in individuals' behavior may contribute to the performance of exploitation and exploration activities on a company level (Bonesso et al., 2014). Heracleous and Wirtz (2009) stated that ambidexterity would be needed at both organizational and individual levels in the service industry.

Individual ambidextrous behavior is the ability of an individual to make decisions about balancing exploration activities, such as creating new ideas, products, and services, and exploitation activities focusing on utilizing existing resources and competencies in a dynamic environment (Gibson & Birkinshaw, 2004; Mom et al., 2009; Raisch et al., 2009).

### **2.2 Intrinsic Motivation – Extrinsic Motivation**

Previous studies have indicated that individuals can be motivated in many ways, while a high level of

motivation can affect individuals' behavior regarding their work performance and efficiency of finishing tasks (Valero & Hirschi, 2016). Mon et al. (2015) also noted that motivation is the foundation of an individual's ambidextrous behavior.

Herzberg's motivation-hygiene theory highlights the distinction between motivator and hygiene factors (Herzberg, 1987). Intrinsic motivation provides examples of motivator factors. When an employee does something because it is pleasurable, enjoyable, interesting, fun, or challenging, the action is done out of "intrinsic motivation." By contrast, hygiene factors require something between the activity and some separate consequences such as extrinsic rewards or avoiding a punishment. Hygiene factors can be considered as extrinsic motivation (Herzberg, 1987). Herzberg's motivation-hygiene theory was used as a classification of job-related factors for employee motivation in the service industry (Wong et al., 1999). This research develops hypotheses based on Herzberg's motivation-hygiene theory, using a structural model to show the relationship between the two types of motivation and individual ambidexterity, which in turn leads to improved service performance.

### **2.3 Relationship Between Intrinsic Motivation and Individual Ambidexterity**

*Intrinsic motivation* occurs when individuals perform activities in

relation to their competency in knowledge, experience, and feelings (Ryan & Deci, 2000). Kao and Chen (2016) confirmed that intrinsic motivation is positively related to individual ambidexterity. Herzberg's motivation-hygiene theory highlights the four components of intrinsic motivation: challenge, enjoyment, learning goal orientation, and empowerment. First, a challenge involves problem solving and task creativity. Second, enjoyment involves interesting activities at work which emphasize self-expression and self-entertainment (Leung et al., 2014). Third, learning goal orientation is important to individual ambidexterity in terms of gaining new knowledge and skills (Hirst et al., 2009). Individual ambidexterity involves the learning process regarding the conflicting tasks of exploration and exploitation (Kauppila & Tempelaar, 2016). Exploration involves the learning process of searching and developing new ideas, products, services, and skills; while exploitation involves the learning process of refining existing skills and routines (Gong et al., 2009). Lastly, empowerment must be developed in order to develop individuals' ability to make decisions regarding their competency to carry out conflicting tasks in the service industry (Lin, 2002).

These four components are involved in generating job satisfaction and are related to self-fulfillment. Individuals who are strongly intrinsically motivated may develop new services, exercise creativity, and

refine existing skills in their work (Amabile et al., 1994; Gong et al., 2009; Kauppila & Tempelaar, 2016). Thus, intrinsic motivation may cause individuals to engage in explorative and exploitative behaviors. Accordingly, the following hypothesis is proposed:

*Hypothesis 1 (H1): Intrinsic motivation is positively related to individual ambidexterity.*

## **2.4 Relationship Between Extrinsic Motivation and Individual Ambidexterity**

*Extrinsic motivation* prevents an individual from experiencing job dissatisfaction when the activities necessary to achieve the required goals are not interesting (Gagné & Deci, 2005; Herzberg, 1987). Herzberg's motivation-hygiene theory concentrates on three important components for extrinsic motivation: incentive and compensation, job security, and service climate. Incentives and compensation are effective motivating strategies for individuals, to prevent them from experiencing job dissatisfaction at work (Herzberg, 1987). Ahammad et al. (2015) also noted that incentives and compensation influence workers to perform individual ambidexterity in their service activities. Job security grants individuals future career expectations and other benefits in the organization (Kraimer et al., 2005). A job with highly perceived job security motivates individuals to react to various company policies. Individuals

who perceive job security will be committed and respond to situations by efficiently performing their work (Kraimer et al., 2005). Thus, job security is related to individuals' behavior and service performance (Ma et al., 2016). The service climate also affects individuals' attitudes and behavior (Yoon et al., 2001). The service climate refers to the policies, procedures, condition of service equipment, and interpersonal relationships among persons who work in the service industry (Schneider et al., 1998). Bonesso et al. (2014) noted that individuals who undertook training, enhancing their specialized knowledge, were more able to deal with conflicting tasks. Prior studies have shown that a strong service climate motivates individuals to perform well in their service activities and leads to excellent service performance (Jiang et al., 2016; Jung et al., 2017; Yeh, 2012).

These three components of extrinsic motivation also involve individual perception in the service business. Extrinsic motivation can affect individual ambidexterity. Thus, the following hypothesis is proposed:

*Hypothesis 2 (H2): Extrinsic motivation is positively related to individual ambidexterity.*

## **2.5 Relationship Among Intrinsic Motivation, Extrinsic Motivation, Individual Ambidexterity, and Service Performance**

*Service performance* refers to actions conducted by cabin crew which are aimed at meeting the

service goals of their airline company (Kao & Chen, 2016). Individuals who work in complex and conflicting job environments such as in the airline business are expected to rapidly “switch” or combine exploration and exploitation activities during their working period (Bonesso et al., 2014). When a task conflict occurs individual ambidexterity allows cabin crew members to make decisions and manage themselves accordingly, allowing them to provide high performance through both efficiency-oriented routine tasks and variety-increasing non-routine tasks (Gibson & Birkinshaw, 2004; Mom et al., 2009). Furthermore, members of the cabin crew must be adaptive and flexible (Kao & Chen, 2016) to deal with uncertain or unpredictable situations, considering the dynamic resources of their competitive advantage to deliver efficient and effective service (Heracleous & Wirtz, 2009).

Recently, evidence has shown that individual ambidexterity positively influences service performance (Jasmand et al., 2012; Kao & Chen, 2016). Williams (2003) stated that cabin crew members are typically characterized as having direct interaction with passengers during service delivery with a long working period and a high level of demanding situations. The satisfaction or dissatisfaction of airline passengers derives from the quality of service and the way that the cabin crew handle their requests (Williams, 2003). Moreover, the ambidextrous behavior of cabin crew

can create a critical impression of excellent service, affecting passenger satisfaction and passengers’ repurchase intentions (Slevitch & Washburn, 2017). Individual ambidexterity is a cabin crew member’s ability to flexibly adapt his or her positive behavior, emphasizing passengers’ satisfaction, thus resulting in good service performance (Jasmand et al., 2012). Many researchers have highlighted the role of individual ambidexterity for completing contradictory activities to meet multiple goals, particularly in service organizations. For instance, ambidextrous behavior is positively related to an individual’s decision making in service organizations (Mom et al., 2009). The ambidextrous behavior of customer service representatives is engaged in the pursuit of service and sales goals during the service process (Jasmand et al., 2012). Moreover, Kao and Chen (2016) found that the ambidextrous behavior of individuals who engage in both service efficiency (exploitation activity) and creating new services (exploration activity) is positively related to frontline service performance.

It is expected that individual ambidexterity will lead to high service performance regarding airline cabin crew. At this point, it is assumed that employees with high levels of intrinsic and extrinsic motivation are likely to perform individual ambidexterity and will positively effect service performance. Thus, the following hypotheses are proposed:

*Hypothesis 3 (H3): Individual ambidexterity is positively related to service performance.*

*Hypothesis 4 (H4): Individual ambidexterity mediates the relationship between intrinsic motivation and service performance.*

*Hypothesis 5 (H5): Individual ambidexterity mediates the relationship between extrinsic motivation and service performance.*

Figure 1 presents the conceptual model of the current study.

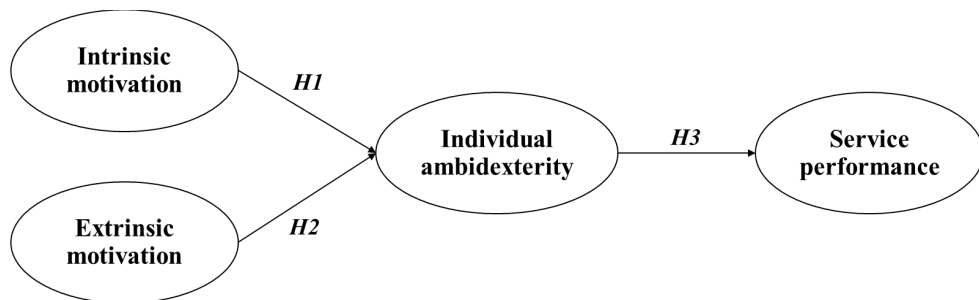
### 3. METHODOLOGY

#### 3.1 Sample Characteristics and Data Collection

Asia-based airline businesses operating both full service and cabin facilities were targeted for data collection. A self-administered questionnaire was used to collect data from a sample of cabin crew, all of whom had flying experience of at least one year. The questionnaires were placed in a convenient location.

Within three months, the total number of questionnaires returned with valid and complete responses was 569. Thus, a total of 569 questionnaires were used for further statistical analysis, as this sample size was consistent with the sample size requirements for a structural equation model (SEM) (Hair et al., 2010).

Female respondents accounted for the majority of the sample (72.1%), while 27.9% were male. Most of the respondents (56.6%) were between the ages of 25 and 34, 27.9% were between the ages of 35 and 44, 6.7% were below 25 years old, 7% were between the ages of 45–55, and 1.8% were over the age of 55 years. The majority of respondents held an undergraduate-level qualification (78.7%). The respondents consisted of standard cabin crew (73.3%), managers (14.6%), and senior cabin crew (12.1%). The majority of the sample were Asian (92.3%), while the remaining respondents came from Europe (4.9%), North America (1.4%), Australia and Oceania (0.9%), and Africa (0.5%).



*H4* Intrinsic motivation → Individual ambidexterity → Service performance

*H5* Extrinsic motivation → Individual ambidexterity → Service performance

**Figure 1** The conceptual model

### 3.2 Measurement Scales

Multiple item indicators were used to operationalize the intrinsic motivation, extrinsic motivation, individual ambidextrous behavior, and service performance constructs. All indicators were measured using five-point Likert-type scales ranging from “strongly agree” (=5) to “strongly disagree” (=1).

*Intrinsic motivation* was evaluated by challenge, enjoyment, learning goal orientation, and empowerment. The scales for challenge and enjoyment were measured using 5 items adapted from the Work Preference Inventory (WPI) scale (Amabile et al., 1994). Three items from the scale for learning goal orientation developed by Button, Mathieu, and Zajac (1996) were used. To measure empowerment, 3 items were taken from Spreitzer’s (1995) psychological empowerment scale.

*Extrinsic motivation* was evaluated by incentive and compensation, job security, and service climate. The scale for incentives and compensation developed by Kuvaas, Buch, Weibel, Dysvik, and Nerstad (2017) provided 4 items. The job security scale was measured using 3 items adapted from Kraimer, Wayne, Liden, and Sparrowe (2005). To measure service climate, 4 items from the climate for service scale of Schneider et al. (1998) were used.

*Individual ambidextrous behavior* is related to exploration and exploitation activities. The scale for both activities were developed and

validated by Mom et al. (2009); this provided 7 items.

*Service performance* was adapted from the general self-efficacy scale (Chen et al., 2001), which measures an individual’s perception of his or her ability to perform in a variety of situations to achieve goals, providing 4 items.

The questionnaire was written in English. The survey instrument was pre-tested to pilot a sample of 30 cabin crew members working for commercial airlines based in Thailand. The cabin crew had no difficulty understanding the questionnaire items.

## 4. DATA ANALYSIS AND RESULTS

### 4.1 Measurement Model Analysis

SPSS version 21 and Mplus version 7.3 were used for the statistical analysis. As suggested by Fornell and Larcker (1981), a confirmatory factor analysis (CFA) was performed to test the convergent and discriminant validity. To evaluate the reliability and validity of the measurement model, the researcher used Cronbach’s alpha, factor loadings, composite reliability (CR), average variance extracted (AVE), convergent validity, and discriminant validity (Fornell & Larcker, 1981; Hair et al., 2010). The reliability of the measures was evaluated using Cronbach’s alpha coefficients, which ranged from 0.714 to 0.880, with all being greater than the cutoff value of 0.70 (Nunnally, 1978). The



measurement model was tested for convergent and discriminant validity using CFA. Table 1 shows that the items with a factor loading of less than 0.60 were eliminated from the measurement model for the CFA to improve the convergent validity of the constructs. Evidence in support of convergent validity was observed as the CR values ranged from 0.715 to 0.883, all of which are greater than the recommended value of 0.70. Moreover, the AVE values ranged from 0.536 to 0.716, exceeding the recommended cutoff of 0.50 (Hair et al., 2010).

The researcher checked the conditions for discriminant validity or “the extent to which a construct is not a reflection of other constructs” (Hair et al., 2010). The square root of the AVE for each construct was greater than the correlations estimate between the corresponding construct and those remaining, indicating adequate discriminant validity (Fornell & Larcker, 1981). As shown in Table 2, no problems with discriminant validity emerged. Taken together, the measurement model appeared to be both reliable and valid prior to testing the hypotheses.

The fit of the measurement model with the empirical data was assessed using chi-squared ( $X^2$ ) statistics, the comparative fit index (CFI), the Tucker-Lewis index (TLI), the root mean square of approximation (RMSEA), and the standardized root mean square residual (SRMR) (Hair et al., 2010). The resulting measurement model proved acceptable with the data according to

the following goodness-of-fit indices:  $X^2 = 876.389$ ,  $df = 329$ ,  $CFI = 0.935$ ,  $TLI = 0.919$ ,  $RMSEA = 0.054$ ,  $SRMR = 0.040$ .

To minimize common method variance (CMV), which potentially creates a problem in behavioral research, the researcher obtained information on the independent and dependent variables from different sources, guaranteed the confidentiality of the data, and improved the wording of each item (Podsakoff et al., 2012). Moreover, an unrotated factor value accounted for 25.4% of variance in all of the latent variables between the range of 18% to 32% variance noted by Podsakoff et al. (2012). Thus, the CMV was not a serious concern in this study.

Table 3 shows that the weight of the first-order constructs on the designed second-order constructs indicated that intrinsic motivation was a second-order construct with 4 components, namely, challenge, enjoyment, learning goal orientation, and empowerment. Extrinsic motivation was a second-order construct with 3 components, namely, incentive and compensation, job security, and service climate. Individual ambidextrous behavior was a second-order construct with 2 components, namely, exploration and exploitation activities.

## **4.2 Structural Model**

The SEM was developed using two motivation constructs, that is, a construct of individual ambidexterity and a construct of service

**Table 1** Confirmatory factor analysis result

Construct Items	Factor Loadings	Item Reliabilities	$\alpha$	CR	AVE
<b>Intrinsic motivation (INT)</b>					
<b>Challenge (CHA)</b>					
			0.865	0.840	0.638
I enjoy trying to solve complex problems.	0.855	0.735			
I enjoy tackling problems that are completely new to me.	0.839	0.701			
The more difficult the problem, the more I enjoy trying to solve it.	0.693	0.500			
<b>Enjoyment (ENJ)</b>					
			0.714	0.715	0.557
What matters most to me is enjoying what I do.	0.772	0.555			
It is important to me to have an outlet for self-expression.	0.719	0.555			
<b>Learning goal (LEG)</b>					
			0.813	0.815	0.595
I try hard to improve on my past performance.	0.739	0.616			
The opportunity to extend the range of my abilities is important to me.	0.799	0.610			
I do my best when I'm working on a fairly difficult task.	0.774	0.557			
<b>Empowerment (EMP)</b>					
			0.777	0.777	0.635
I have mastered the skills necessary for my job.	0.802	0.642			
I have significant autonomy in determining how to do my job.	0.792	0.629			
<b>Extrinsic motivation (EXT)</b>					
<b>Incentive and compensation (INC)</b>					
			0.871	0.873	0.632
External incentives such as bonuses and provisions are essential for how well I perform my job.	0.757	0.757			
It is important for me to have an external incentive to strive for and do a good job.	0.856	0.687			
If I am supposed to put in extra effort in my job, I need to get extra pay.	0.835	0.630			
If I had been offered better pay, I would have done a better job.	0.725	0.516			
<b>Job security (JOS)</b>					
			0.698	0.699	0.536
I am secure in my job.	0.721	0.573			
I will be able to keep my present job if I wish.	0.743	0.497			

**Table 1** Confirmatory factor analysis result (Continued)

Construct Items	Factor Loadings	Item Reliabilities	$\alpha$	CR	AVE
<b><i>Service climate (CLI)</i></b>			0.849	0.849	0.652
The cabin crew receives recognition and rewards for the delivery of superior service.	0.847	0.717			
The leadership shown by our airline management supports the service quality.	0.788	0.626			
The overall quality of the service provided by our airline to passengers is excellent.	0.787	0.607			
<b><i>Individual Ambidexterity (IA)</i></b>					
<b><i>Exploration activities (EPR)</i></b>			0.880	0.883	0.716
Evaluating diverse options with respect to services or processes.	0.864	0.821			
Searching for new possibilities with respect to services or processes.	0.903	0.752			
Focused on strong renewal of services or processes.	0.766	0.567			
<b><i>Exploitation activities (EPI)</i></b>			0.798	0.798	0.568
Activities that clearly fit existing company procedures.	0.751	0.582			
Activities that I carry out as if they were routine.	0.764	0.569			
Activities that I can conduct by using my existing knowledge.	0.746	0.548			
<b><i>Service performance (SP)</i></b>			0.860	0.861	0.607
Compared to my colleagues, I can deliver good service.	0.738	0.666			
I am confident that I can perform effectively in many different services.	0.810	0.655			
I will be able to successfully overcome many challenges.	0.812	0.581			
When facing difficult services, I am certain that I will accomplish them.	0.754	0.526			

Notes:  $\alpha$ : Cronbach's alpha; CR: composite reliability; AVE: average variance extracted

**Table 2** Discriminant validity of the constructs.

	1	2	3	4	5	6	7	8	9	10
<b>Mean</b>	3.546	3.998	4.061	3.911	3.862	3.596	3.406	3.680	3.763	3.939
<b>SD</b>	0.233	0.148	0.116	0.103	0.341	0.265	0.582	0.155	0.062	0.060
<b>1.CHA</b>	<b>0.799</b>									
<b>2.ENJ</b>	0.468	<b>0.746</b>								
<b>3.LEG</b>	0.558	0.484	<b>0.771</b>							
<b>4.EMP</b>	0.518	0.555	0.613	<b>0.797</b>						
<b>5.INC</b>	0.103	0.262	0.202	0.136	<b>0.795</b>					
<b>6.JOS</b>	0.297	0.183	0.299	0.318	0.111	<b>0.732</b>				
<b>7.CLI</b>	0.230	0.072	0.283	0.306	0.100	0.513	<b>0.808</b>			
<b>8.EPR</b>	0.340	0.198	0.357	0.313	0.208	0.411	0.550	<b>0.846</b>		
<b>9.EPI</b>	0.362	0.340	0.477	0.423	0.168	0.340	0.391	0.487	<b>0.754</b>	
<b>10.SP</b>	0.471	0.452	0.535	0.525	0.139	0.400	0.395	0.480	0.577	<b>0.779</b>

Note: SD: Standard-deviation; Bolded values refer to the square root of the AVE; The remaining values are the correlations.

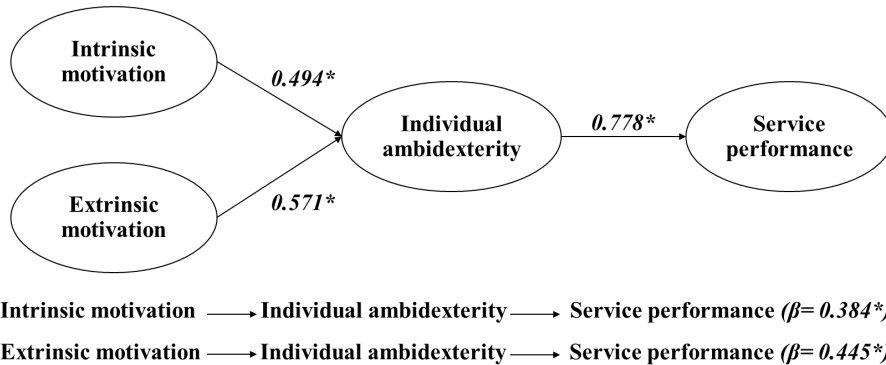
**Table 3** Weights of the first-order constructs on the designated second-order constructs

Second-ordered Constructs	First-ordered Constructs	Weight	t-value
INT	CHA	0.697	20.644***
	ENJ	0.646	15.892***
	LEG	0.793	26.260***
	EMP	0.778	23.550***
EXT	INC	0.221	3.997***
	JOS	0.732	15.848***
	CLI	0.672	13.813***
IA	EPR	0.665	19.947***
	EPI	0.778	31.246***

\*\*\*p-value < .001

performance, to verify the path relationships of intrinsic motivation, extrinsic motivation, individual ambidexterity, and service performance. Figure 2 shows the standardized path estimates of the model. As proposed in H1, a positive and significant relationship existed between intrinsic motivation and individual ambidexterity ( $\beta = 0.494$ ,  $p < .001$ ). Regarding the second hypothesis (H2), extrinsic motivation was found to have a significant positive affect on individual

ambidexterity ( $\beta = 0.571$ ,  $p < .001$ ). For H3, the result demonstrated a positive and significant relationship between individual ambidexterity and service performance ( $\beta = 0.778$ ,  $p < .001$ ). For H4 and H5, the results indicated significant indirect effects of intrinsic motivation ( $\beta = 0.384$ ,  $p < .001$ ), and extrinsic motivation ( $\beta = 0.445$ ,  $p < .001$ ) via individual ambidexterity on service performance. In addition, to confirm the mediating role of individual ambidexterity, a path model was



$X^2 = 981.736$ ,  $df = 361$ ,  $CFI = 0.926$ ,  $TLI = 0.917$ ,  $RMSEA = 0.055$ ,  $SRMR = 0.055$ ,  $*p < 0.001$

**Figure 2** Structural model result

tested using a bootstrap technique with 1,000 resamples (Preacher & Hayes, 2008). The results indicated that excluding zero showed a significant indirect effect of intrinsic motivation ( $\beta = 0.384^*$ , 99.5% CI = [0.133, 0.635]) and extrinsic motivation ( $\beta = 0.445^*$ , 99.5% CI = [0.257, 0.633]) on service performance through individual ambidexterity. Therefore, all five hypotheses were supported.

## 5. CONCLUSION AND DISCUSSION

The results showed that intrinsic and extrinsic motivation were important predictors of individual ambidexterity, positively affecting the service performance of cabin crew. This study showed that challenge and enjoyment can satisfy cabin crew members, triggering their happiness and enthusiasm. Challenge and enjoyment are emotional states that a

cabin crew member directly gains from their work. Additionally, learning goal orientation and empowerment can enhance the engagement of cabin crew in exploration and exploitative activities (Spreitzer, 1995). Zhu et al. (2016) noted that intrinsic motivation is directly related to exploration activity. Thus, intrinsic motivation can drive cabin crew to work under complex tasks in a dynamic environment to achieve positive outcomes (Kao & Chen, 2016).

Extrinsic motivation as positively related to individual ambidexterity has been supported by Ahammad et al. (2015), Ma et al. (2016), and Yeh (2012). Ahammad et al. (2015) explained that incentives and compensation influence productivity and performance, also suggesting that companies should design incentives and appraisal programs to motivate employees' adoption of appropriate behaviors. Cabin crew are willing to undertake complicated tasks relating

to extra-role behavior when they obtain a high level of job security (Ma et al., 2016). Moreover, the service climate within the airline influences the ambidextrous behavior of their cabin crew in terms of delivering high-quality service, thereby resulting in good service performance (Yeh, 2012). The findings of this study are supported by previous research. For example, Mom et al. (2015) noted that motivation is a foundation of individual ambidexterity. Most job responsibilities of the cabin crew are located within the aircraft cabin. The intrinsic motivation of cabin crew members comes from their working attitude during the service process, while extrinsic motivation does not immediately take place during work. However, cabin crew still require benefits from the company to motivate their ambidextrous behavior.

To study individual ambidexterity in the airline business, many previous studies have called for a better understanding of the activities involving ambidexterity that may lead to better service performance (Bonesso et al., 2014; Gibson & Birkinshaw, 2004; Heracleous & Wirtz, 2009; Kao & Chen, 2016; Mom et al., 2009). The findings revealed that cabin crew who have the ability to complete conflicting tasks, exhibit positive service performance. Similarly, Jasmand et al. (2012) found that ambidextrous behavior is positively related to service performance. Thus, airlines should provide additional training for cabin crew regarding how to manage services efficiently and effectively to

satisfy their passengers and follow company standards. Overall, the findings contribute to the understanding of cabin crew who work in dynamic service environments, by examining the relationships between the two types of motivation and individual ambidexterity in terms of service performance. This relationship indicates that cabin crew managers must understand motivational drivers to acquaint themselves with their cabin crew members and emphasize development requirements. Airline companies should also combine appropriate motivational drivers to promote the ambidexterity of cabin crew, in turn leading to the enhancement of service performance.

## **6. FUTURE RESEARCH AND LIMITATIONS**

The participants were the first limitation of this study, as they held different positions in various airlines, meaning that individual airlines or specific positions were not analyzed. Further research on this topic should include controlled positions and the airline companies of the participants. The general self-efficacy scale was another limitation that might have influenced the study as it could have led to overestimation of the results of the cabin crew members' behavior, which would in turn affect the data interpretation. These limitations might be useful for future researchers to explore additional and insightful data from specific cultures or companies. Moreover, future

researchers can examine the use of intrinsic or extrinsic motivation to foster individuals' ambidextrous behavior. The scope of individual ambidexterity can be adopted and expanded to different industries. Future researchers may also investigate specific outcome variables, such as certain activities of exploration and exploitation in the service context, enhancing the current findings.

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